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API-BASED CORPORATE-TO-BANK CONNECTIVITY

The Connective Tissue Enabling Real-Time Treasury and Payments

June 3, 2022
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A Division of Oliver Wyman

This is an authorized reprint of an excerpt from a Celent report discussing various connectivity use cases and profiling 16 solution providers. The full report is more than 60 pages long. The report was not sponsored by Starfish Digital in any way.

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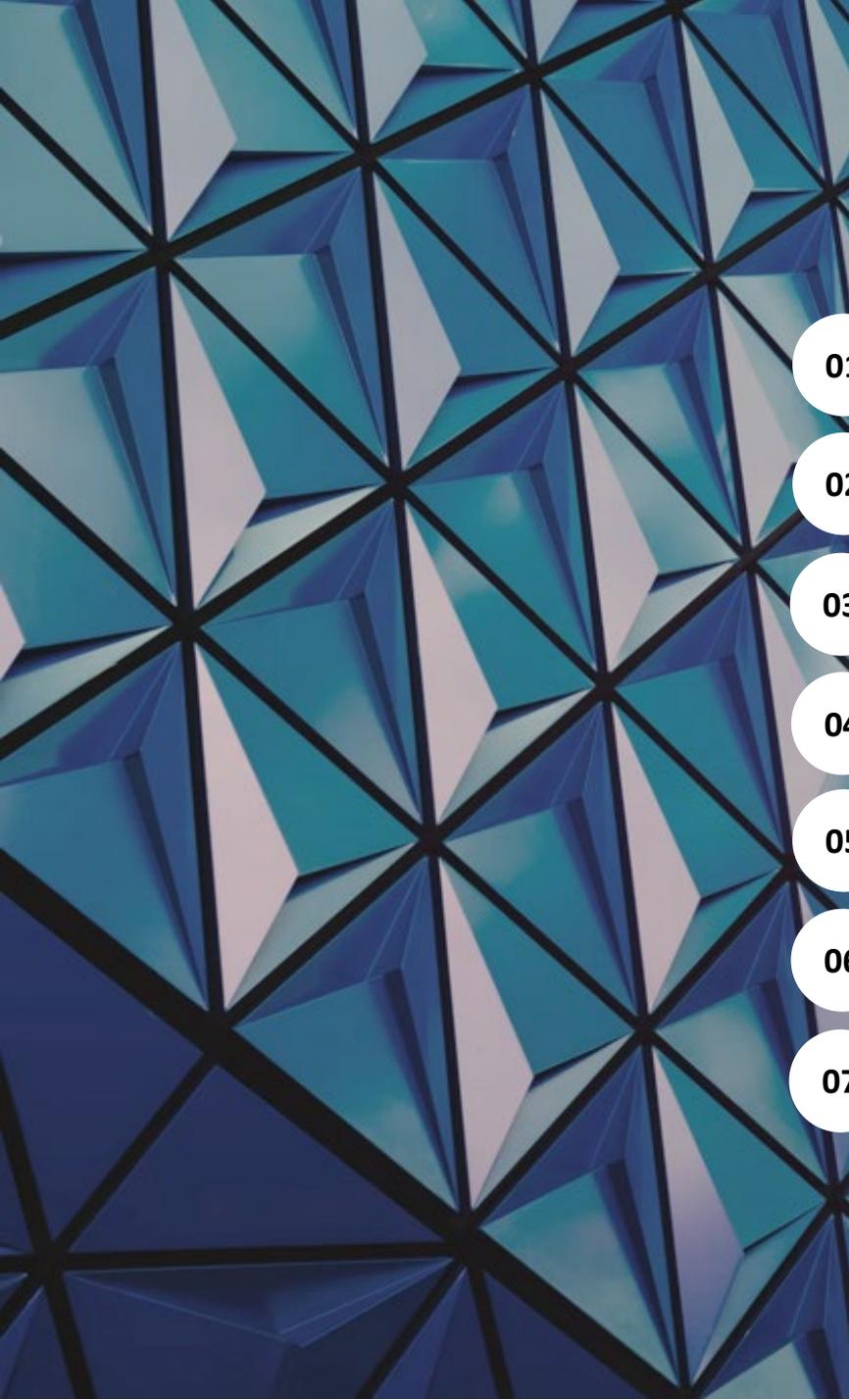
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Corporate-to-bank channel connectivity is a critical enabler for businesses of all sizes as they expand globally and increase the number of banks and accounts needed to conduct business. Historically, companies used a number of integration methods to exchange financial data: bank portals, mobile apps, host-to-host files, domestic networks, and the SWIFT network. However, over the past few years, APIs have emerged as a new connectivity channel for bank clients, enabling real-time, embedded, and automated data flows between corporates and their banks.

Banks are increasing investments in client connectivity, including open banking APIs, driven by customer demand for real-time balance and transaction data and real-time payment initiation and reconciliation. Even where a bank already provides APIs, they recognize the need to improve API quality and build out additional APIs to meet customer expectations for usability and functionality.

Adding to the complexity of meeting customer expectations is that connectivity requirements become more critical and complex as a corporation grows and expands. Large corporations depend on enterprise resource planning (ERP) and treasury management software (TMS) for financial management and payment operations. Smaller firms embrace a range of accounting software packages and simplified ERP tools. However, no matter the treasury technology tool of choice, regular transaction and payment data feeds are at the core of robust cash flow and working capital management.

Celent identified two primary use cases for API-enabled connectivity: 1) multi-bank connectivity and data aggregation, and 2) ERP, TMS, and accounting software integration. Next, we researched the solution provider marketplace, identifying and profiling 16 vendors across the globe, ranging from small startups to massive publicly traded corporations. Multiple providers support each use case, with some more focused on ERP or TMS integration, others enabling payment automation, and still others squarely dedicated to multi-bank connectivity. Celent recommends different partnership models and solution providers depending on the bank and client segment.

Looking across the corporate-to-bank connectivity landscape, one thing is clear. The time is now to formulate your API product and channel strategy. Celent's deep expertise in the corporate digital channel segment can help you analyze the opportunity and build a compelling business case.

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**INTRODUCTION TO CORPORATE-TO-BANK
CONNECTIVITY CHANNELS**

BACKGROUND

Corporate-to-bank channel connectivity is a critical enabler for businesses of all sizes as they expand globally and increase the number of banks and accounts needed to conduct business. In addition, corporate channels act as the digital backbone for corporate clients to retrieve transaction information, initiate payments, collect receivables, perform reconciliations, and conduct other financial transactions.

To cope with the increasingly hybrid world of corporate-to-bank integration, banks must offer a full range of attended and unattended digital channels tailored to a corporate's specific business processes. Corporate clients use multiple channels, but smaller firms rely on web-based solutions, with larger firms depending on host-to-host/file-based connectivity.

Celent believes that it is vital that banks deliver an omnichannel digital customer experience, but the term means different things to different people. Based on our own research, we believe that:

“Omnichannel is about delivering a customized but consistent financial institution brand experience to customers across all channels and points of interaction.”

An omnichannel experience is even more critical when delivering services to corporate clients. Each client has a unique set of business and technology requirements based on their corporate treasury organizational structure, geographic footprint, and treasury technology sophistication. A consistent financial institution brand experience is essential to corporate clients, and banks must tailor the customer experience to each client segment's unique needs. An even more bespoke and customized experience is critical for the largest, most complex organizations.

APIs represent an additional bank connectivity channel for most corporate clients, not a replacement for web-based corporate digital portals or host-to-host file channels. Forward-looking banks have already embraced APIs to launch new real-time, value-added solutions to meet the varying needs of corporate clients. But others that are waiting on the sidelines until they see confirmed, compelling demand from business clients may be missing out.

THE FULL RANGE OF CORPORATE-TO-BANK INTEGRATION METHODS

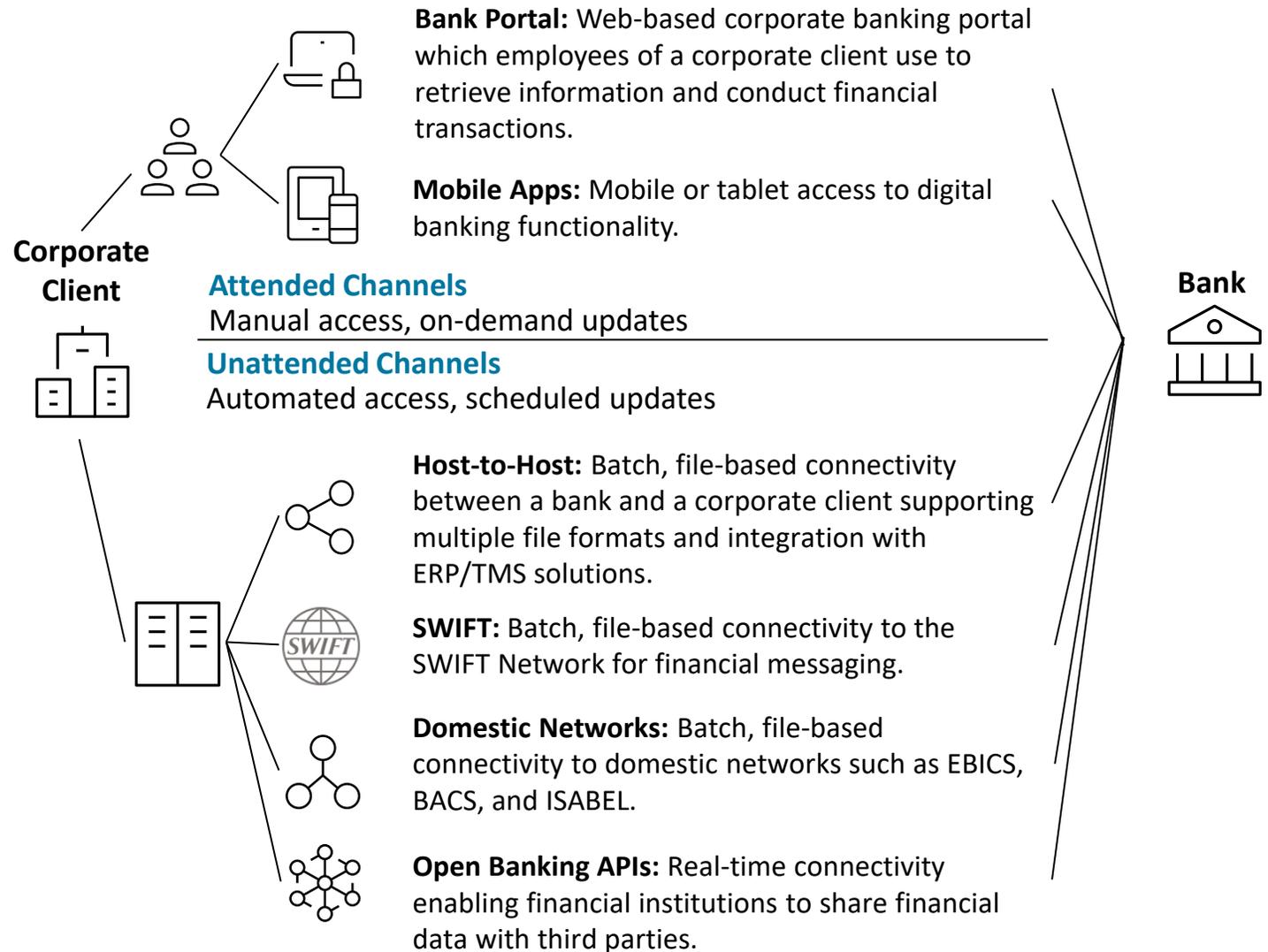
Attended Vs. Unattended Channels

As discussed in [Corporate-to-Bank Integration: The Need for a Hybrid Approach](#) (November 2018), there is a key distinction between two types of corporate digital channels: attended versus unattended.

- **Attended digital channels**, which employees of a corporate client use to retrieve information and conduct financial transactions (e.g., online portal, mobile banking app, or tablet banking app).

versus

- **Unattended channels**, which integrate bank and corporate systems in an automated fashion, without manual intervention (e.g., host-to-host file, SWIFT, domestic networks, and open banking APIs).

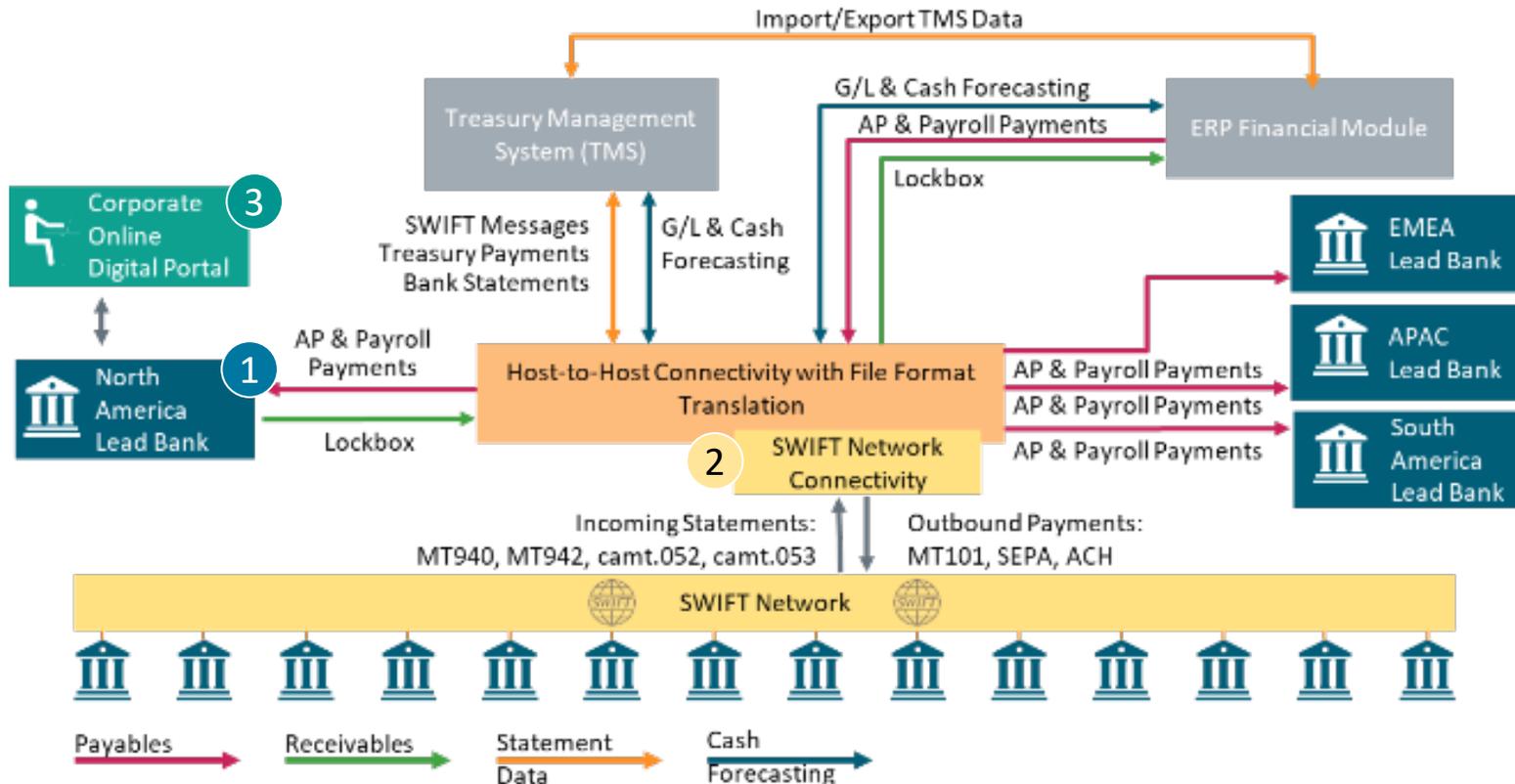


Source: Celent

03

**TREASURY CHALLENGES
DRIVING API DEMAND**

THE TREASURY TECHNOLOGY LANDSCAPE IS INCREASINGLY COMPLEX



Hybrid Connectivity

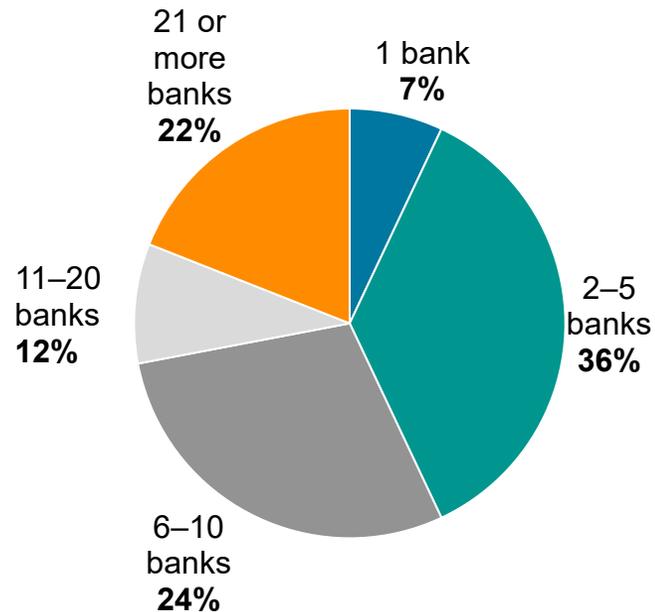
Most corporate treasury departments use more than one channel to connect with their banks. For example, a large corporate customer may choose:

- 1 Direct file channel connectivity with its primary cash management banks in one or more geographies;
- 2 SWIFT network connectivity to reach several international banks for vendor and payroll payments;
- 3 Their bank's online digital portal for one-off, real time wire payments.

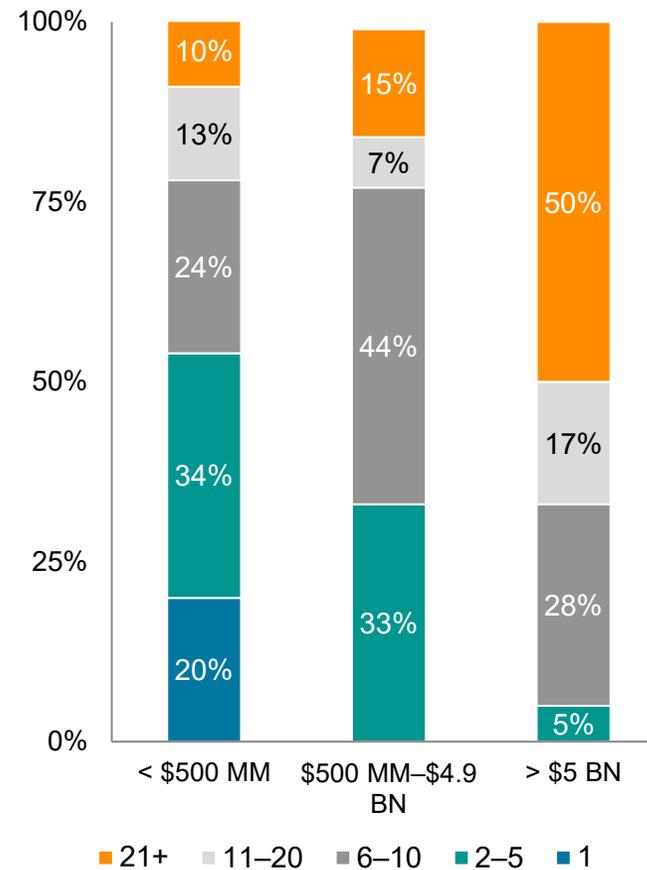
Source: Celent

CORPORATE TREASURERS FACE AN EXPLOSION IN BANKING PARTNERS

Banking Partners Overall



Banking Partners By Revenue Size



Multi-Bank Connectivity Requirements

As companies grow, mature, and expand geographically, they require numerous operating accounts at local, regional, and global banks for foreign exchange, currency services, employee payroll, and vendor payments.

CGI Transaction Banking Surveys found that overall, 34% of firms work with more than 11 banks. Looking at larger global firms, 50% of them work with 21 or more banks.

Even the smallest businesses usually partner with more than one bank. Only 20% of smaller firms reported doing business with a single bank.

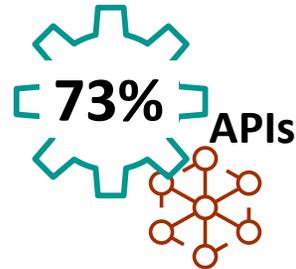
Source: CGI 2019 and 2017 Transaction Banking Surveys, published by GTNews & CGI, Celent Analysis

GROWING DEMAND FOR APIS FROM CORPORATE TREASURERS TO ENABLE REAL-TIME USE CASES

APIs' Increasing Importance

Numerous corporate treasury surveys find demand for enhanced connectivity solutions increasing, primarily APIs, to enable cash visibility, real-time payments and tracking, FX execution, and the like.

APIs are Highly Important
 Seventy-three percent of respondents view APIs as highly important to corporate treasury groups.

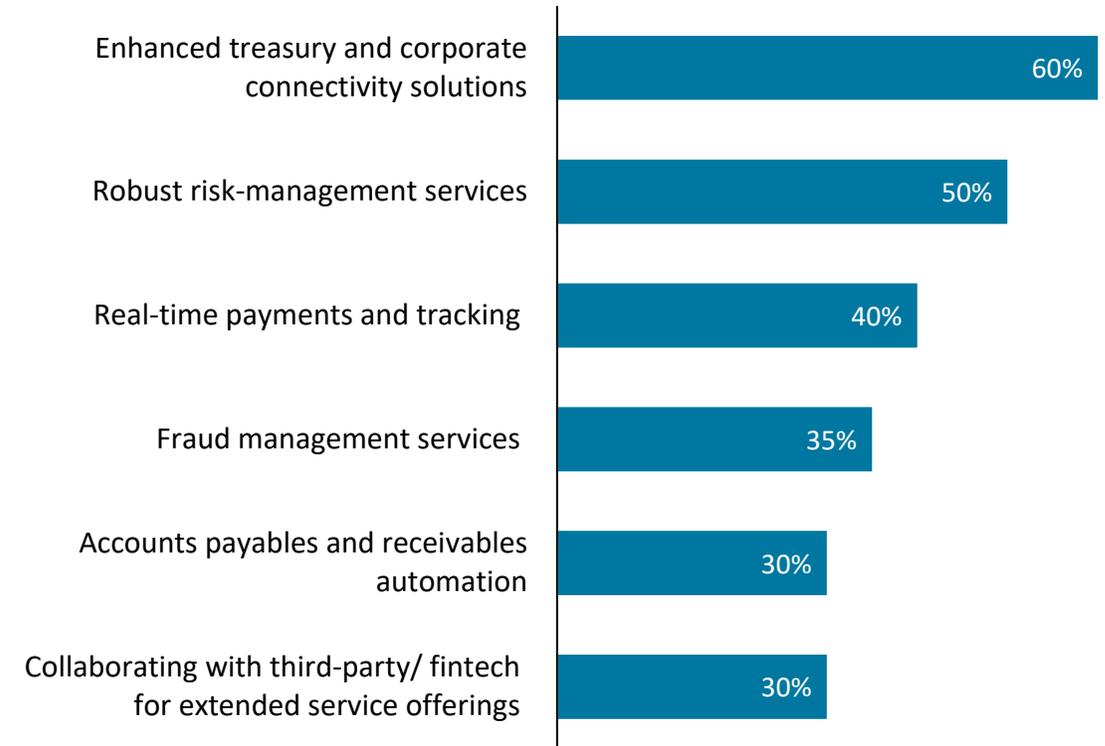


Information Reporting leads the pack for API usage through TMS/TRMS vendors

-  **56%** For connecting to banks for information reporting
-  **37%** For connecting to banks for payments
-  **28%** To connect to ERPs
-  **19%** To connect to information/data providers
-  **13%** To connect to other BI tools (Power BI, Tableau, etc.)

Source: [2021 Treasury Technology Survey Report](#), Strategic Treasurer

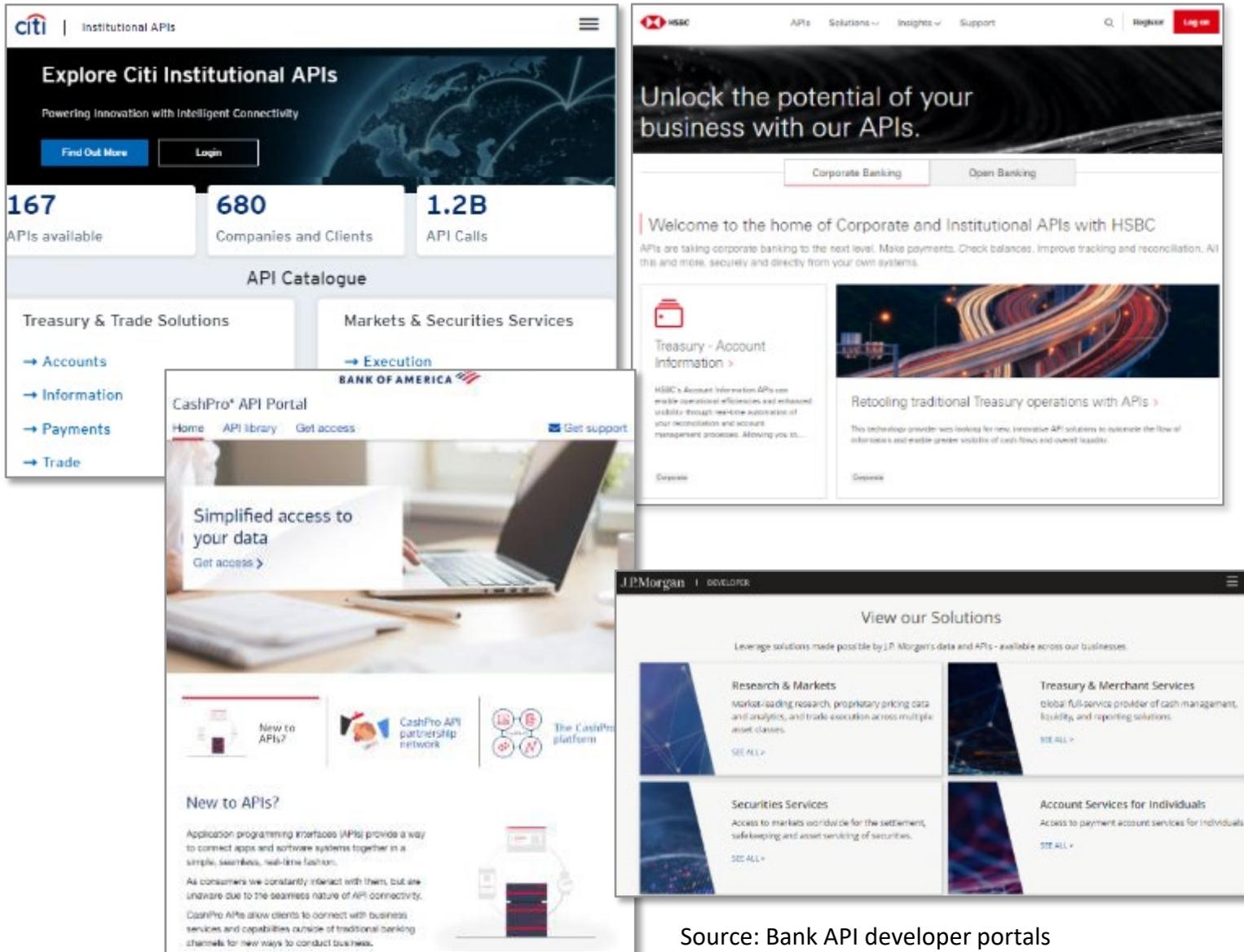
What do treasurers expect from their banks?



Question asked: What do you expect from your banks/payments provider as part of their service/product offering? Rank your response on a scale of 1–7, with 7 being highly important and 1 being the least or not at all important. Responses above 5 have been provided in the figure. Percentages do not total 100.

Source: Capgemini Financial Services Analysis, 2020; [World Payments Report 2020](#) industry stakeholders survey, N=20 corporates

LARGER BANKS OFFER AND PRIORITIZE COMMERCIAL APIS



Source: Bank API developer portals

Banks' Responses to the Increasing Demand for APIs

Although not mandated to do so, many banks have answered the market-driven imperative to create APIs for core commercial account and services integration. Recognizing the need for robust and secure APIs, these banks often create a separate developer experience for commercial APIs.

Corporates and technology providers leverage these APIs to integrate with treasury and finance systems, enabling real time information flows.

Fintechs use these APIs to create value-added services, often by partnering with the bank to connect to real time, immediate payment rails.

Note: Regulations such as PSD2, UK Open Banking, and Australian Open Banking mandate open API access to consumer and small business banking data. However, these APIs often lack the necessary data fields to suit commercial/corporate use cases.

04

**API-ENABLED CONNECTIVITY
USE CASES**

CONNECTIVITY REQUIREMENTS BECOME MORE CRITICAL AS COMPLEXITY GROWS

Accounting Software

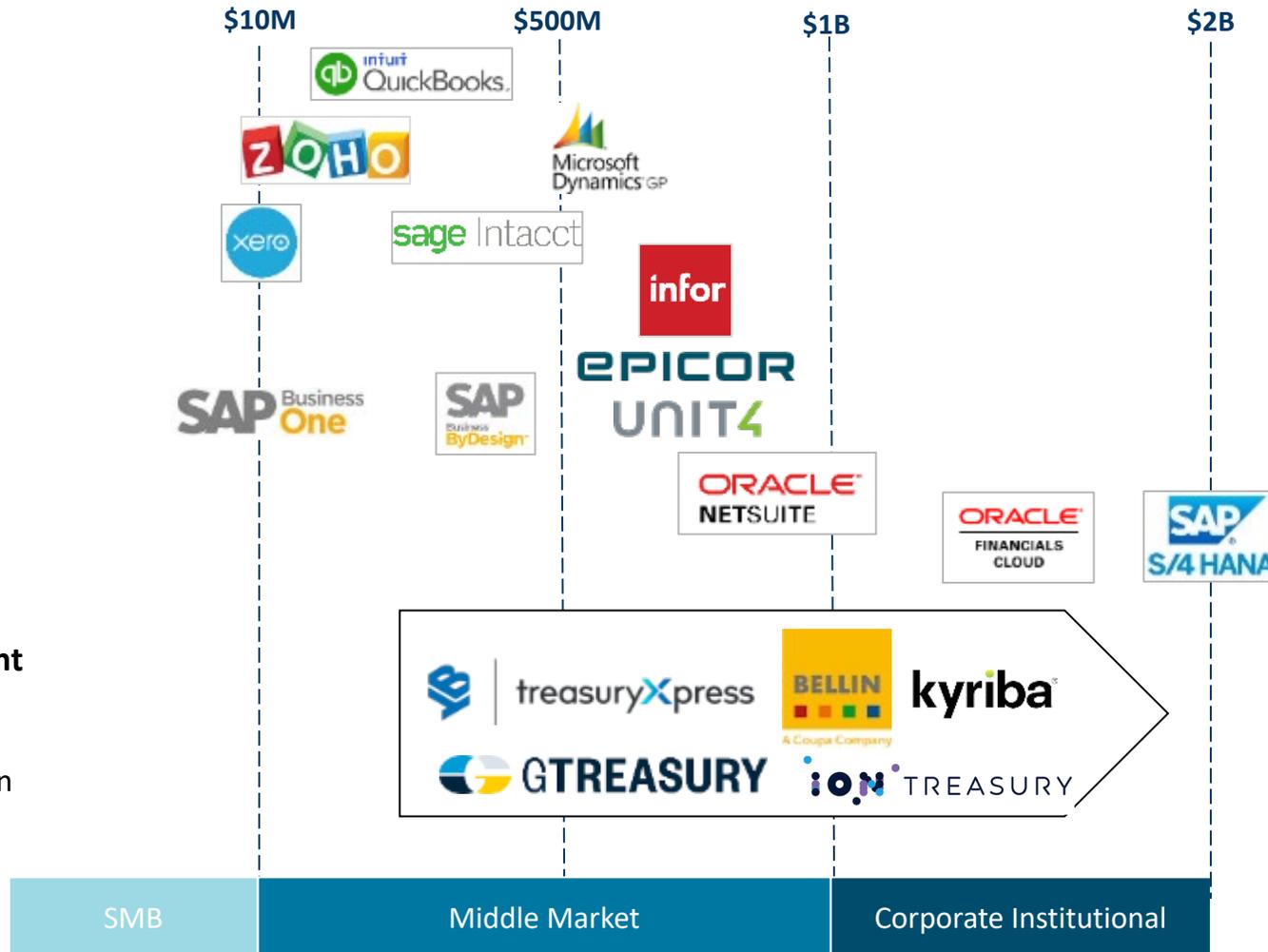
Bank transactions, payment initiation

Enterprise Resource Planning

Payment initiation, remittance data

Treasury Management Systems

Bank transactions, payment authentication



Reliance on Treasury Technology

Larger corporations find ERP and treasury management systems essential to running their businesses. According to a 2020 survey from Strategic Treasurer, 77% of respondents have either a fully hosted or installed system.

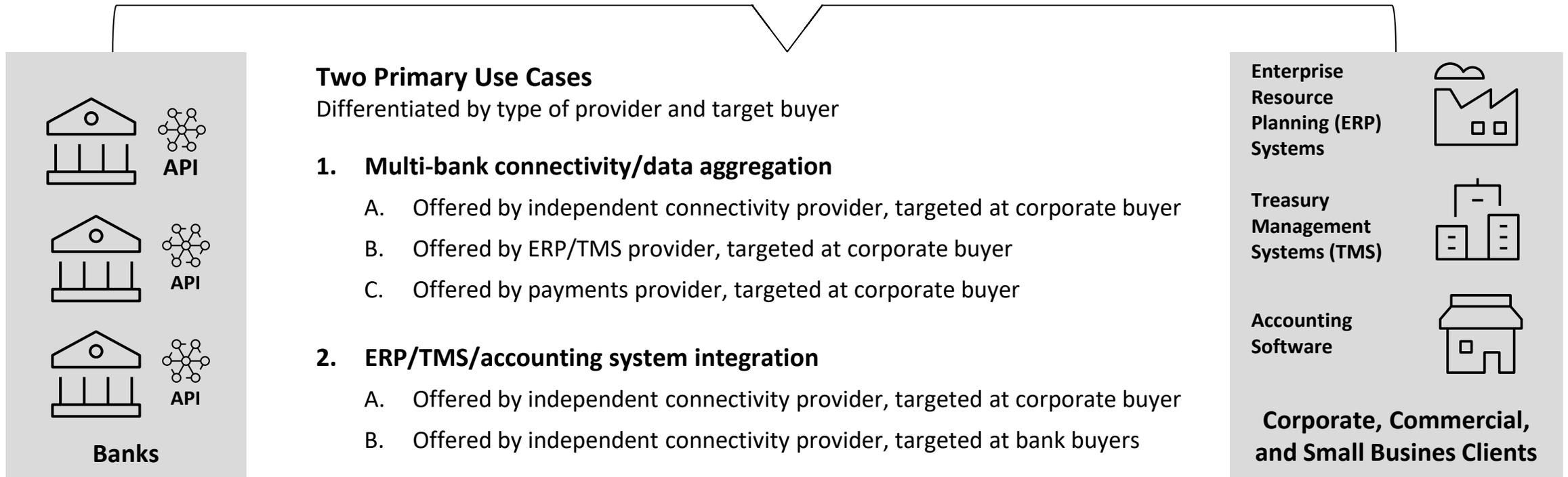
In the same survey, only 38% of smaller firms use treasury systems, with 58% of these firms relying on Excel spreadsheets or other methods.

Many of these smaller firms use a range of accounting software packages or financial management systems, all requiring regular feeds of bank balance and transaction data.

Regardless of technology used, business clients value ease of bank integration.

Source: Celent analysis

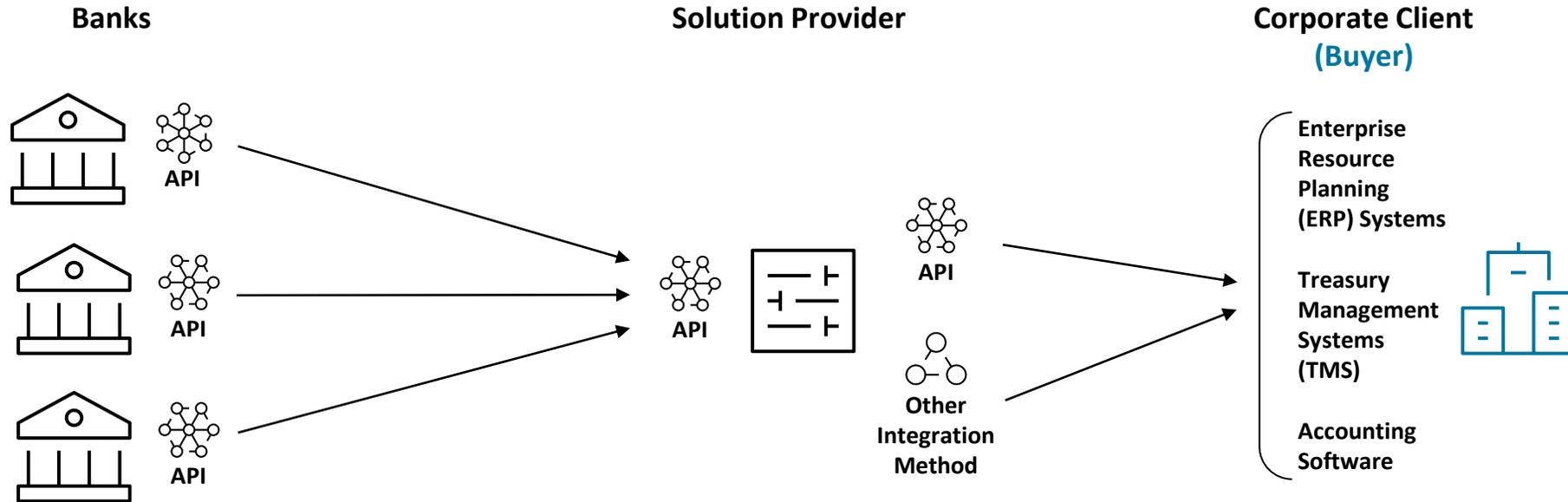
API-BASED CONNECTIVITY: THE CONNECTIVE TISSUE ENABLING REAL-TIME TREASURY AND PAYMENTS



To navigate directly to each vendor profile, press Ctrl+Click on the logo

1A: MULTI-BANK CONNECTIVITY/DATA AGGREGATION

Offered by Independent Provider, Targeted at **Corporate Buyer**



Business Model	Features	Value-Added Services
<ul style="list-style-type: none"> Aggregate bank balance and transaction data from multiple banks, leveraging open banking APIs 	<ul style="list-style-type: none"> Multi-bank connectivity API connectivity and maintenance 	<ul style="list-style-type: none"> File format translation TMS/ ERP/ Accounting software connectors Cash forecasting Payment initiation



05

**SOLUTION PROVIDER
PROFILES**

STARFISH DIGITAL (1/2)

Company Profile, Company Positioning, Value Proposition, Operating Model



Company Profile



Company Name	Starfish Digital Pte. Ltd.
Product Name	Starfish Universal Adaptor, Starfish Connect
Website URL	Starfish.Digital
Headquarters	Singapore
Year Founded	2020
Employees	~25
Founder/CEO	Patrick Huang, CEO; Daniel Choi, CTO; Sally Clarke CRO (Co-Founders)
Ownership	Privately held
Funding	Privately funded
Geographic Reach	Primary focus on Asia-Pacific
Target Market	Multi-national banks and corporates present in ASEAN, along with leading ASEAN regional and local banks
Monetization	Fixed-price subscription model plus connection charge
Named Clients	Not available
Notable Partners	Amelia, AWS, MuleSoft

Company Positioning



- Starfish Digital positions itself as a financial connectivity platform, connecting any company to any corporate banking service.
- For banks, they provide standardized client connectivity, adoption of bank API products, and faster time-to-revenue.
- For corporates, they integrate finance and treasury to automate banking data in real time.

Connectivity Use Case(s)

- Multi-bank connectivity
- ERP/TMS/Accounting System Integration

Supported Channels

- Open Banking and Partner APIs
- Host-to-Host
- Domestic Networks
- SWIFT

Value Proposition



- The company feels that its flexibility is a differentiator, allowing corporates and banks to communicate with multiple methods e.g., APIs, SFTP (file), and SWIFT messages.
- Starfish Connect provides an end-to-end managed service with the security and reliability demanded of critical B2B financial infrastructure.
- The Starfish Universal Adaptor intelligently unlocks and integrates financial data from any source to any target.
- Starfish Digital is a managed service, fully responsible for technical customer onboarding to Starfish Digital product services.

Operating Model



- A key element of their operating model is providing end-to-end connectivity, including corporate back office systems of record, such as ERPs, data lakes, and accounting software.
- Base library of 10,000 API connectors as well as custom connectors.
- The target connectivity model is API-based connectivity, but the provider supports other legacy communications methods such as SWIFT, SFTP, FIX, proprietary bank message formats, etc.
- Pricing is fixed price, OPEX-based subscription model for core SaaS products, with a base connection charge.
- There are additive charges based on additional product consumption.

STARFISH DIGITAL (2/2)

Celent Analysis, Company-Provided Screenshots/Diagrams

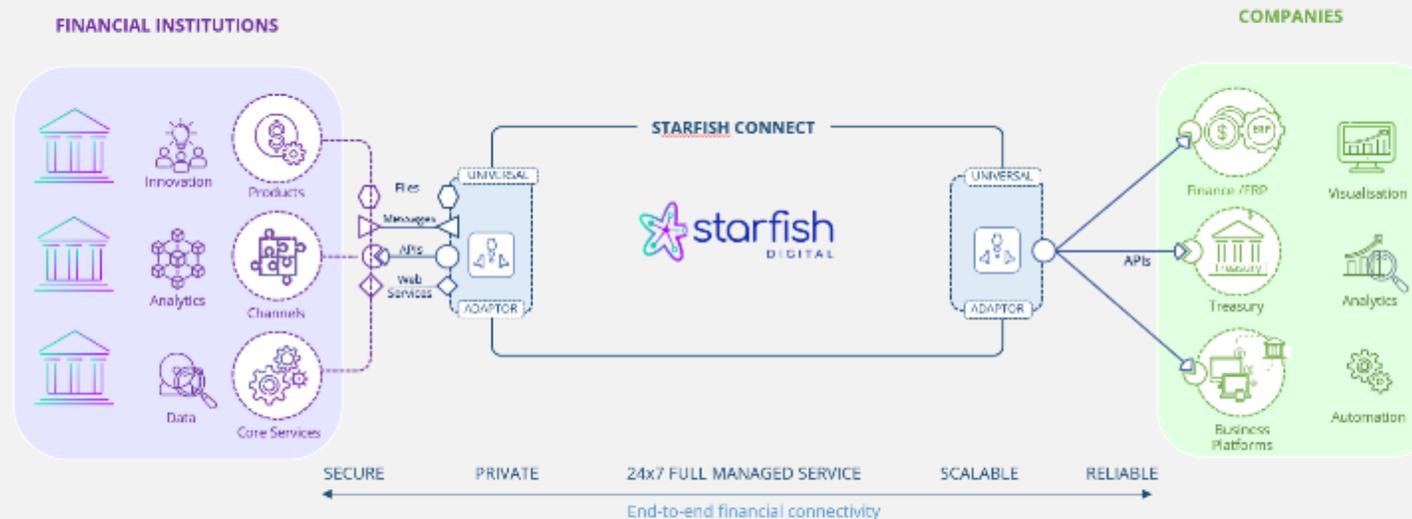


Celent's Take

- Starfish Digital is a relatively new entrant into the multi-bank connectivity space, spending its first year building an MVP and talking to its target market. The firm is just now signing its first banks.
- Starfish is unique in that it markets to both banks (multi-client) and corporate clients (multi-bank).
- Starfish is one of the few providers that offer a full range of connectivity options, both file- and API-based.
- Starfish is poised to help both ASEAN banks and corporates at the beginning of their multi-bank, API-enabled connectivity journey.

Company-Provided Screenshots/Diagrams

Financial Connectivity Made Easy



- Starfish Digital is a financial connectivity platform. We digitise and exchange financial data between banks and companies.
- Starfish Universal Adaptor intelligently unlocks and delivers corporate banking data to any finance, treasury or business platform.
- Starfish Connect provides an end-to-end managed service with the security and reliability demanded of critical B2B financial infrastructure.

06

FINAL THOUGHTS

CELENT'S ADVICE TO BANKS: PARTNER FOR API SUCCESS

We've discussed two primary API-based connectivity use cases:

1. ERP/TMS/accounting system integration, and
2. Multi-bank connectivity and data aggregation.

Multiple providers support each use case, with some more focused on ERP or TMS integration, others enabling payment automation, and still others squarely dedicated to multi-bank connectivity. Depending on the bank and client segment, Celent recommends different partnership models and solution providers.

Providing ERP/TMS/SWIFT Connectivity for Large Corporate and Middle-Market Commercial Clients

Almost all the providers interviewed for this report center their sales and marketing efforts on large corporate or middle-market commercial clients, offering them bank (and other financial) data integration solutions. This approach makes sense, given those clients' complex banking relationships and need to improve cash visibility. In addition, many large corporate clients depend on SAP's ERP software for financial management along with payment initiation and/or connectivity to the SWIFT network for global bank information and payment initiation.

For this client base, Celent recommends that banks seek out referral partners with the necessary specialized treasury management and payments expertise (e.g., ERP, TMS, or SWIFT connectivity) along with geographic knowledge and reach. Partnership examples include Standard Chartered, Citi, and J.P. Morgan with SAP, Deutsche Bank with FinLync, Deutsche Bank with TIS, and Silicon Valley Bank with Modern Treasury.

Providing ERP/Accounting Software Connectivity for Middle-Market Commercial and SME Clients

Providers in this category center their marketing efforts on banks seeking to enable business clients to seamlessly integrate financial data into less complex ERP systems

and accounting software such as Oracle NetSuite, Sage Intact, Microsoft Dynamics 365, Intuit Quickbooks, and Xero. Providers also offer connectivity to other industry vertical software providers (e.g., property management and tax preparation.) Partnership examples include J.P. Morgan Chase and TD Bank with FISPAN.

Helping Corporate Clients to Integrate Financial Data from Multiple Banking Partners

Providers focused on multi-bank connectivity fall into two primary categories: those whose primary focus is on multi-bank connectivity versus those that offer multi-bank connectivity to integrate data with their primary solution set—either ERP software, TMS system, or payments automation provider. These providers primarily market to corporate and business clients, but a few have partnership and referral agreements with banks. Partnership examples include Wells Fargo and Capital One with Trovata, J.P. Morgan and Citi with Kyriba, and Goldman Sachs with GTreasury.

The Time Is Now

If you're not one of the forward-looking banks offering ERP/TMS/accounting system integration or multi-bank connectivity, the time is now to formulate your product strategy. Survey your customer base. Are customers struggling to download data from your corporate portal, reformat that data, and then upload the data into their financial management systems each morning? What ERP, TMS, or accounting software is commonly used? Are you losing clients to banks that offer better connectivity?

Once you have answers to those questions, you have the basis for building your business case and further analyzing the opportunity to better serve your clients.

Was this report useful to you? Please send any comments, questions, or suggestions for upcoming research topics to info@celent.com.

RELATED CELENT RESEARCH

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[Generating a Win-Win in Transaction Banking: Opportunities to Fill the Gaps between Corporate Demand and Bank Supply](#)

[Playing the Long Game to Enhance Client Engagement: 2020 Corporate Digital Channels Survey Results](#)

[The Steady Rise of Open Banking: Laying the Foundations for Open Finance](#)

[Now Is the Time for Open Banking Payments](#)

[Parsing the Data Aggregation Landscape in the US](#)

[Open Banking API Portals: Five Best Practices to Increase Developer Engagement](#)

[Creating Value-Added Services for Corporate Clients: Overcoming Barriers to Adopting APIs](#)

[Corporate-to-Bank Integration: The Need for a Hybrid Approach](#)

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