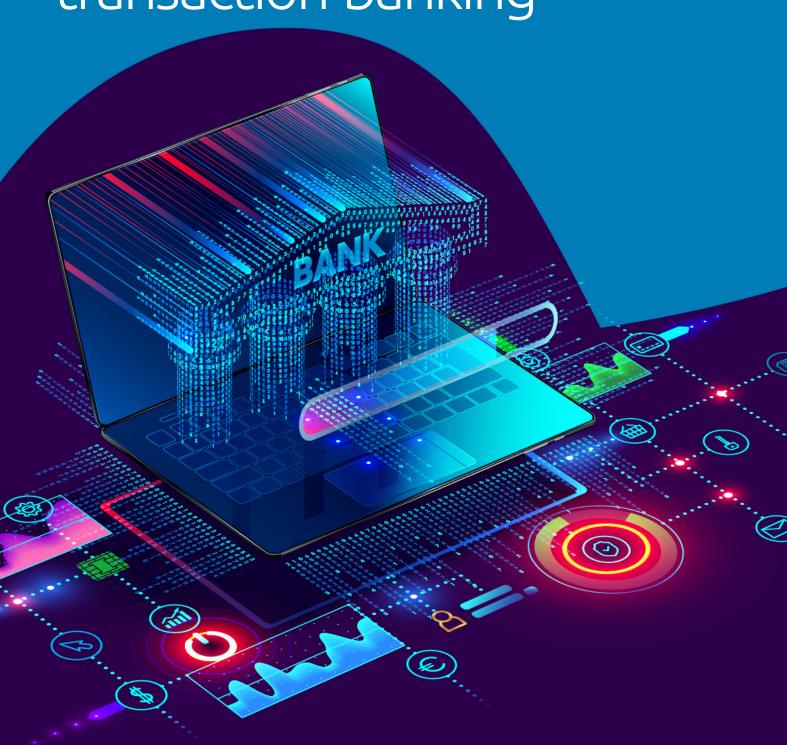


The untapped potential of virtual accounts in transaction banking



Executive summary

While the COVID-19 pandemic has had a large impact on the transaction banking landscape, it is not the only disruptor in a bank's journey towards modernization and digital transformation.

Corporate treasurers are no longer just looking for traditional transaction banking services but also expect banks to play a supporting role in optimizing their business requirements, finding cost efficiencies, and addressing key risk areas. Corporate treasurers require their banking partners to include capabilities enabling rationalization of existing accounting structures, improved reconciliation processes, continual status monitoring, access to valuable data, itemized reporting at entity level, and enhanced liquidity risk management in their services. To address all of this is not a small undertaking for a transaction bank, but there is a solution that will tackle many aspects, and that is through Virtual Account Management (VAM) technology.



Modern VAM technology enables a fundamental transformation in the provision of global cash management services. Enhanced VAM capabilities enable a transaction bank to offer cost savings, automation, working capital optimization, and a fit-for-purpose account structure to its customers, which in combination with real-time information supports treasurers in strategic decision making and risk management.

A next-generation VAM technology platform can cover various use-cases, delivered through globally consistent capabilities and processes without incremental software deployments. Furthermore, combined with notional and physical pooling capabilities, an "All-in-One" cash management approach helps financial institutions deliver just the right cross-entity, cross-currency and cross-country solution from a single holistic software platform.

For a transaction bank to provide corporate clients with rationalization of accounts, flexibility in operations and high customer satisfaction, a sophisticated VAM framework is indispensable. But how does VAM address the current market challenges and provide the correct framework for a bank to deliver up to expectations of its corporate customers?

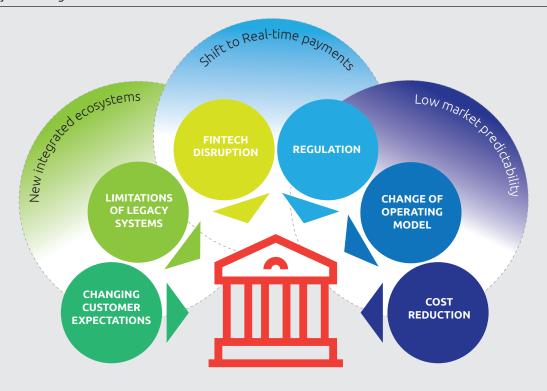
The setting: challenging market environment for transaction banks

COVID 19 and economic uncertainty on one side, and new open banking and real-time payments opportunities on the other, have forced global transaction banking industry to undergo fundamental and rapid change. The market is further disrupted by new and innovative players, including FinTechs. While the new entrants benefit from the absence of complex and costly legacy systems, banks are wagering on payments modernization and a new take on technology.

In order to drive increased revenues from corporate customer segment, transaction banks must improve the customer journey, work on the right ecosystem strategy to emerge as a 'one-stop shop', while radically reducing costs and leveraging digital assets. "Visionary banks are diligently prioritizing technology transformation, as 68% say that the loss of existing clients and prospects is the most significant threat to their plan".¹

Collaboration, connected networks, and cross-industry data sharing are critical facets to building an ecosystem. Open Banking can help in the fusion of banking, multi-banking and non-banking data which in turn can provide value to corporate clients. Monetizing quick-win solutions and re-visiting infrastructure and data strategy will be key.

Figure 1. Major challenges for transaction banks



^{1.} World Payments Report 2020, Capgemini

Key factors for successful growth

Despite market challenges, corporate customers continue to expect innovative ideas and continuously improving products from their banks to address their own changing environments. The growing corporate demand for real-time liquidity, and introduction of new digital products and services related to real-time cash management, has become an essential initiative for transaction banks.

INNOVATIVE TECHNOLOGY

As an obstacle to adjusting to this market demand, system limitations, data, integration challenges and scalability issues in technical infrastructure are frequently named as the greatest barriers to business growth. Massive legacy system modernization and in-house developments will not provide short-term return on technology investments and will typically prolong time-tomarket for new business propositions. In parallel with core technology infrastructure evaluations, many banks are implementing innovative, thirdparty software or service capabilities alongside existing platforms and services. This, in turn, enables an immediate improvement in competitive position and realization of business and ecosystem strategy.

SYSTEM CENTRALIZATION

A next step includes system **rationalization**, **optimization**, **and centralization**, where various siloed banking systems and bank infrastructures are gradually replaced with «next-generation» solution capabilities focused on APIs, microservices and Cloud, thereby ensuring innovative, scalable, open and compliant services. Additionally, integrating instant payments into core offerings can help banks with messaging standardization, enhanced collection instruments, and omni-channel access.

Top three drivers for banks' strategic initiatives for the next 2–3 years:

79% - Client visible innovation

75% - Digital transformation

73% - Regulatory compliance

(Source: World Payments Report 2020 Capgemini)

AUTOMATION

Finally, new technology can have a potentially large impact on the client servicing and operations functions. New solutions will not only **automate current support processes**, but also empower bank customers (and their underlying clients) to self-administer information dashboards, accounts, reports, and associated services. Providing bank customers access to a (Cloud-based) service that includes control and administration services has the potential for rationalization, optimization, and centralization throughout the complete value chain across corporate and bank.

The Challenge: Corporate customers expect banks to solve their pain-points

Similar to banks, corporations are also navigating their global businesses through a disruptive and complex environment. The corporate treasury function continues to have a key role in managing and delivering financial control (including liquidity and risk management) while maximizing business opportunities and ensuring sustainability.

A centralized approach for payments is the key. Corporations consider it essential to have control and visibility over payment flows but are looking towards banks to deliver real-time solutions in this area.

Typical corporate pain-points include:

- **High operational cost** there's a strong demand for a reduced number of bank relationships and lower account administration cost. This also relates to the need for increased efficiencies and agile ways of working, enabled by implementation of new technologies, process automation and higher degree of self-administration.
- **Limited visibility of working capital** liquidity must be visible to corporate treasurer on a daily basis, thereby enabling sound financial decisions and ability to withstand economic downturns. This also includes aggregation services and seamless visibility of multibank liquidity.
- Traceability of payments and reconciliation challenges these are typically the most timeconsuming areas within corporate treasury and cash management, aggravated by the lack of integration between various corporate, banking and external payment ecosystems.
- **Exposure to financial risks**, including liquidity, FX and compliance related risks. Financial fraud is another area of risk, both banks and corporations wish to restrict.
- Lack of real-time data while customers' customers exploit the benefits of instant payments, corporate systems and processes are still lagging behind. Technology overhauls to include new features like cloud-based API solutions, is something corporations are starting to evaluate more often.

As a result, corporations no longer just look for traditional transaction banking products and services but expect banks to play a more active and supporting role in optimizing and realizing their business requirements, cost efficiencies and addressing key areas of risk. Primary objectives include rationalization of existing accounting structures, improved reconciliation processes, status monitoring, access to valuable data, itemized reporting at entity level and enhanced liquidity risk management.

Is there a single solution for different corporate needs?

In the light of the current changes in market dynamics, coupled with increasing corporate expectations for more digital and flexible cash management tools, many transaction banks are exploring new market propositions linked to virtual accounts. While corporations often implement virtual accounts for reconciliation and reporting there can also be significant liquidity benefits that help to address several corporate pain-points. Implementation of Virtual Account Management (VAM) can offer cost savings, automation and working capital optimization, built around a fit-for-purpose account structure, which in combination with real-time information will support treasurers in strategic decision making and risk management.

Fundamentally, virtual accounts provide a mechanism for organizing and reporting data that is held in a physical (or real) bank account. However, the inherent flexibility in defining virtual account hierarchies, that reflect various business operations, enables banks to offer multiple customer propositions from a single technology platform.

Virtual accounts allow corporate treasury to gain greater visibility of the overall cash position and more control over their use of funds. However, the fact that only a small percentage of companies are currently using virtual accounts suggests that virtual account offerings currently represent an unfulfilled business niche for banks in the provision of corporate services.

Figure 2. Potential Use Cases of VAM

		SELECTED CUSTOMER SEGMENTS			
POTENTIAL USE CASES	BENEFITS	Global corporations	Large enterprises	SMEs	Brokers, lawyers, real-estate managers
Automation of Account Receivables	Reduction of manual work due to automated reconciliation. Improved liquidity overview.	X	X		
Virtual Cash Management	Reduced number of physical accounts. Reduced transaction and service fees. Centralized treasury function.		X	X	
Client Money Management	Segregated client funds without the need to open large amount of physical bank accounts. Reduced account opening/closing time.				X

«Next generation» virtual accounts are transforming transaction banking services

Virtual accounts are not new: banks have offered these types of products and services for about 20 years, targeting specific customer segments and serving various purposes. Also referred to as 'sub-accounts', they are essentially non-physical off-balance accounts that can be used by clients to reflect and optimize their business operations.

With many of the features typically available in a physical account, virtual accounts provide an excellent tool for rationalizing the number of physical bank accounts and banking relationships. Time-consuming and costly physical account administration is replaced by self-serviced virtual account creation and maintenance by the customer. Self-serviced virtual account administration according to specific client needs adds a dimension of scale that is challenging, if not impossible, with physical bank accounts.

While virtual accounts are clearly recognized for providing significant benefits to Accounts Receivables (AR) processing, they can also provide corporations with a mechanism for administering on-behalf-of relationships within entity hierarchies and centralized payables and receivables processing. In this model, payments and collections of an entire company can be managed from a small number of dedicated physical bank accounts.

The latest virtual account management (VAM) technology also enables a fundamental transformation in the provision of global cash management services. For example, reduction of physical bank accounts may reduce the need for single currency notional pools, as entities will be linked virtually to the same physical account.

A cross-border virtual overlay account, over a number of currency structures, also provides a mechanism to view total liquidity positions across geographies.

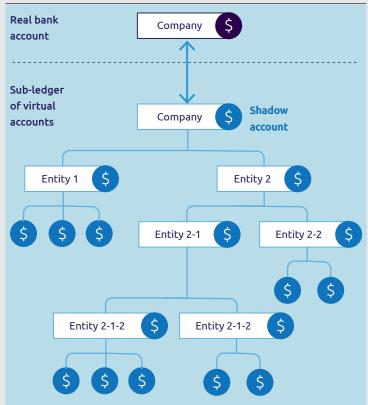
Main benefits of VAM

- Rationalization and simplification of physical bank account structures and banking relationships
- Ability to self-administer virtual accounts (under a defined physical account) with equivalent capabilities as a traditional physical account
- · Access to local clearing infrastructures without requiring a real account in the country
- Rapid account opening and closing processes through self-service account administration
- · Improved straight-through reconciliation to ERP
- On-Behalf-Of structures according to corporate requirements
- Multi-bank connectivity, enabling customers to create and administrate virtual accounts across multiple banking relationships and partner bank ecosystems
- Real-time visibility of liquidity positions, including inter-company positions
- Extensive reporting functionality, covering the whole account structure at company or subsidiary level

Extended account hierarchies with unlimited number of accounts through self-service capabilities

Corporations have been expanding their use of virtual accounts, not only looking for account rationalization but also for support for complex operations such as managing multi-currency liquidity, intercompany funding, and interest and margins.

Figure 3. Hierarchy of virtual accounts



Use Case 1 - AUTOMATION OF ACCOUNT RECEIVABLES

Time savings and error reduction

Account Receivables (AR) automation functionality within VAM aims at taking manual work out of matching remittance information with invoices and reconciling them in the ERP.

While many automated receivables applications deal with automated invoice generation and follow-up, virtual accounts solve reconciliation challenges by allocating "published" (clearing-recognizable) identifiers at virtual account level as part of an on-behalf-of relationship. Thus, while funds are received into a single physical account, incoming funds are also automatically allocated to individual virtual accounts or sub-ledgers.

It is also possible to assign multiple published account references to a single virtual account. Together with itemized ERP reporting, these features promote higher rates of straight-through ERP reconciliation, reduced levels of ledger inaccuracies, improved visibility of payment data and enhanced decision making.

A key challenge for banks is to provide near real-time reporting to VAM from legacy systems. This is enabled through an API-driven integration capability ensuring timely delivery and visibility of transactional data.

"Instant data exchange and API connectivity have become treasurers' technology priorities. In the United States, nearly 83% of companies with USD1 billion or more in annual revenues report high awareness of real-time payments, which can be interpreted as readiness to adopt in 2020".²

For corporations that are seeking:

- Improved reconciliation rates. AR reconciliation is still very often tracked and executed manually using spreadsheets. This process is both time consuming and error prone, and it has become the key challenge for many corporations.
- Trackable and transparent payment data. In reality many incoming payments can be hard to identify, as they might come from bank accounts that do not clearly identify the company that was invoiced, have missing or incorrect reference to the invoice or combine several invoices into single money transfer. A virtual account number per customer or even per invoice serves as a unique identifier in this case.
- Rationalization and simplification of physical bank accounts and banking relationships.
- Improved efficiencies and levels of automation in incoming funds allocation processes.
- Enhanced reporting to ERP and associated improvements in levels of straight-through reconciliation.
- Higher returns on working capital complete overview of funds for sound investment decisions.

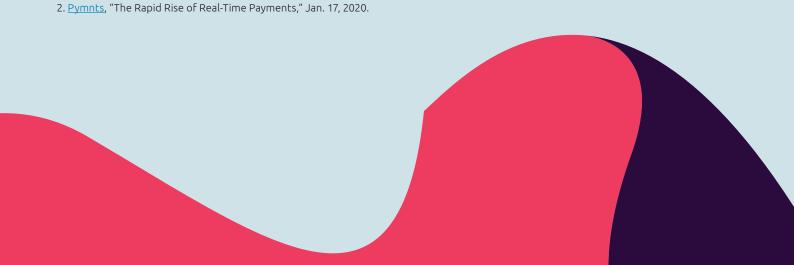
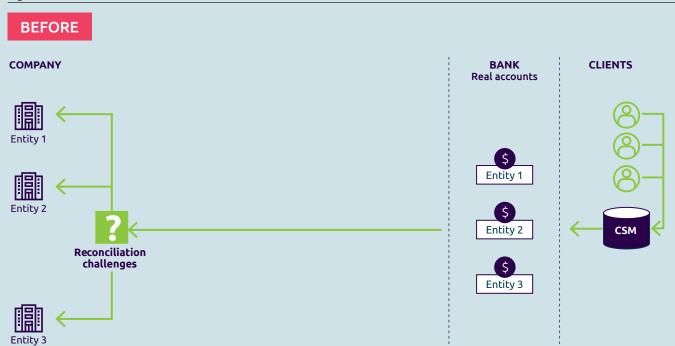
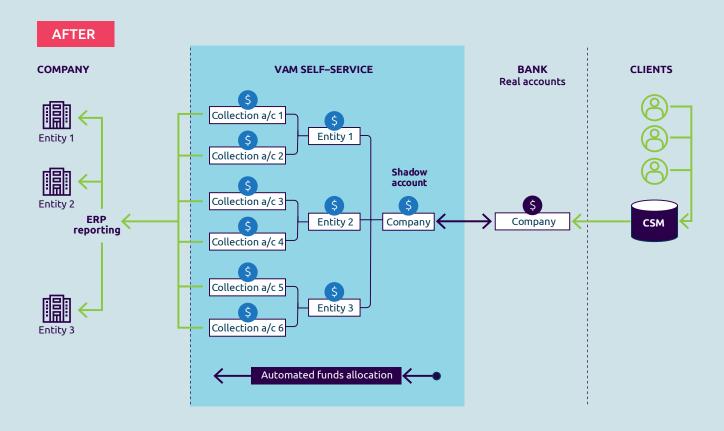


Figure 4. Automation of account receivables





Use Case 2 - VIRTUAL CASH MANAGEMENT

Centralization and agility

Virtual Cash Management (VCM) allows corporations to adopt an agile treasury management model, which enhances responsiveness to support strategic decisions and be more reactive towards external factors (e.g., COVID 19). The ultimate goals of implementing the solution are centralization, cost efficiencies and risk reduction.

Virtual accounts can provide corporations with extended features for enhanced liquidity management. At its simplest, this proposition involves organizing and reporting transactional data from a rationalized number of physical bank accounts. The segregation and aggregation of transactions and balances enables a centralized visibility of liquidity according to the self-administered virtual account structures, while providing transactional detail at virtual account level for reporting and audit-trail purposes.

With virtual accounts corporate customers can create account structures reflecting liquidity held in accounts in other banks, with a multi-bank virtual overlay consolidating liquidity positions. Account information from other banks can be populated through statements or Open Banking APIs (e.g., PSD2). It is also possible to initiate payment requests from the virtual accounts that represent the physical accounts held in the other bank.

Additionally, VCM provides a mechanism for administering "on-behalf-of" relationships within entity hierarchies and centralized payables and receivables processing. In this model, payments and collections of an entire company can be managed from a small number of dedicated physical bank accounts owned by the parent entity. Designed to simplify banking structures, support business growth and bring greater control and visibility to treasury processes, the VCM solution enables banks to offer a corporate proposition with intercompany positions as part of the account structure, including foreign currency administration and virtual account to virtual account transfers.

The latest virtual accounts technology enables a fundamental transformation in the provision of global cash management services. For example, notional pools associated with the same physical account in a domestic structure can be administered virtually, where participating entities are linked virtually to the same physical bank account.

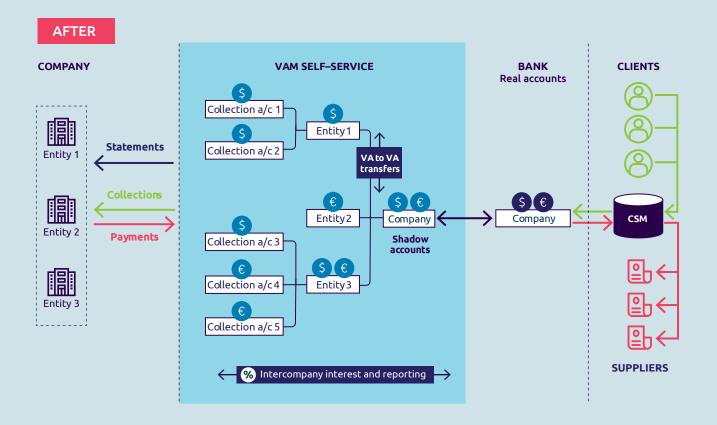
A VCM solution empowers corporations to define intercompany interest apportionment rules and automated transfer mechanisms (e.g., scheduled sweeping and topping) as well as balance, transaction, and interest reporting through self-servicing capabilities.

For corporations that are seeking:

- · Central visibility of multi-bank funds
- · Real-time and centralized visibility and control over corporate liquidity positions
- Real-time reporting to support more efficient cash flow forecasting at the entity level
- · Rationalization and simplification of physical bank accounts and banking relationships
- Improved efficiencies and levels of automation in incoming funds allocation processes
- · Enhanced reporting to ERP and associated improvements in levels of straight-through reconciliation
- Trackable and transparent transaction data
- Support for POBO and COBO centralization and factory models
- Full self-servicing capabilities to define additional virtual account services (e.g., interest apportionment and reporting) to reflect corporate operations and ERP structures

Figure 5. Virtual cash management

COMPANY BANK Real accounts Culents Entity 1 Collections Entity 2 Payments Suppliers Suppliers



Use Case 3 - CLIENT MONEY MANAGEMENT

Self-service account opening and segregation of funds

The term 'Client Money Management' (also referred to as CMM or Escrow Services) is used to describe administration of financial portfolios by specialized people or organizations on behalf of a client. Typical examples for entities managing client money are law firms, pension administrators, property managers, insurance companies, brokers, etc. where CMM virtual account features can be used for client transaction tracking and interest application.

The main challenges solved by CMM relate to ensuring the segregation of accounts to avoid co-mingling of funds owned by different clients. CMM is also a highly regulated sector and it is, therefore, essential to address relevant reporting requirements.

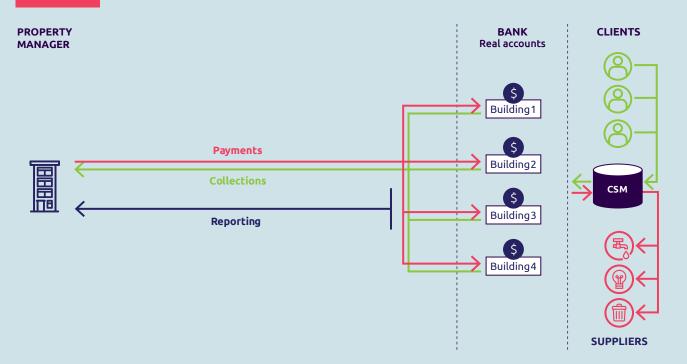
As with other VAM propositions, client self-servicing is fundamental to CMM and virtual accounts can be opened rapidly and activated by the managing entity according to relevant know your customer (KYC) requirements, which are controlled by the bank.

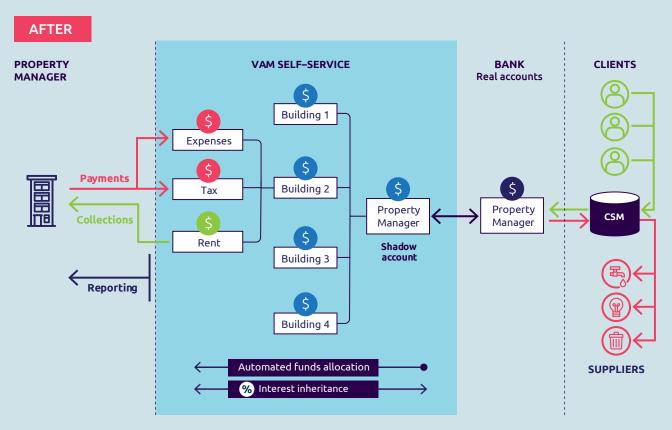
For corporations that are seeking:

- · Rationalization and simplification of physical bank accounts and banking relationships
- Segregation and aggregation of clients and client money holdings
- Trackable and transparent transaction data
- Allocation of transactions with incomplete referencing to the correct underlying client account, based on pre-defined rules
- Interest allocation on the client accounts according to flexible interest set-up
- · Enhanced reporting

Figure 6. Client money management

BEFORE





Additional capabilities - VIRTUAL BRANCHES

Optimizing global reach for transaction banks

The Virtual Branch solution addresses three key scenarios:

- Enabling banks to offer customers access to local payment infrastructures for transaction handling (both payables and receivables), with or without a physical account in a specific currency;
- Enabling banks with limited currency account capabilities (e.g., only GBP or USD) to offer customers transaction handling services in additional currencies;
- As an attractive proposition for Payment Services Providers (PSPs) when administering partner bank relationships and integration.

A bank can create Virtual Branches to connect to a foreign payment infrastructure via the member banks of its own banking group or in association with partner banks.

Customers can self-administer virtual account structures in multiple currencies according to business requirements. The Virtual Branch solution will take care of relevant account links between the Virtual Branch and customer hierarchies, incoming and outgoing transaction flows, as well as the reconciliation between the VAM bank and partner bank.

The Virtual Branch itself will not be visible to the customer.

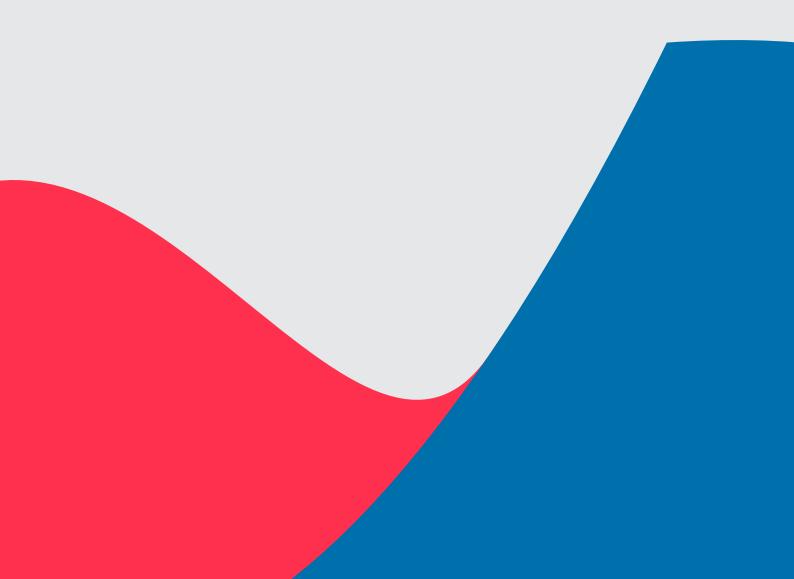
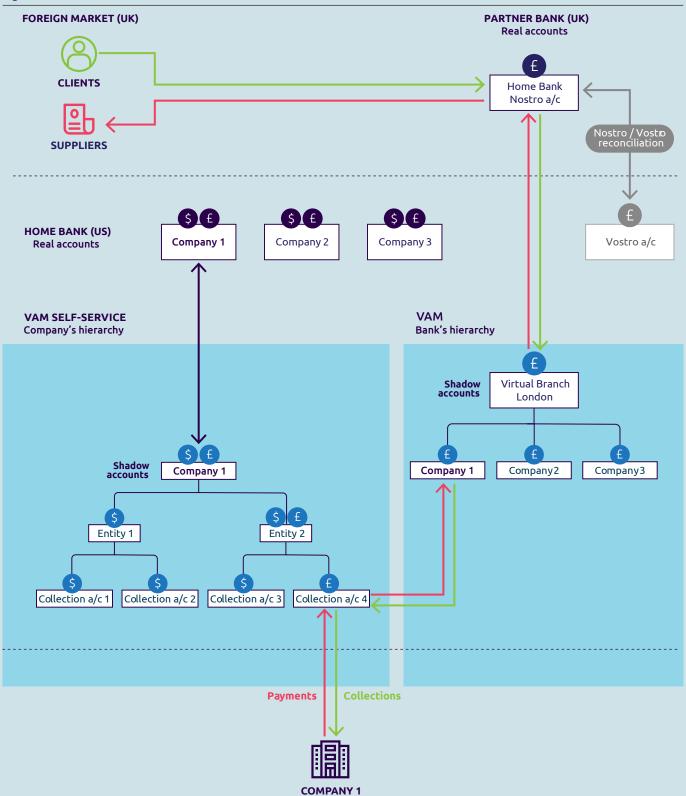


Figure 7. Virtual branches



What's next? An "All-in-One" Cash Management Approach

Integrated real-time cash management practices for corporate treasuries

When offering corporate cash management services in a regional or global perspective, while subject to various local market conditions and individual jurisdictional concerns, it is essential to be able to offer a range of products and services according to individual corporate and geographical requirements. Such cash management products and services are typically administered through multiple banking solutions/platforms with associated cost and inconsistent customer experience.

The "All-in-One" Cash Management approach enables financial institutions to offer just the right cross-entity, cross-currency and cross-country structure (using various cash pooling methods) from a single holistic solution. "All-in-One", thereby, offers a next generation, propositional-based platform covering various use-cases, delivered through globally consistent capabilities and processes.

In addition to enabling a single and consistent cash management platform, "All-in-One" also provides the fundamental components and functional features enabling innovation. For example, it can combine more traditional cash pooling methods such as cash concentration, with virtual account structures in the same hybrid account hierarchy.

Significant benefits for banks

- **Rationalization** replacing various liquidity management solutions with a single, multi-propositional platform.
- **Flexibility** component-based architecture that allows to re-use system modules, features and interfaces for setting up new customer propositions.
- **Customer satisfaction** whether a bank adopts white-labelled state-of-the-art user interface and dashboards or API integration to existing channels, a consistent user experience is enabled across multiple cash-pooling products and services.

APIs

Common Data Storage

Correct Balance Netting

Single Access Management

Wirtual Cash Money Mgmt

Wirtual Branches

Wirtual Branches

Single Global Network

ALL-IN-ONE CASH Pooling

Single global platform

Figure 8. All-in-One Cash Management concept





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About TietoEVRY

TietoEVRY is the largest IT company in the Northern Europe serving customers in over 90 countries worldwide. Payment Solutions, a part of TietoEVRY Financial Services, is a trusted partner in real-time transformations for over 280 banks and financial institutions. Our Virtual Account Management (VAM) solution has been chosen by leading global and regional banks as a key component in their cash management proposition, delivering real-time liquidity management capabilities to the most demanding corporate customers. Additionally, TietoEVRY payment solutions include payment processing, instant payments, open banking, card issuing, acquiring and switching, as well as credit.

We aim to be customers' first choice for their business renewal. Reach out to us to discuss how we can help to boost your business performance!

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