

The evolution of APIs: 3 game-changing use cases for fintech's future

APIs may have been to fintech what the wheel was to transportation.

Before APIs, building a technology business involved a tremendous upfront cost – not in terms of CapEx, but in terms of time and resources spent building the basic building blocks of the business. Pieces of the technology that were necessary for the business but not necessarily a differentiating element of it. Lots had to be built before a new fintech could even think about on-boarding its first customer. So, this was a structural limitation to new financial services companies entering the market.

The proliferation of APIs and the 'as-a-service industry' have turned this business model on its head. With many building blocks being delivered by third parties – from customer authentication, to payments to data integrations or basic data analytics – infrastructure at reasonable rates is readily available for consumption, allowing anyone to access the market. Coupled with the push towards [open finance](#) – which has given firms unprecedented access to customers' financial data, especially in Europe with progressive regulation in that regard – today's fintechs are able to launch more easily, quickly, and cost-effectively, using APIs from best-in-breed providers as building blocks to create highly specialised and personalised products.

APIs in fintech are not a new thing anymore, but API-led products have also evolved considerably over time.

Ten years ago, the complexity of information access and banks' fixation on personal finance management (an immediate evolution of a bank account, unsophisticated transaction categorisation and basic, rule-based recommendations) meant the landscape consisted mainly of apps like [Money Dashboard](#) and ID verification applications, with the occasional (very basic) payments app thrown in.

Since that early vision, fintech APIs have evolved in two fundamental ways.

On the one side, infrastructure APIs have enabled companies to build or replace anything that is not-core to the business by APIs, so they can focus on their key products and differentiating factor.

On the other side, many APIs are now full-fledged financial products delivered through code integrations and designed to address specific customer pain points at the point of need – so-called embedded finance. A person or a business can now get a credit card or loan before paying at the

online checkout, or buy travel insurance when booking a flight, or [hedge against foreign currency fluctuations](#) without ever having to deal with a bank or other financial services incumbent. This has also driven product-led growth for the ecosystem. It's now easier than ever for customers to try out products — often for free or at a significant discount — and see its value for themselves. As a result, companies can now test product market fit and scale faster.

As we take the obvious next step from open finance to open data, APIs will undoubtedly become more mature and sophisticated and may evolve in other, new ways.

So what happens next? How will increasing API-fication impact the evolution of fintech? And what will this mean for the industry moving forward?

In this series, we'll take an in-depth look at some exciting use cases which we think will take embedded finance to the next level.

1. Turning cost centres into competitive advantages via advanced payments operations

Managing payments is essential for every type of business being it real estate or SaaS and all businesses, especially those who are tech-first, need to evolve how they manage their financial operations.

Managing money flows is a hugely time-consuming and costly affair for many businesses and this is especially the case when it involves real-time flows.

The single biggest reason for this is that many organisations' workflows are still largely manual and have not been built to take advantage of the data richness that comes from transactional and data-flows. But even those organisations that have invested in technology often have to contend with high costs and low efficiency, mainly because the major treasury management systems on the market today have limited automation, need to be handled by skilled staff, and may not integrate with each other to provide a single unified view.

Some companies choose to hire people to deal with payment operations, while others choose to build and maintain integrations with banks in order to automate these processes as much as possible. In either case, they are using valuable resources.

In the context of banks and payments, APIs enable companies to programmatically send, receive, and carry out ledger and (complex or not so complex) reconciliation functions within their own systems, as opposed to their banks' applications.

This has three key benefits.

First, it saves time and money by leveraging automation and reduces human error.

Second, it allows for a data strategy that captures and manages data from the on-set of each new client on-boarding, each purchase order or each payment.

Third, it enables proactive budgeting and more accurate forecasting. Instead of relying on historic – and possibly incorrect – data, a real-time, unified view enables organisations to allocate budget based on actual need. Real time accounting.

There are already several players offering payments operation capabilities.

[Modern Treasury](#)'s plug-and-play APIs, for instance, enables development teams to build their own money movement and tracking apps. In Europe, Numeral has built infrastructure for companies moving money through bank transfers. Bank transfers represent a huge market as over 90% of European payments are SEPA payments.

Others have APIs designed to facilitate one use case:

[Formance](#) has built a ledger-as-a-service solution for marketplaces and fintechs, [Sequence](#) is targeting money flows of e-commerce platforms and [Sibill](#) is focusing on cashflow management by consolidating bank accounts and financial data.

Scalability risks for these companies are significant:

For one, because these companies are once removed from the core product, it's hard to earn credit for the user experience, but easy to get blamed if it falls short of expectations. And as API-led businesses, there's a risk that when clients scale, they decide to replicate the technology in-house.

Also, when integrated in the payment flow a company will typically require specific processing or electronic money licenses and the case of the ledger not being held by the regulated party, can cause issues do to lack of real-time risk management.

The upshot is that, when successful, payment operations fintechs enable businesses to transform sunk functions into a compelling strategic advantage. Taking a lending company as an example, faster reconciliation can allow working capital efficiency where cash that would be tied up and couldn't be lent for 4-5 days becomes immediately available. To do this, companies need to be cost-effective and able to handle multiple systems and payment methods at speed and become the system of record for a company. Building reconciliation and ledger products on top of APIs has enabled Modern Treasury to appeal to a broad range of customers.

Over time, it might well be that these APIs mature to the extent that they enable any company to build their own in-house banking stack, crowding out core banking software providers.

2. Complex data flows: Accounting and e-commerce

It's a reality that organisations rely on increasingly large volumes of data across their operations for underwriting and risk management purposes, for inventory and order management, to improve customer service... the list goes on. At the moment, however, as much as [80% of this data is unstructured](#), which means it needs to be cleaned up and reorganised before it's fit for meaningful consumption. And the big problem here is that the various tools one might use in their clean-up efforts, often don't sync with each other and, as a result, terabytes of business-critical information remain siloed and ultimately unusable.

There's an opportunity, then, for fintechs to step up in offering APIs that can aggregate data from disparate sources and pull it together in one unified and organised view. [Plaid](#) is arguably the pioneer in this area, having developed account-linking and banking integration services before expanding into other categories of financial data, including customer identity information, investment data, and data about liabilities like mortgages and student loans. But several other companies have also started similar offerings with accounting and e-commerce data.

Accounting data is complex because it deals with a range of principles, and it's not delivered in real time. But, by integrating with key platforms, newcomer [Codat](#) enables banks, fintech lenders and other technology users to pull small business accounting data and give a better snapshot of their financial health. The company has also recently overcome one of the key outstanding issues: namely, account manipulation. Using Plaid's technology, Codat can now reconcile accounts with bank flows to make much more accurate risk assessments and create tailor-made products for lenders.

Likewise, [Rutter](#) has developed a unified e-commerce API that serves a similar customer base to Codat's. As transactions move increasingly online, lenders want to evaluate, not only a customer's financial data, but also its sales history, inventory levels and sales margins. Traditional financial models and long-winded loan application processes are sorely inefficient against this long list of requirements and users are increasingly tiring of them. By leveraging one or both platforms above, however, a digital lender can make almost instant decisions.

But key to success in this model is scalability, and that brings its own considerations of build vs. buy. In the early days of a business, speed to market is more important than cost, but that relationship often changes as operations ramp up. As closely as these APIs can serve their core business, many customers still prefer to build key integrations in-house, for reasons of cost efficiency and speed of maintenance. If API platforms want to tip the balance in their favour, they must be able to build-in enhanced functionality and actionable insights on top of the data as they evolve from being developer-first platforms, to serve a larger suite of users within an organisation.

A move to open data would allow these APIs to become even more comprehensive, pulling together not just related categories of data, but potentially becoming a single source of truth that organisations rely on to make strategic decisions.

3. Embedded crypto, or crypto-as-a-service

Notwithstanding that we're currently in the midst of a crypto winter, made worse by the recent collapse of FTX, one cannot forget about all the other things happening, many at institutional or government level, that are looking to normalise the technology and asset class. There's still growing demand for the service. Many institutional investors are looking to increase their exposure to crypto or allowing customers to manage and trade digital assets as part of their own portfolios. As such, providers have to manage the unique risks and compliance requirements that holding digital assets creates. And crypto ownership is equally [on the rise](#) among individuals. With [30% of UK consumers](#) — 40% globally — keen to make purchases using crypto, merchants are under growing pressure to accept the alternative payment method.

Demand for crypto services runs the gamut, from front-end features like payments, currency conversion, yield and wallet management, to back-end operations like payment processing, secure custody, and compliance. Creating a crypto-as-a-service product isn't easy. And, for larger clients who

have been slow to adopt crypto features, and especially institutional investors, [regulatory approvals in key jurisdictions](#) and strong ties to the [leading exchanges](#) are table stakes.

Specialised services like [Coinbase Institutional](#) have already begun targeting the sector, but companies developing crypto strategies are not only large operations. From e-commerce merchants to fintechs, there is a huge gap in the market for smaller companies that are better able to operate at pace. Given that onboarding processes at Coinbase remain cumbersome, many players are opting for these more agile providers.

From an institutional perspective, providing custody services can be an effective foot in the door before differentiating through other services. Take Swiss fintech, [Metaco](#), for example. They started out as a digital asset custody engine and then developed an order and execution management system alongside technology that allows financial institutions to access decentralised finance products or start offering them to their own customers.

By contrast, when it comes to other operators, on-ramps and off-ramps — specifically crypto-linked cards and currency conversion services — are obvious low hanging fruit. Speed, risk management and price are the key drivers for growth. The catch is that, with established players like [DriveWealth](#), a Mouro Capital portfolio company, and Stripe offering ramps to merchants and trading services, and Visa and Mastercard developing crypto integrations, transaction fees and likely to fall, squeezing potential margins for newcomers.

That said, we still believe in the long term that the ability to build new infrastructure, rather than connect existing layers, will likely make these players' value propositions much stickier.

The future of finance is embedded, open, and interconnected

[McKinsey estimates](#) that those economies that embrace data-sharing could boost GDP by up to 5% from financial data alone. They reason that data sharing enables customers to buy and use financial services to which they might not otherwise have access, saves time for customers in their interactions with financial services providers and improves the range of product options available.

Similarly, financial institutions stand to gain through *“Increased operational efficiency... better fraud prediction... improved workforce allocation... and reduced friction from data intermediation.”* To this

end, we're already seeing movement towards broader, more granular API-based data sharing but, in order to unlock its full potential, two key challenges remain in place.

First, how to move data more efficiently and securely?

There's a balance to be struck here. Companies need to be able to access and make full use of the data they require easily, but consumers, whether businesses or individuals, need to have peace of mind that their data is in safe hands and won't be abused. [Skyflow](#), a Mouro Capital portfolio company, has built a data privacy vault for sensitive data, offering an API-delivered service that stores personally identifying information (PII), among other sensitive data for customers. This allows companies to simplify how they manage, access, and govern sensitive data and developers to quickly build applications and workflows without worrying about data privacy, compliance or residency.

Second (and arguably more important), fintechs need to scale effectively if they are to make an impact.

This will likely entail some consolidation, which we've already started to see in Visa's abandoned pursuit of Plaid and subsequent acquisition of open banking platform, [Tink](#), instead. Likewise, strategic partnerships will also prove critical. Embracing new standards of openness and interoperability, fintechs can create transformative opportunities for collaboration and innovation to everyone's benefit — be they traditional financial services firms, customers, or the fintech industry itself.