



Payments Innovation Is Critical for Every Global Enterprise

An  XTRM White Paper



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As fintech software and service innovations continue to disrupt the Financial Services market, even non-financial firms need to think about how to take advantage of this trend to improve their payments processes for the benefit of the company, their customers and their partners.

FI – An Industry Ripe for Disruption

The financial services industry has long been ripe for disruption. The success of these disruptive services have not come completely as a result of the inattention of financial institutions (FI) or lack of investments in innovation on their part. More often, financial service businesses operate in an environment governed stifled by hard-line regulations and the need to meet both global and local compliance standards. Bank secrecy, security terms, the lack of trust in technology, and strict regulations have slowed down FI development and innovation from the tech perspective.

It's clear that banks and financial institutions recognize the need to provide better user experience for financial services and are working hard to offer new and innovative solutions. Over the course of the past decade, they have attempted, with more or less success, to deploy more consumer-centric solutions, such as mobile wallet, mobile banking, and P2P (peer-to-peer) payment solutions. But it is also important to observe that most banks are following a me-too strategy when it comes to offer new, digital based, financial services and customer experience. Indeed, most of these new services have been developed in response to other players in their ecosystem, the fintech and big tech companies, that are disrupting the old model with new innovative, customer centric services.



In the long term, the financial services market will continue to change dramatically as these innovations from both fintech startups and niche players with unique capabilities and the entrance of Big Tech players (ApplePay, GoogleWallet, etc.) expand the possibilities. And those possibilities, regulatory considerations notwithstanding, are seemingly endless with respect to integrating financial processes with the delivery of goods and services, harvesting data (e.g. open banking) and distributed ledger technologies including new blockchain currencies (cryptocurrency) to Facebook's Libra currency concept which would seek to stabilize valuation by tethering it globally to "a collection of low-volatility assets, such as bank deposits and short-term government securities in currencies from stable and reputable central banks."¹ Over time, these disruptive capabilities will create real immediate and near-term opportunities for nearly **any business**.

Rather than waiting for new capabilities to trickle through their financial institutions who adopt or incorporate services that emerging fintech firms have introduced, businesses today can look to their own process and incorporate them directly into their value chain. There are now readily available point solutions across a number of financial process innovations - from mobile payments to invoicing/billing; from payroll and trading to financial packaging and even distributed ledger technology - which can be tapped today; many of which may have significant impact immediately.

No area of financial services, however, is both as ubiquitous and as ripe for immediate improvement as global payments, projected to exceed \$3 trillion dollar in global payments revenue by 2023 according to McKinsey's Global Payment Practice.² Considered from the SME, large corporation or ISV/SaaS provider perspective, that revenue translates into their cost of doing business or exciting growth opportunity to peel away some of these global banking fees!

¹ <https://libra.org/en-US/white-paper/#the-libra-currency-and-reserve>

² Global payments 2018: A dynamic industry continues to break new ground, McKinsey Global Payment Practice



Global Payments Innovation – Not Just for Financial Institutions (FI)

Financial institutions have traditionally owned the market and defined the limits in the area of payment solutions. Few, other than the cryptocurrency players thus far have moved fully beyond the traditional banking systems (ACH, SWIFT, et al) and the card processing networks (Visa, AmEx, MasterCard, et al).

These payment ecosystems remain the **primary endpoints** for receiving and making payments and will remain so for the foreseeable future. Despite that reality, there are tremendous opportunities for firms outside the financial industry to take advantage of new capabilities, the potential of new payments platforms and digital wallet architectures to support myriad business workflows including sending, receiving and exchanging funds and the use of APIs to embed these payment processes within their own software solutions.

Waiting for the banks or even Big Tech to create new capabilities only puts your firm at the mercy of their business strategy -- assuming they bring forward the capabilities that meet your needs rather than requiring you to define your needs in the context of their capabilities which is often the status quo. Indeed, there are compelling reasons not to wait but rather to take near-term actions that can:

- drive greater operational efficiency
- lower operating costs
- improve customer or partner experience
- aggregate account views to improve workflows
- provide more flexibility to unbundled, fee-based financial services or relationships no longer serving your best interests

Often what's needed to take advantage of emerging payments solutions can be as straight-forward as understanding the needs of the customers or partners you serve and how tapping into non-traditional payments platforms can enable you to deliver better outcomes more efficiently. And, in doing so, it requires the ability to reframe your view of what can or should be done internally, externally and by whom along with resources to execute on a strategy to implement them.



Using Digital, Mobile and Global Payments Architectures

It's All About the Experience with Ample Room for Process Improvement

Customers, of course, have been the ones most impacted by financial services firms' lack of agility, whether they need to open an account, send money overseas, pay their suppliers and partners, receive payments from their customers or trade in multiple currencies. And, while the consumer markets have seen relatively rapid implementation of new services, particularly in mobile banking, the B2B market continues to lag behind in business-centric services although new players have emerged.

In their October 2018 whitepaper³, McKinsey & Company and SWIFT identify cross-border payments as one segment that remains concentrated in B2B. And we believe that's likely to remain so, although C2B remittances are growing more rapidly than any other cross-border category. That white paper also contains their view on the likely nature of changes in cross-border payments, including 3 key points:

- Shifting growth: There will be many more cross-border payments than today but growth might not come from the expected sources (new use cases)
- Customers rule: They will define the nature of future services, not providers, e.g. FIs (new capabilities)
- Integrated experience, fragmented production: Fragmentation of the value chain will continue ... but it will be integrated into user solutions... production differences ..not visible to end user (embedded functionality)

In short, no matter how fragmented the value chain, nor how many new use cases and new capabilities emerge to meet demand, the customer experience must be paramount. And inversely, as long as the customer experience is integrated and seamless, the value chain can be de-constructed to allow for best-in-class components at each stage rather than counting on a sole supplier to be best of breed at every stage.

Payments Platform for B2B Use Cases – Receivables, Payables and P2P

The term 'digital wallet' has become ubiquitous and is often used interchangeably with 'mobile wallet' to describe widely disparate solutions anything from your bank's online system or mobile app to your wallet at a major retailer or using ApplePay, GooglePay or PayPal.

³ A Vision for the Future-of-Cross-Border-Payments, SWIFT and McKinsey & Company



However, the use of digital wallets in the B2B marketplace is still in the early stages and its potential for addressing myriad B2B use cases and even new business models is only now becoming apparent.

Using digital wallets in tandem with an independent **payments platform** offers the ability to outsource or offload much of the administrative burden associated with making, reconciling and reporting payments to partners and customers.

Further, an independent payments platform can support multiple digital wallets within a single account for both Payers and Payees.

- Funds can be Sourced from nearly anyone, anywhere and via multiple methods (ACH, card processing, etc.) in many currencies, e.g. USD, Euro, Yen, Yuan, etc.
- Funds can be Sent to anyone, anywhere as long as they have a digital wallet on the platform; and, if one does not exist for a Person or Company, one can be created dynamically along with a Pending Account.
- Pending Accounts can be updated by the Recipient using self-serve tools to provide the additional details required for KYC and AML compliance.

These intra-platform movement capabilities have a profound impact on how digital wallets can be architected to support incoming payments (AR) and outgoing payments (AP) as well as wallet-to-wallet (W2W) movement to facilitate peer-to-peer (P2P) payment, currency exchange (FX) or aggregating payments for more efficient payment workflows with partners and affiliates. Using a payments platform also offers the ability to offload administrative burdens related to compliance, e.g. AML, KYC, and tax reporting.

Mobile Access to Attract Customers vs. Barrier to Entry

The digital wallet has become the standard for 'Customers'. However, Customers in the Financial Industry context supposes that you must ensure Know-Your-Customer (KYC) compliance for every account, as well as screening transactions for Anti-Money Laundering (AML) compliance.

For prospects and potential partners and other 'Non-Customer' relationships this can become a barrier to doing business that's simply too high. The process of fulfilling KYC requirements as a precedent for doing any form of business is often unwarranted when the relationship is not yet fully engaged. This seems particularly annoying when one remembers that in nearly all uses cases, at either **endpoint** coming into or out of a payments platform is a known 'Customer' of a bank (ACH) or payments network (e.g. Visa, Mastercard, etc.).



Using an external payments platform enables all parties access to all the transactions pertinent to them while shielding their payees data beyond the transactions specific to their business relationship. This means an aggregator can see all of the transactions from hundreds, even thousands of users while each user can see all the transactions that they have either initiated or been the recipient of from all other entities using the platform. Imagine, for example, a referral or reseller partner or sales rep receiving rebates, rewards or commissions from the multiple vendors whom they represent. Each vendor has visibility to their business but no line of sight to the consolidated wallet of the payee.

Mobile and on-line access to the payments platform can be enabled via widgets requiring little or no programming, or white-labeled and fully embedded into your workflow via APIs. The platform can then manage user identity in the platform to comply, as needed, with KYC and AML requirements.

Increasing Use of Cross-border Payments - Improved FX

As discussed earlier, cross-border payments are a growing payments sector. And one where transaction fees and FX are often very high even, accounting for nearly all of the C2B global payments revenues and 83% of B2B global payments revenue⁴.



Key feature required of any global payments platform to facilitate cross-border payments is the ability for all users to Send, Receive, Fund, Exchange and Transfer in multiple currencies. This can be accomplished by provisioning each account as many digital wallets as required to complete any planned transactions as well as by empowering the account holder the ability to create as many currency-specific wallets as they desire. This enables either party to complete the FX Exchange on the payments platform -- generally at far more attractive FX rates than found at traditional financial institutions. Once, in their local currency, an account holder can Transfer to any external endpoint available to them based on their profile, ACH or SWIFT, etc. .

W2W exchanges can occur between account holders as long as both using the same currency. Typically, W2W activity does not incur any fees.

⁴ A Vision for the Future-of-Cross-Border-Payments, SWIFT and McKinsey & Company



Leveraging APIs to Optimize the Payments Value Chain

As we've seen, for more than a decade now, fintech companies have been accelerating innovation and elevating customer expectations when it comes to having accessible, fast and user friendly financial services. Fintech and BigTech companies alike put user experience, UX, at the heart of their offer. Unlike traditional FI offerings, these firms enable consumers and businesses self-serve online and mobile access to financial services without the hurdles of going through intricate and convoluted processes. And now through the explosion of APIs these capabilities can be stacked in unique value chains with far less development time required than systems.

FinTech and BigTech are working from the ground up to solve financial services consumers issues, while Financial Institutions and Banks are working in their highly regulated framework, only focusing on delivering compliant solutions. That said, each rely heavily on APIs to create their respective value chains.

Type of APIs:

An API is a set of functions which allow for sharing data and requests between systems, usually, in a controlled, secure manner. There are three types of APIs with widespread use in finance:

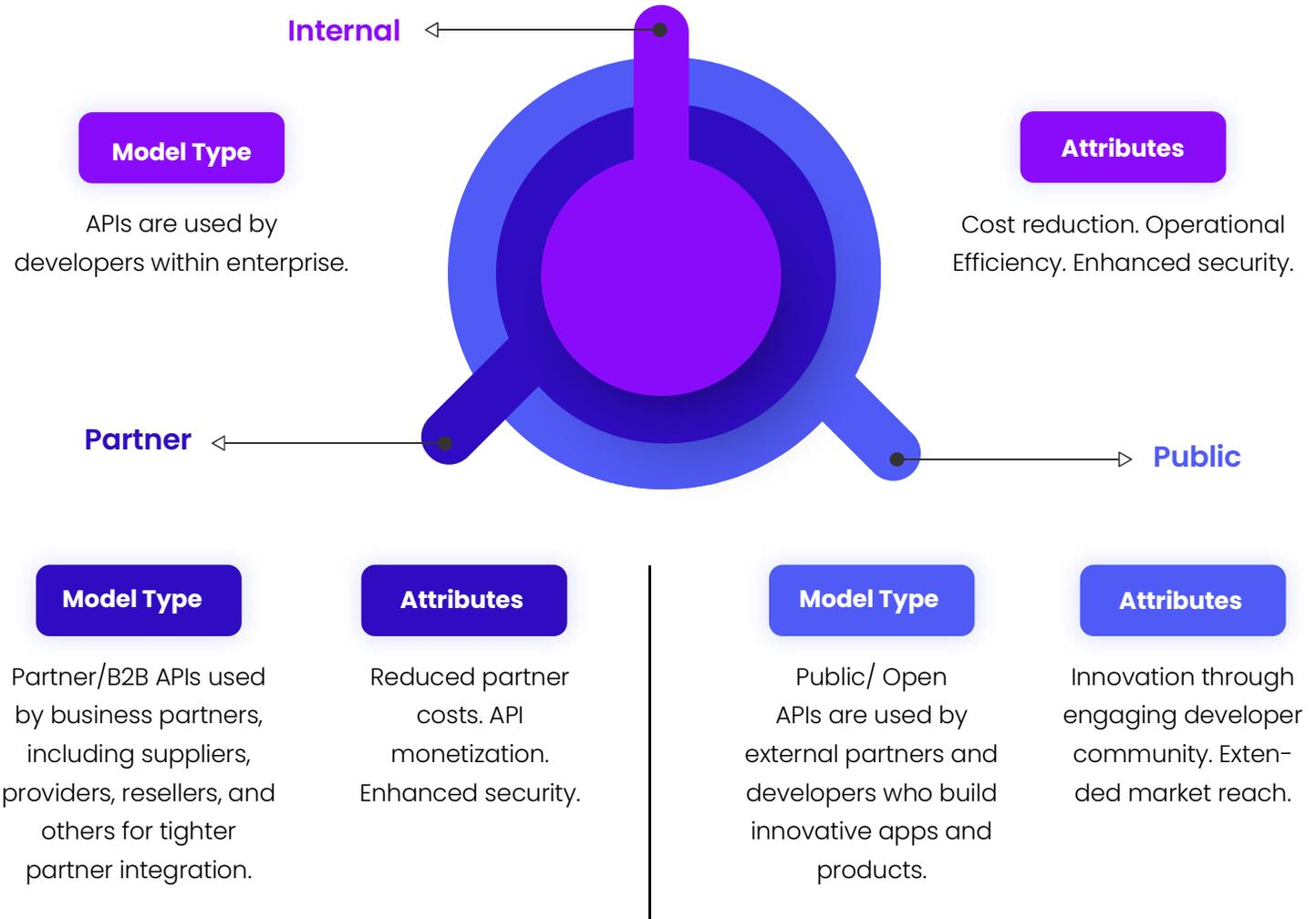
- Internal APIs used for sharing data across internal systems and users.
- Partner APIs (Private APIs) that let banks and payments processors exchange data with their partners.
- Public APIs (Open APIs) that allow for sharing

Indeed, APIs are essential to enabling non-financial services firms to integrate global financial services. An example of such services is customer data aggregators. Such companies source data from several banks and provide it to developers on the basis of the open banking concept.

With the customers pain points in mind, they are ultra agile and have a very fast time to market. A fintech company can launch a new feature or even whole new products in a matter of weeks, where a financial institution might take months, or years, to have new products up and running.



Three types of APIs API Models



The most common financial institution offerings are payment related APIs, which facilitate initiating payments and receiving basic customer information like account and profile data. Currently, the widest spectrum of integration options is available on the European market as EU legislation obligates banks to comply with PSD2. While Asia and North America lag behind, local players also provide some open banking options for developers.



Implications for Non-FI Firms

What does this mean to the non-financial institutions? How can our company take advantage of the fintech disruptions particularly as related to payment solution?

The first step, of course, is assessment. It's one thing to become aware of opportunities to reduce operating expenses, lower costs for your partners or customers, streamline business processes or improve your partner and customer experience. It's another to quantify their cost and impact. APIs are readily available to manage nearly every aspect of payments, inbound and outbound, including offloading KYC and AML functionality to And mobile friendly widgets provide easily embedded self-serve tools for customers and partners.

Automating payment processes with a global payments platform that leverages the capabilities of an intelligent digital wallet architecture creates operational efficiency and lowers operating costs by automating and simplifying core payment processes.

Typically, banks and traditional financial institutions create a full customer profile as the first step in building a business relationship, prior to conducting any transactional business. While this is important for their business and essential to complying with regulatory considerations including KYC, AML and tax reporting, it also creates a significant administrative burden (and cost).

Payment networks such as Visa, MasterCard, etc. make e-commerce transactions more convenient for both customers and merchants by eliminating the need for KYC at the transactional level. In these networks, there is an Issuing Bank (Customer) and a Merchant Bank for each transaction; each has an already vetted, KYC-compliant relationship with anyone on either side of the transaction. Payment gateways, however, may be needed which adds considerably to the transaction processing expense.

An intelligent Payments Platform, however, can perform the functions of a payment gateway. More importantly, it operates in a manner that is somewhat analogous to the payment networks albeit with more choice in payment methods, inbound and outbound. What is similar to the payment networks is that transfers out of the platform are typically made via ACH, SWIFT or wire transfer, meaning that the recipient is a customer of the bank that has also taken responsibility for KYC and AML compliance.



1. Identity/Access: From Unknown to Known

An intelligent payments platform provides far more functionality than that of a payment gateway. And what is distinctly different from the payment networks, however, is that the payments platform also completes full KYC and AML compliance for all users. It does so, however, iteratively so as to minimize the transactional friction, moving accounts through four stages of Identity: Pending accounts are unable to conduct currency exchanges or transfer funds externally until their account meets basic AML and KYC requirements; then Basic, Standard and Advanced accounts capture progressively more profile data and earn correspondingly higher caps to the volume and velocity they may conduct on a daily basis. This iterative process ensures all with the visibility needed to manage their activity without requiring an undue burden for prospects and/or transactional users who never reach the threshold required for KYC, AML or tax reporting.

2. Aggregation: Supports More Optimal Business Workflows

Payment platforms incorporating intelligent digital wallet architectures enable simpler, frictionless movements of money in new ways that make doing business easier and more cost effective. The ability to design and track the flow of funds between a company and its connected partners, affiliates and customers opens new possibilities. By taking advantage of the visibility and instant nature of payments multi-tier relationships can be created and managed in near real-time. And connected accounts can be configured to support any number of multi-currency wallets making it far simpler to manage global payments as described below.

3. Compliance: Shifting Burden Improves Operational Efficiency

Payment platforms, of course, must provide security and compliance similar to those required for internally hosted solutions including PCI, GDPR, SOX, ISO 27001, ISAE 3402, SOC 1,2,3 as well as 2-step authorizations and encrypted data.

Additionally, a key benefit to outsourcing KYC and AML compliance requirements and tax reporting functionality to an external payments platform is to dramatically reduce operating expenses whether these functions are currently being done internally, as-a-service on behalf of your customers and partners or externally by a financial institution or other third-party.

Self-serve tools for users to complete and update their Account and Profile information lowers data management costs. And the payments platform should automate KYC compliance at the account level and AML screening at a transactional level.



4. Fungibility: Expanding Choice and Lowering FX

Using an external payments platform and properly designed digital wallet architecture, offers business the ability to receive and send payments that meet their needs and better serve the needs of their customers by allowing the transfer of funds out of a digital wallet via any number of payment methods. When available, this provides end-users with the opportunity to control their choice of payment methods.

These methods include transferring via direct deposit into a recipient's bank account via ACH, SWIFT or wire transfer or to a prepaid debit card, digital gift card or other non-financial payments platforms such as PayPal.

And it also enables the ability to complete any currency FX fully within the platform allowing for much lower FX rates than those available through the banks as well as the ability to design for either party to absorb the FX expense. Companies can then pay in their preferred currency and recipients can receive money in theirs.

