



Developers Guide to B2B Payments

An  **xtrm** White Paper



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Moving money should be simple, fast and cheap for both payers and payees. But for many B2B software applications and end-user use cases, that's simply not the case.

With the explosion of new digital payment methods, processes and platforms and the ongoing digital transformation of traditional financial institutions including banks and card processing networks, it's easy to think that by now direct real-time digital payments would be ubiquitous and that everybody would be taking advantage. Not true. In fact, when it comes to immediate, real-time payments they currently account for less than 1% of B2B payments globally. But there's hope. And there's opportunity!

Any software can be payment-enabled.

Payment enabled means using APIs to embed payment capabilities including instant, real-time transactions. Real-time transactions to move funds between accounts and across borders. For example, exchanging funds between accounts (A2A) via digital wallets using a payment platform or from one currency digital wallet to another (W2W) within an organization's or individual's account on the payment platform.

APIs are the key to accelerating the digital transformation of payments by enabling virtually any software to incorporate payments functionality to move money and funds when and where required. Whether it's incorporating payment functionality for purposes of accepting digital payments from credit/debit cards or direct ACH bank transfers to pay for goods and services or embedding payment workflows and money movement in payment distribution use cases unique to specialized industry or customer/partner segment needs, the potential for digital payments to meet the needs is both real and less difficult than many imagine.

The purpose of this document is to provide developers with a brief guide to the payments landscape to augment the Xtrm API™ documentation that details **how** to use digital wallet architecture and a payments platform to move money. This guide intends to provide context for developers to explain more of the **what** of payment systems at a high-level and the **why**, the business benefits to be derived from transitioning to direct, real-time payments.



Let's Start with Why

Why do businesses need or want real-time payment transaction capabilities?

Real-time transactions can reduce payment friction, lower payment costs for payers and businesses receiving funds DQG empower payees to choose their method of receiving payment. In e-commerce and consumer point-of-sale transactions creating a frictionless consumer payment experience is paramount for merchants to meet customer expectations and drive consumer loyalty. As a result, credit/debit card transactions have largely replaced cash and paper checks as the primary payment methods in nearly every consumer spending category. From online to mobile pay wallets to RFD enabled transactions, contactless payments, riding on these rails provided by the card payment networks, have flourished as the pandemic further demonstrated their key advantages. B2B markets, however, are not so readily accommodated by these enhancements, nor are they accepting of the significant hit to their bottom lines.

Real-time or near real-time payment transactions are possible using e-commerce payment gateways connected to the card networks. So why then use digital wallets and a payments platform to facilitate instant B2B payments? Beyond eliminating or reducing payment gateway, card network and banking fees, the technology is readily embedded in any software with payment requirements creating a myriad of white-label opportunities for ISVs and developers looking for tools to meet their client's payment needs with minimal investment.

Digital wallets solutions are straightforward to architect within any payment distribution workflow. They are relatively uncomplicated to set-up and test in the sandbox and to place in production. Digital wallets make it easy both for end-users to receive payments and for managing companies to onboard clients making the payments.



The B2B Payment Landscape is Not the Same as the Consumer Marketplace

What does it take to solve complex B2B use cases? Most B2B payments complete a fairly complex business process workflow. Understanding the upstream workflows is the key to mastering B2B payment use cases so that they are simple, secure and efficient.

Business automation software from AR/AP to ERP and CRM as well as App Marketplaces continue to evolve with evermore customized vertical focus solutions for the unique payment needs of each, including vertically integrated solutions with embedded incoming and outgoing payments capabilities for many industries and use cases including (but certainly not limited to):

- Channel Partner Management
- Supply Chain Management
- Contractor Management (gig workers)
- Real estate/Property Management
- Travel & Event Management
- Health Care
- Non-profits

And yet many stop short of actually facilitating payments. Many B2B use cases fall on the edges of a business's core payables and receivables workflows and may have fewer controls, lower levels of automation and higher handling costs than others, for example (again, this is by no means an exhaustive list):

- Claims Payouts
- Partner Rebates
- Customer Rebates
- Incentive Payments
- Referral Rewards
- Digital Gifting
- Emergency Funding
- Co-pay Cards



Many businesses use software apps and third-party service providers to handle the data but not the actual movement of funds. For that, they often turn to legacy payment gateways and facilitators such as banking partners and/or the card processing networks, Visa, MasterCard, et al.

While the solutions are often complex and highly customized, the end of the process for many of these software tools is to export a file. That file then flows back to the software user's firm to execute the actual payments. Simple, right? Not exactly. Payment distribution runs through many potential payment rails, each with its own processes, workflows and intermediaries.

And what about costs?

The payment distribution process for B2B is often more costly than the inherent complexities warrant. Payments networks and payment facilitators have emerged to enable the movement of funds, yet many remain largely enmeshed in an old business model pioneered by the card payment networks. If the debit card networks have unburdened merchants from the tyranny of 3-6% charged by credit card networks, why is it that digital payment processing costs often remain at 2.9% or higher. It seems that the anti-trust suit was settled but the payment network toll road remains largely intact.

And what about global payments where financial institutions at both ends of the transactions, wire transmission, currency exchange and other intermediaries can send settlement costs up to as much as 30% of the transaction! Inexpensive? Not even close.

Keeping Things Simple Requires an Intelligent Approach

In most of these use cases, the file flows directly to the user firm's banking partner, but at what cost? And does that serve all of the payment related needs of the recipient or beneficiary as well as that of the remitter? A turnkey payments platform is architected to address all of those needs -- and in doing so it also serves to simplify the complexities that surround payment distribution most notably security, regulatory compliance and tax reporting as well as currency exchange.

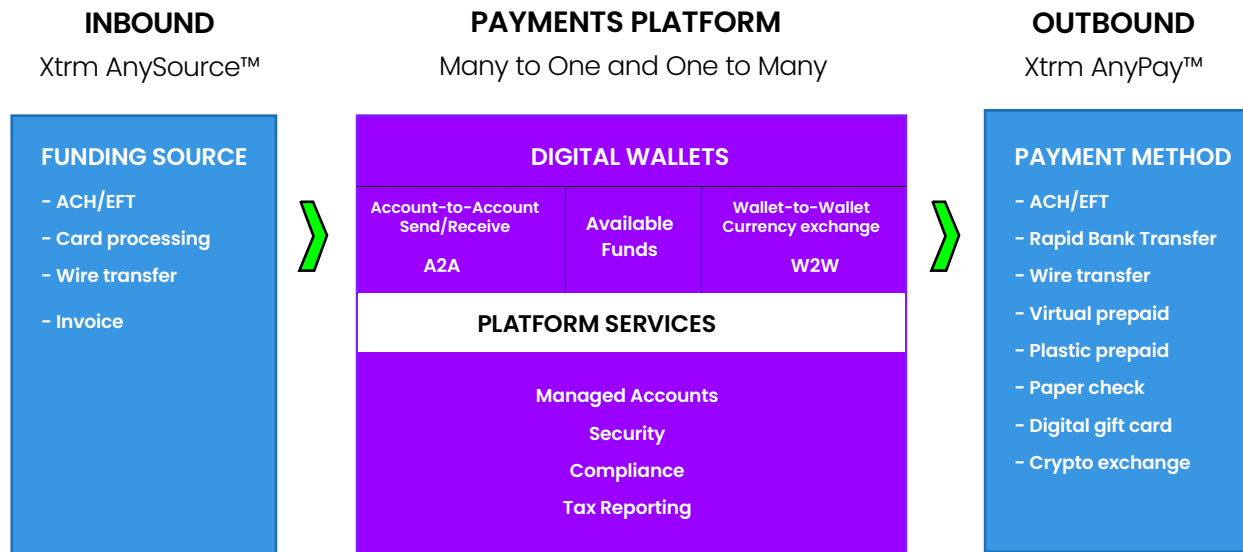
An intelligent payments platform is made so when embedded in the upstream software and service solutions informed with the business workflow uniquely configured to meet the specific use cases while blending the benefits of instant, digital and multicurrency capabilities to improve both payer and payee user experience.



Global Digital Payment Rails: Incoming and Outgoing

A payments platform must consider both the inbound and outbound payment rails as well as provide for holding funds to make immediate, direct payment possible as well as the ancillary services required for handling payments and payments data on behalf of global B2B clients: privacy, security, regulatory compliance, tax reporting and currency exchange to support cross-border use cases.

Most B2B use cases generally follow the traditional contours of either an Accounts Receivable use case (“Many to One” payment capture) or an Accounts Payable use case (“One to Many” payment distribution). However, using digital wallet architecture on a payments platform creates the potential for digitally end-to-end payment workflows incorporating both the inbound receipt of funds from customers and the outbound payment of distribution partners and/or suppliers.





To be turnkey it must incorporate automated services required to render payments securely and comply with various regulatory mandates such as Anti-Money Laundering (AML) and Know-Your Customer (KYC) strictures as well as provide tax data required for payee reporting including 1099 creation as required. To be global it must be digital, mobile first and incorporate currency exchange wholly within the platform so that payers and payees alike can transfer funds within multiple, currency-specific digital wallets within their account. To be digital it must be cloud-based, treating incoming and outgoing payment as endpoints for either entry or exit. And to be frictionless it must be integrated seamlessly (embedded using APIs whenever possible).

Turnkey payments platform: a horizontal, global solution that manages the movement of payments -- inbound and outbound -- for both payer (remitter) and payee (beneficiary) while also automating many of the ancillary services associated with payment processing or distribution. It is a logical extension for nearly any software with a payment component.

Banks and Card Networks Are Not a Turnkey Payments Solutions

Banks and card networks are both vital to making payments seamless for end-users— whether it's a payroll check or benefits payment deposited directly into a user's bank account or added to their reloadable debit card, or the ability for e-commerce sites to provide payment options for consumers via the card networks. Without the nearly ubiquitous merchant acceptance of Visa, MasterCard and American Express, the behavioral rails would not have been in place for the next wave of digital and mobile payment applications like ApplePay or GooglePay.

Reducing friction in a payment process is highly dependent on managing the process digitally to the greatest extent possible. This is true for B2B payments just as is for consumer payments but the friction points are not the same. For consumers, the point-of-sale experience, online, in store or mobile are built around a common set of use cases – capturing the credit card info, authorizing payment, processing payments and reconciling, etc. There are multiple payment rails – cash, credit, etc. – but for each the consumer experience is effectively the same for all consumers.

For business, however, they must contend with all of the rails at once both from the inbound and outbound perspective and frequently there are additional complexities in the process (invoices, partial orders, contingent payments, tax reporting, etc) that must be addressed.



Embedding payment capabilities directly within software and services is a critical component of simplifying complex payment workflows. Meanwhile, digital workflows often mirror paper-based workflows; and in an effort to mirror legacy processes and systems, opportunities to improve upon them can be missed

Fundamentally, banks and card networks are both processors and endpoints in a payment process. For a full explanation on how card networks work, you can find many sources. Here's the take from wallethub.com. We won't duplicate that info here other than to differentiate how payments via a payments platform differ from that through the card networks. Along with a few key concepts:

Authorization – Card networks facilitate payments from an issuing bank representing the Cardholder to an acquiring bank representing the Merchant less an 'interchange fee'. A payments platform simplifies this process by hosting both payer payee digital wallets on the same platform, allowing for instant wallet-to-wallet transactions.

Authentication – a payments platform authenticates all payees and payers and uses automation to monitor transaction activity to flag suspicious transactions. All KYC and AML requirements are met prior to transferring funds to any external endpoint. Card networks present the data to the issuing bank for disposition. Transactions are batched for daily processing

Clearing/Settlement – this can take 24-48 hours via card network; using a payments platform it is immediate.

Just like card networks with "Cardholders" and "Merchants" a payments platform host two key on either end of a transaction:

- **Remitter/payer** – sends funds from their digital wallet on the platform
- **Beneficiary/payee** – receives funds from any source into their digital wallet on the platform

However, the payments platform requires far fewer players (and their associated costs):

- **Card network** – none required. Optional source for receiving funds. Card payments are only one source for funding a Remitter wallet.
- **Merchant account** – none required. Although Manager Accounts can aggregate payments received using the platform's Merchant ID from the card networks.



- **Issuing bank** – not applicable.
- **Acquiring bank** – not applicable.
- **Acquiring processor/Service provider** – when using card networks as a funding source, the payment platform performs this function.

And the card processing fees are numerous and none are required using a payments platform unless using it as a processor for card payments:

- **Interchange fees** – usually a percentage of the transaction (e.g. 2.35% to the issuing bank) and a per transaction (e.g. \$0.15 to the card network).
- **Assessment** – card network fee for using their branded cards (e.g. 0.11% and \$0.0195 per swipe)
- **Markups** – acquiring processors generally add a markup which is negotiable but generally accounts for 20-25% of the total cost of payments.

As a facilitator of payments card networks offer widespread acceptance and familiarity which is key to offering seamless experiences for end-users. However, as singular endpoint options for incoming and outgoing money flows, they are not all-inclusive in meeting all the needs of a turnkey payments platform.

Each represents a payment option but not the entire portfolio of payment alternatives. Beyond that, they may not offer the ancillary services associated with B2B payments including KYC/AML compliance and tax reporting (other than for their own customers), or currency exchange automation to facilitate frictionless cross-border payments.

A payments platform does all of these services without creating a direct customer relationship, providing a white-labeled experience that can be customized and branded within any software, thus enabling software and service providers to deliver targeted markets with a payment experience uniquely configured to their specific use cases.

Direct account-to-account (A2A) payments and wallet-to-wallet (W2W) currency exchanges occur on the platform bypassing both banks and card processors, which serve only as end-points for users of any payment transaction by using their pre-existing bank or card accounts. This creates the ability for instant exchanges while eliminating much of the cost and complexity of payments necessitated by the need for new customer accounts while reducing FX costs as well.



PAYMENT METHOD FEATURES COMPARISON			
	CASH or CHECK Traditional Banking Institutions	CREDIT OR DEBIT Payment Card Networks	DIGITAL WALLET Hosted Payments Platform
Speed	10-14 days to access a new account; 1-3 days to transfer to an existing account.	Immediate	Immediate
Choice	Limited to the bank's proprietary systems and APIs.	Limited to card networks and marketplace APIs.	APIs for inbound and outbound options provide choice of payment methods to payers and payees.
Integration	None or limited to bank's proprietary systems/APIs	Limited to card networks and marketplace APIs	Fully integrated within software or service provider solution
Visibility	Limited	Limited	End-to-end visibility for all stakeholders.
Compliance	AML, KYC are limited to each bank's customers	Not applicable	AML, KYC and transaction monitoring.
Cross-Border Payments	Very expensive.	All payments are converted to the user's local currency at market rates. Cross-border surcharges may apply.	Multi-currency digital wallets enable low cost FX.



Connected Accounts Aggregate Payments and Benefits

Embedding payment platform capabilities into their business software allows any ISV or service provider to effectively control – and potentially monetize – the flow of payments. In the e-commerce space, digital payment capabilities have led new business models for using the card networks of *payment facilitator*, where a firm has a Master Merchant ID (MMID) and all of its customers have sub-merchant MIDs, and *payment aggregator*, which processes inbound payments under a single MID on behalf of its clients.

These are important steps forward for processing card payments more efficiently and more cost-effectively while creating significant cost savings for merchant payees. However, similar aggregation opportunities exist for payment distribution as well; although they are often not as well understood because the true cost of payment distribution is not as clear as the direct cost from merchant fees associated with card processing.

Using a payments platform enables aggregation of both inbound and outbound payment workflows. Payment aggregation on a payments platform operates in many ways analogous to the payment facilitation model as it hosts both Manager Accounts (similar to Master Merchant ID) and Connected Accounts (analogous to sub-merchant accounts) but with a few major difference – all of the accounts are on the platform rather than at any specific end-point so Manager Accounts have greater flexibility to support more customer use cases.

Manager Accounts can aggregate all the activity to manage the downstream activity on behalf of its Connected Account customers and reap the incremental revenue associated with processing their payments and the potential for increased customer retention. Unlike a payment facilitator that only processes card payments on behalf of others under a single merchant account using the card networks, a Manager Account aggregator using the payments platform does not need a merchant account nor is it limited to managing the inbound flow of payments.

Connected Accounts, likewise, have more flexibility and self-service capabilities to allow them (if provisioned) the ability to manage multiple, currency-specific digital wallets to simplify cross-border transactions as well as the choice of the method of payment to receive distributed funds, ACH/EFT, wire transfer, prepaid debit (virtual or physical card), digital gift card, etc.



PAYMENT PROCESSING ALTERNATIVES			
	Card Payment Aggregator	Card Payment Facilitator	Payment Platform Connected Accounts
Merchant ID	Single MID for all sub-accounts.	Master MID. Each user is required to obtain a sub-account MID.	None required. MID hed at the Payment Platform Level
Manager Accounts	Not applicable.	Not applicable.	Yes. Enables Manager Account with
Choice of Payment Method	Card network specific	Card-network specific	User choice of payment methods.
Monetization	Not applicable	Limited	Increases the value of the customer base.

The Role of Account Management

Payments expertise isn't required to embed payments capabilities within any software using an intelligent payments platform and APIs. But understanding the specifics of how payments fit into the business model and the operational workflows is essential to designing and implementing solutions that meet the business needs and the regulatory, compliance and tax reporting requirements of global payers and payees.

Software solutions, of course, are often as much about managed services as about software. Agents and service providers, of course, may need additional payment management functionality.

An *intelligent global payments platform* is part software and part automated business process combined to provide an all-inclusive payments capability that complements its ability to send and receive payments using its digital wallet architecture.



As mentioned earlier, the payments platform hosts two key entities: Remitters/payers and Beneficiary/payees. Each is provisioned with a unique account on the platform and as many currency-specific digital wallets as needed based on the currencies required to conduct their transactions. Accounts can be either Personal accounts or Company accounts.

Beyond the distinction of individual vs company accounts as it relates to AML, KYC and tax reporting considerations, there are three levels of accounts controlling access to platform features:

- **Beneficiary** – receives funds from any source into their digital wallet on the platform. Anytime anyone pays a Beneficiary they are added to that account's list of Payees.
- **Connected** – this is designed for companies to have additional visibility to downstream customers or partners with respect to their admins, employees, wallet transactions (with restrictions), linked banks and company profile.
- **Connected & Manager** – this allows a managing agency or ISV with visibility and to do certain tasks on behalf of their connected client company – from linking bank accounts to submitting mass payments to configuring connected company SSO. The ability to either empower their clients to self-serve most functionality or do tasks on behalf of their customer can be configured to align with the agency or ISV business model and SLAs.

Connected accounts can either be connected at the time of a new account's creation on the platform by a Connected or Connected & Manager account or by requesting to be connected to an existing company account.



Ultimately, It's Up to You, the Developer

The payments platform's digital wallet architecture supports global payment processes, inbound and outbound, managing evermore specialized payments use cases.

Embedding payments using APIs affords the greatest opportunity for efficiency and effectiveness, and doing so at scale is great for the bottom-line. For most developers, that's the goal, optimal automation. But in the interim, the platform's capabilities are fully accessible via the web for everything from simple transactions to mass payments and providing the end-user with self-serve tools to manage their engagement, providing the developer and their client with the ability to test in the sandbox and trial in the real world before going all-in on a fully embedded solution.

Service providers, as well as ISVs, can configure payment processes and create bespoke processes with their workflows. And client customers can create and fund digital wallets in as many currencies they need - USD, euro, British pound, yen, yuan, etc.

In the past, creating currency-specific accounts had to be limited to a company's legal structure and where they do business. While Legal, Finance and Corporate Accounting requirements continue to be key payment process design/configuration considerations, the ability to create multi-currency digital wallets gives the developer/designer choices in how to accommodate cross-border payments in manners not previously available - in terms of speed, flexibility and costs.

No matter the use case: global, instant and mobile payments are rapidly becoming the new norm. Encompassing digital payments in a platform that surrounds them with the security, privacy, tax and regulatory compliance needed to conduct global business enables ISVs and service providers to focus their service and technology innovations in a rapidly changing marketplace.

Developers, it's up to you. We're here to help.

