Stellar

Whitepaper

STELLAR FOR CROSS-BORDER BUSINESS PAYMENTS



INTRODUCTION

Millions of businesses around the world contribute to the nearly $2 trillion in cross-border payments each year. Whether paying remote staff, getting paid by customers, or sending money to key suppliers, there is friction when transacting between different currencies. Starting with the payer's bank and ending in the account of the recipient usually takes several steps - each costing both time and money.

Globalization is driving emerging FinTechs and large multinationals to create new pathways for cross-border payments. B2B payments are generally low-risk and low-cost between highly developed economies and markets due to established infrastructure and competitive market forces in banking services. However, in the case where either the sender or receiver of payment is using a less-traded currency, challenges abound.

Global B2B payment costs are especially high when sending or receiving happens in an emerging economy.

In the 1970s SWIFT (Society for the Worldwide Interbank Financial Telecommunications) was established in Brussels to allow member banks to move value internationally, with standard instructions. But it's a closed system, operated by traditional banks. Non-member banks are limited and sending funds cross-border usually takes days, resulting in fees and less-than-favorable exchange rates collected by intermediaries. To help mitigate this, Large enterprises will often establish foreign bank accounts to prefund B2B transactions. However, this forces them to absorb the risk of fluctuations in currency value.

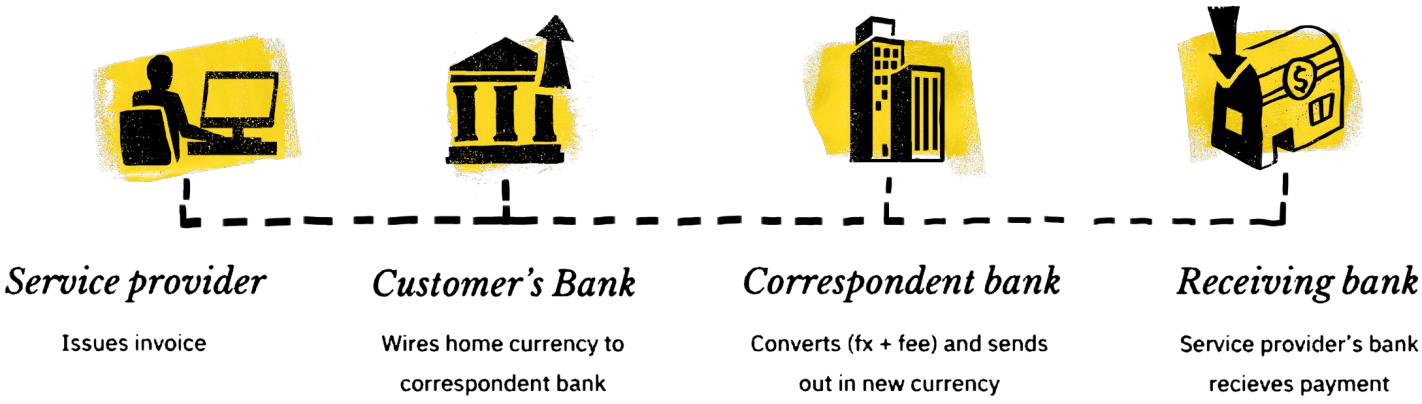
In 2015, we introduced Stellar to the world. Stellar is an open network for moving value internationally with standard instructions, a more modern and transparent way to make B2B payments. Like SWIFT,only digital, modern, better - and open to all.

See all the advantages when Stellar partners Tempo and Cowrie manage B2B payment flows between France and Nigeria.

HOW B2B CROSS-BORDER PAYMENTS HAPPEN

In most B2B transactions, an invoice is issued by the provider of goods/services that specifies payment method and terms. The service provider decides how they want to be paid, and in what currency. For large payments, international wire via SWIFT is most common. Using this bank=to-bank protocol, the customer will have to work with their own bank to make the payment, and the correspondent bank in between will change the currency, decide the foreign exchange rate and charge their fees.

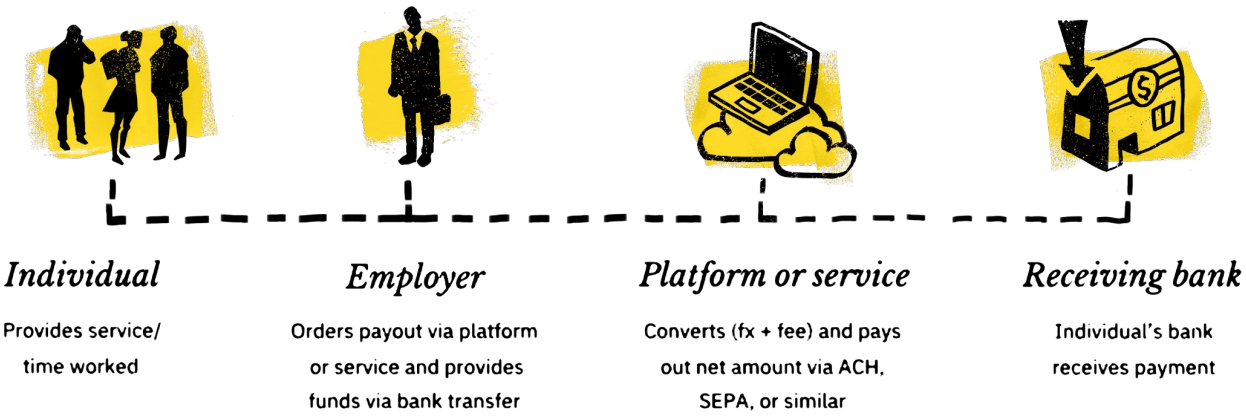
Typical B2B Payment Path



Thai is the most commonly used method to move value from one business to another when changing currencies is needed. The typical time to settle is 2-5 business days, depending on the banks and countries involved. The world's largest banks are able to initiate the transactions and often maintain relationships with counterparty banks of similar size in other countries.

When moving money to local, smaller banks in countries with lower GDP, the process can be much slower and more expensive because of the more manual nature of the banking systems. Not all banks have direct connections to SWIFT, so that can produce opportunities for errors and slowness. If you want to know more about a specific protocol, here's a handy article with all kinds of international banking codes and protocols defined.

Typical Business-to-employee (B2E) or Business-to-Consumer Payment Path



One notable difference is that in the scenario above, the paying business decides how the payment happens. Employers (except for very large corporations) will generally use an international payroll service (like FMP, Velocity, or Deel) to handle compliance with local tax and employment regulation. Marketplaces will decide both sides, they'll accept certain payment methods from customers, and also have workers/service providers sign up and provide their banking details for payouts (like Upwork, Airbnb, Uber).

For large Marketplaces doing a lot of payments in certain countries, it often makes sense for them to establish a funding account and banking relationship in the foreign country.

Treasury operations then take care to rebalance the flows of funds for these large companies to forecast and maintain the right amount of cash on hand for payments in each geographic region. However, this ties up capital and exposes the company to forex risk, especially when the destination country has a difficult-to-transact or volatile currency. In the case of foreign workers, B2E payroll will require funding several days in advance.

THE MARKET FOR B2B PAYMENTS: 2020

Money in the global market moves across country borders at volumes of close to $2 trillion per year.

MCKINSEY REPORT, 2020

An explosion of FinTech platforms and services has enabled traditional money to convert and move along new paths, eliminating intermediaries and bypassing legacy infrastructure. Add to this the rise of blockchain and borderless cryptocurrencies, and you have a nearly infinite landscape of B2B payment pathways. Early 2020 showed

5-8% lower global payment volume due to COVID-19, however it has still been a year of FinTech payment innovation, as a result of widespread trends against cash and in-person commerce modes of transacting. Several regions in Latin America have rebounded in volume and are expected to have

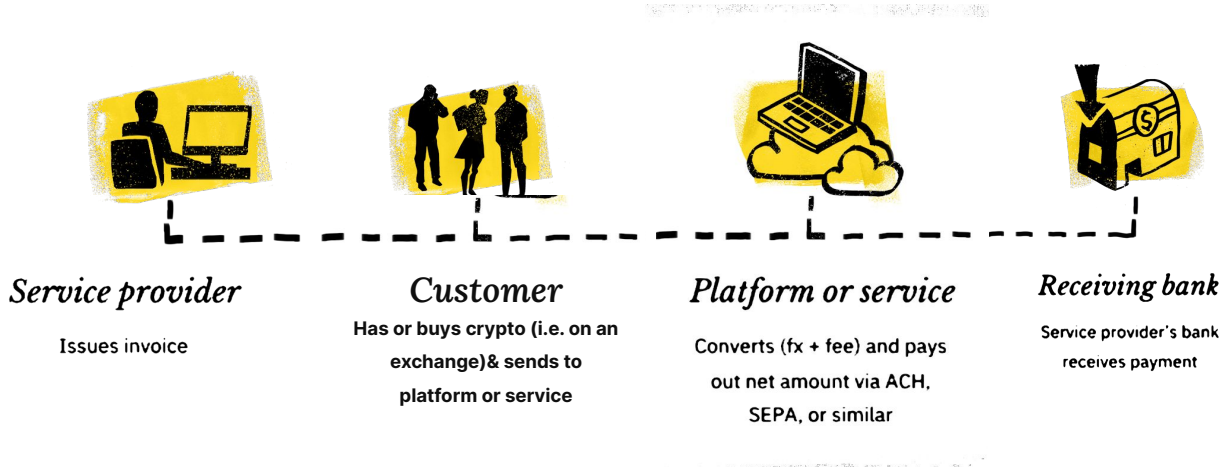
Net growth for the year overall.

INNOVATION & NEW OPTIONS

New pathways involving cryptocurrency for B2B payment flows have been growing in several geographic corridors.

Because of the appreciated value of (mainly BTC) crypto, holders of this asset started looking for ways to spend it on major purchases. This, in combination with general hype about cryptocurrency as a form of payment, gave rise to companies like Bitpay, CoinGate, and other API-based services to integrate in eCommerce sites. The longer-term and most viable use case for Bitpay eventually became invoice payment for companies with foreign customers. This removed the need for correspondent banking, or any in-country bank services, to receive large payments in US dollars. A service provider could simply invoice via Bitpay, the buyer would get cryptocurrency from a local source, then send it at virtually no cost to Bitpay for conversion to USD (for a fee, usually 1%).

Customer Pays via Crypto



Because of the friction involved with going in and out of currencies in the developing world, cryptocurrencies were an attractive option for B2B payment flows, providing there was access to crypto, and volatility could be managed.

STELLAR FOR CROSS-BORDER PAYMENTS

ADDRESSING VOLATILITY

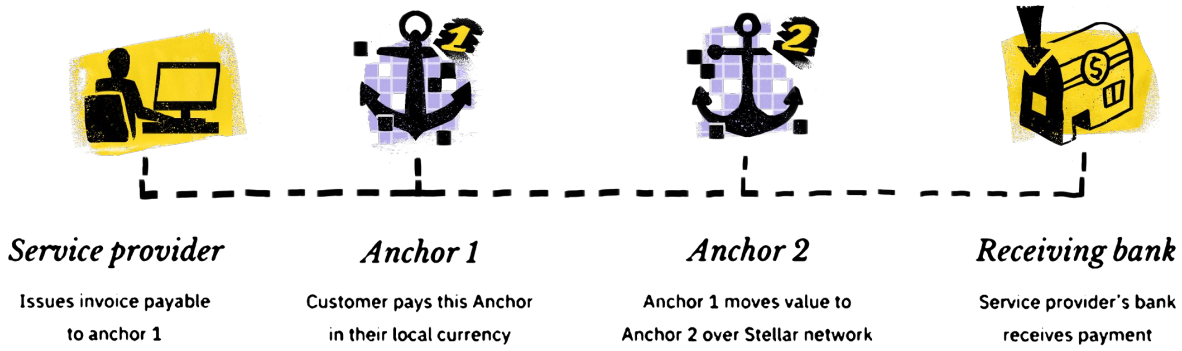
One downside of the pay-with-crypto approach is that the world's most liquid cryptocurrencies are constantly fluctuating in value. This volatility makes them a less-than-ideal medium for paying invoices that will eventually be converted into a local, traditional currency. Shifts in the market could cause an unexpected loss in value between the sender and receiver. Fortunately, the digitization of world currencies in the form of "stablecoins" has helped immensely. Stablecoins are backed and valued 1:1 to their underlying currency.

For example, a digitized US dollar is always worth $1, and can be redeemed by sending it back to the issuer of that stablecoin. Representing currency on the Stellar network makes it possible to change one digital US dollar for an equivalent amount of another currency, without going to a bank. Stablecoins are denominated in several world currencies, which can be moved and converted across the Stellar network's decentralized exchange.

Stellar replaces the process of the international wire and currency conversion in a single pathway.

STELLAR ENABLES THE BEST OF BOTH WORLDS

Stellar combines the power of a frictionless, blockchain-based pathway for payments, with local partners to provide on/and off ramps to the world's currencies. The Stellar network can be compared to SWIFT in that it provides a standard protocol that all participants use to communicate in a consistent way. Our local partners, anchors, accept traditional currency from the paying business, and in a single path, value is converted to the destination currency and delivered for payout via a local anchor in the receiver's geography.



Both the service provider and the buyer can transact in their own, local currency, without the need for an intermediary bank. In essence, Stellar replaces the process of the international wire and currency conversion in a single pathway.

REFERENCE DEFINITIONS & EXAMPLES

B2B cross-border transactions

When businesses pay for goods and/or services provided by other businesses, otherwise known as a B2B model, and the two entities are in different countries, a cross-border transaction occurs. Smaller payments, for example SaaS subscriptions (like

CRM software, hosted services, Adobe products, or similar), might be accomplished with ordinary debit/credit payment cards. Payment card processors then take care of the currency conversion and deliver funds to the merchant [eventually link to Payment Processing page] in a settlement payment to their bank account. When the amounts become higher and order sizes are large (like ordering raw materials or contracting a large project), companies typically issue invoices that get paid via international

"wire transfers" communicated on a payment network (like

SWIFT or SEPA), sometimes involving intermediary banks. These payments usually settle between the banks in 1-5 business days and involve varying fees and forex rates of exchange.

B2C or B2E cross-border payments

When the sender is a business, and the receiver is an individual (like marketplace payouts for etsy, Airbnb, fiverr) or the receiver is an employee/contractor for the business located in another country, we call that Business-to-Consumer (B2C) or Business-to-Employee (B2E) payments. Businesses that need to pay individuals in other countries, especially on a regular basis, often use a platform or service. In a B2E payment, conversion costs and local taxes are usually taken out of the net payment to the receiver.

Learn more about the Stellar ecosystem and how cross-border payment capabilities can be enabled for your business.