

TABLE PYMTS.com CONTENTS

03 What's Inside

A look at the evolving cross-border B2B payments landscape as well as how the ongoing pandemic is fueling demand for smarter ways to pay

08 Feature Story

An interview with Alexandre Liuzzi, co-founder and chief strategy officer at Brazilian financial technology provider BeeTech, about how APIs and accelerated onboarding can improve cross-border payments for SMBs

13 News and Trends

Recent headlines from the space, including the formation of a new industry association in the EU for addressing cross-border payment pain points and signs of recovery in domestic and cross-border trade

18 Deep Dive

An in-depth examination of the challenges associated with B2B cross-border payments and how regulatory cooperation and APIs can help reduce these obstacles

22 About

Information about PYMNTS.com and Nium

ACKNOWLEDGMENT

The Smarter Payments Tracker® is powered by Nium, and PYMNTS is grateful for the company's support and insight. PYMNTS.com retains full editorial control over the following findings, methodology and data analysis.





everal innovations have sought to digitize payments in recent years, but the shift to digital has not been even across global markets. South Korea, for instance, has all but eliminated paper checks for more than a decade, whereas in China, online payments accounted for 73 percent of all transactions as of 2018. The United States is still heavily reliant on paper checks.

Business-to-business (B2B) payments are also undergoing digital transformation, with many businesses looking to faster and more secure digital alternatives to writing checks and making wire transfers. The ongoing COVID-19 pandemic has only accelerated this shift, perhaps even more so for cross-border payments, which are particularly friction-filled.

Small and medium-sized businesses (SMBs) can often find themselves susceptible to fluctuating foreign exchange rates and relying on correspondent banking networks to make and receive cross-border B2B payments — something that adds a layer of time and cost to the payments process. B2B cross-border transactions take three to five days to complete and on average get routed through four different banks, each tacking on a processing fee. Anti-money laundering (AML) compliance and other security checks can further contribute to delays, creating costs that correspondent banks then pass on to their customers.

Many SMBs thus turn to smaller banks in hopes of getting more personalized services and avoiding these problems, but

using smaller banks to complete crossborder transactions is friction-laden, too. Small banks often do not have the same technical capabilities or level of expertise as larger banks.

There is a growing need for cross-border payment options that give businesses certainty, speed and transparency. This need is set to further increase in the coming years, as the volume of cross-border B2B payments is projected to reach \$6.4 trillion by 2024.

A range of new payment innovations that utilize existing payment rails with new tools and technologies for seamless integration hold promise, but their universal adoption is still far off. Businesses that are quick to embrace innovative ways

for making cross-border payments will not only enjoy improved cash flow but will also be positioned to stay ahead of their competition.

Around the world of smarter payments

Pursuing cross-border commerce can open the door to a host of new expansion opportunities and help boost bottom lines, as businesses are well aware. A Visa study of 1,000 C-level executives from 10 major global markets reported that 87 percent of respondents find expanding online sales into new markets to be one of the biggest growth opportunities for their business, yet these businesses all too often struggle to pursue these opportunities. The study found that 37 percent of businesses cite challenges associated



WHAT'S INSIDE

with accepting and processing foreign transactions as one of their top barriers to entry into foreign markets, followed by legal and trade issues at 33 percent. Small business experience these obstacles even more acutely, as 39 percent of executive respondents say they are not prepared to handle cross-border transactions, compared to those of 14 percent of medium-sized businesses and 7 percent of large businesses.

Businesses experience these payment pains to varying degrees. In markets such as the Asia-Pacific (APAC) region, conducting B2B cross-border commerce takes a whole different level of complexity. SMBs must navigate a fragmented regulatory landscape, slow processing times and high charges, on top of other obstacles. The ongoing pandemic, however, is accelerating the demand and adoption of digital platforms that can make the payment experience more seamless and help resolve regulatory compliance issues.

Some payments providers in Europe are banding together to level the playing field and help resolve issues associated with cross-border payments. A group of such providers, including Ingenico, Nets, Nexi and Worldline, have jointly formed an industry association called the European Digital Payments Industry Alliance (EDPIA), which aims to create a single digital payments market in Europe. The alliance also plans to develop the regulatory framework for

EXECUTIVE

The world economy officially entered a recession in April due to the COVID-19 pandemic. Why should investors continue to finance payments and banking-as-a-service (BaaS) platforms despite this economic downturn?

"Smart investors are usually able to separate seasonality from fundamentals. COVID-19 has definitely brought 'resilience' into focus—specifically how well-diversified a business is and how it will fare in periods of shock. Quality investors are going to fine-tune their investment criteria to pick companies that not only have a strong foundation and moat but also tick this new check box.

FinTech may be better insulated than other sectors from a capital retreat, especially when benefits that online financial tools bring to consumers and businesses are clearly illustrated amid the global lock-down. Many FinTech companies, including Nium, are hitting record-level growth since the start of COVID-19 lockdowns. Payments and BaaS, in particular, have both proved to be versatile domains that will become even more relevant in times when traditional businesses are slow to adapt, and [they] will continue to grow despite the recession."

ADITI SHOLAPURKAR,

head of strategy and investor relations at

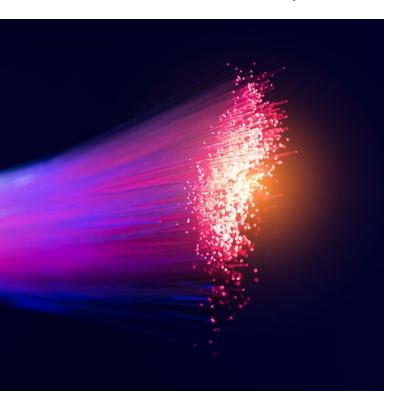


facilitating seamless payments between European Union citizens, corporations and governments, strengthening the European payments industry.

For more on these stories and other smarter payments developments, read the Tracker's News and Trends (p. 13).

Navigating cross-border payments and how they can be improved for SMBs

Cross-border transactions are growing more prevalent among SMBs as the increasing digitization of commerce opens new international sales channels. These payments are fraught with pain points, however, including slow processing times and lack of feedback if they fail. In this



month's Feature Story (p. 8), PYMNTS talked with Alexandre Liuzzi, co-founder and chief strategy officer at Brazilian financial technology provider and Nium client BeeTech, about how these problems can be mitigated through digitized customer onboarding services and the increased use of APIs to connect sending and receiving banks.

Deep Dive: Streamlining B2B cross-border payments

The volume of cross-border B2B payments has been steadily climbing over the past few years, but these payments are notorious for being sluggish, expensive and opaque despite the growth in volume, as they must undergo a long series of regulatory checks. This month's Deep Dive (p. 18) explores the regulatory and transparency challenges facing B2B cross-border payments, examines their impact on SMBs and details how the use of application programming interfaces (APIs) can accelerate these payments and reduce the pain points associated with them.



Decline in cross-border payments volume in May 2020



Share of businesses worried about the data security of cross-border payments



Share of businesses concerned about how fraud might affect their cross-border transactions

FIVE FAST FACTS

69%

Portion
of companies that
use wire transfers for
cross-border payments

\$171B

Total value of cross-border B2B payments in 2019



BeeTech ON NAVIGATING CROSS-BORDER PAYMENTS FOR SMBs

ross-border payments, once the exclusive domain of large businesses that had the resources to expand their operations overseas and afford the often-exorbitant costs related to payment processing fees and international shipping, are growing ever more popular among SMBs. The emergence of new digital payment methods has leveled the playing field between large and small businesses, making it easier than ever for SMBs to transact abroad and open up new revenue streams.

These payments still face more than their fair share of frictions, however. One survey found that 40 percent of SMBs are concerned with unfavorable exchange fees and that another 29 percent find these

payments intolerably sluggish. These friction points are too often the result of the outdated and inefficient cross-border payments infrastructure that most financial institutions (FIs) rely upon.

"Traditional banks have invested very little in how to improve the customer experience," said Alexandre Liuzzi, co-founder and chief strategy officer at Brazilian financial technology provider BeeTech. "The whole process [within] the financial institution is still very unintegrated, and there's a lot of different systems that don't communicate [between] themselves and a lot of manual procedures that are not scalable."

Faulty and outdated customer onboarding processes also share the blame for

THE WORLD HAS
BECOME MORE AND
MORE WORRIED
ABOUT THE FLOW
OF MONEY, NOT
NECESSARILY
JUST BECAUSE
OF TERRORIST
FINANCING BUT ALSO
BECAUSE OF ANTIMONEY LAUNDERING
POLICIES.

cross-border payment struggles, according to Liuzzi. Streamlining these onboarding procedures and implementing APIs to connect banks in a more efficient way could be the linchpin to ending these frustrations.

Problems with SMB cross-border payments

The inefficiencies in B2B cross-border payments are well-known among SMB owners, as the correspondence banking model has been in effect since 1973. The sender's bank and the recipient's bank rarely have the means to connect directly with each other, and transactions instead go through a daisy chain of connecting banks.

"You had a lot of intermediaries [back then]," said Liuzzi. "A Brazilian bank, for example,



has to have another correspondent bank [in Brazil] that communicates with a correspondent bank in the U.S., which then communicates with the recipient's American bank. So [a single transaction can] go through four banks, which is inefficient and can take up to 48 hours to liquidate."

Equally at fault are the tedious and restrictive onboarding process that SMBs are required to go through before they can even think about making crosspayments, said Liuzzi. border This process deters many businesses from conducting transactions across borders in the first place, restricting their revenue streams.

"The world has become more and more worried about the flow of money, not necessarily just because of terrorist financing but also because of anti-money laundering policies," Liuzzi noted. "Banks have to understand the reasons behind the transactions and understand if this client [is] approved to transact. It's an inefficient process in terms of both the regulatory requirements and its outdated messaging system."

Any one of the correspondence transactions or onboarding processes can completely fail with no feedback to the sending or receiving SMB, leaving both businesses stupefied as to why the transaction was declined. Improving transparency and

speed can be achieved through digitization and APIs.

Improving cross-border payments for SMBs

Digitization of onboarding procedures allows more seamless integration with other data sources, according to Liuzzi. This digitization allows payment providers to leverage government databases and even the data of other third-party processors to cross-reference applicants digitally, slashing the time it takes to ensure that they are who they say they are.

"We can do all the validation checks with the bureaus digitally for the onboard and then enable the SMB to [make the payment] and also liquidate the transaction really quickly," said Liuzzi.

Once the onboarding is complete, payments processors can link with the receiving banks via APIs rather than go through a labyrinth of linked correspondence banks. All the compliance and authentication checks are performed by the API rather than the banks themselves, diminishing the amount of redundant verifications that slow payments down and keeping the senders and receivers in the loop.

"If you're a customer in Brazil and want to invest abroad, for instance, you [had] to prove that you have an account open with a brokerage firm like TD Ameritrade or Charles Schwab and send the payment



provider all of your documentation," Liuzzi noted. "But now all you need is an account number and the name of your brokerage firm, and the [payment provider] just pings them [throughout the process using] the API."

Providing the customer with updates at every step of the payments process is only a stopgap measure, however. The ultimate goal is making these payments instantaneous and rendering these updates unnecessary in the first place: Either the payment succeeds or fails instantly, and in the latter case the customer can solve problems and try again right away.

"Feedback is needed because the transaction takes time," said Liuzzi. "If you are actually instant in the transaction, then the only feedback you need is just 'Hey, it's there.' So what we are working on now is how to provider better feedback, but the ultimate goal is to create instant transactions."

Many countries, including Brazil, are working on developing the infrastructure to make this dream of immediate payments a reality. Digitizing cross-border payments in the meantime can help SMB customers keep apprised of their payment status and ensure that the flow of their international payments remains fast, seamless and transparent.

NEWS AND TRENDS

SMARTER PAYMENTS DEVELOPMENTS

Cross-border payments represent major obstacle for SMBs, study finds

Pursuing opportunities in new international markets is one of the most important things a company can do to grow its business and boost its bottom line, according to a study of 1,000 C-level executives by card network Visa that found 87 percent of respondents expressing this belief.

Expanding business abroad, however, comes with its own unique challenges. Thirty-seven percent of respondents cited processing foreign transactions as one of their top barriers to entry in foreign markets, followed by legal and trade issues at 33 percent. Small businesses are particularly vulnerable to these obstacles: 39 percent of SMBs say they are not prepared to handle cross-border transactions, whereas

only 14 percent of medium-sized businesses and 7 percent of large businesses said the same.

Accelerating cross-border payments in the Asia-Pacific region

SMBs all around the world face frictions sending and receiving cross-border payments, but merchants in certain markets experience them to a greater degree than others. Overcoming these hurdles can be particularly challenging for merchants in the APAC region.

The APAC region has some of the highest remittance and cross-border payments volumes in the world, yet it experiences many of the problems intrinsic to these payments, such as slow processing times and high fees. Chief among these problems, however, is the lack of a centralized governing body in the region. The APAC region has multiple regulatory bodies, unlike the EU, and the fragmentation complicates sending and receiving cross-border payments, according to Nium's head of strategy and investor relations, Aditi Sholapurkar.

The ongoing COVID-19 pandemic is another development affecting the cross-border process for consumers and businesses. Social distancing mandates and continued government-imposed lockdowns — some of which are beginning to be lifted — have highlighted the need for applications and payment tools that can help consumers easily remit money. Such mandates have also spotlighted the need for busi-

39 PERCENT OF SMBs SAY THEY ARE

NOT PREPARED TO HANDLE

CROSS-BORDER TRANSACTIONS.



nesses to be able to send and receive payments without relying on paper-based invoicing and payment methods and in a way that is compliant with regulatory requirements.

InstaReM launches new supplier payments program for SMBs

Having the capital to make timely payments to suppliers is a challenge that businesses often face. Nium consumer and SMB brand InstaReM recently rolled out a new platform to aid in this problem. The platform, BizPay, allows businesses to use their corporate payment cards to fund supplier payments, reducing the amount of fees and charges associated with these payments. SMBs can use this solution by entering the name of the recipient, the amount and the currency in the online portal, at which point the payment is charged to their card and sent to the receiver. This gives

SMBs control over costs, since it eliminates fees and charges typically associated with other credit-solution options.

The solution is aimed at serving SMBs located in Singapore, where even before the pandemic 61 percent of such businesses had low credit standings and less than 15 percent had access to sufficient credit. The pandemic has exacerbated this lack of credit, according to Sanjiv Razdan, Nium's global head of commercial payments, because of delays in payments and the economic downturn caused by the virus.

SMARTER PAYMENTS PARTNERSHIPS

European payments providers form industry association to address cross-border payment challenges

Some new developments in Europe are set to impact the cross-border payments land-scape there. A group of European payments industry heavyweights, including Ingenico, Nets, Nexi and Worldline, are banding together to form an industry association called the EDPIA in an effort to solve several payments issues plaguing the European payments sector. The new association is intended to be a unified body

that will engage in policy discussions that affect payments in the EU. The alliance also plans to undertake a series of initiatives aimed at helping facilitate secure and seamless payments to EU citizens, corporations and governments.

The EDPIA's ultimate goal is the formation of a single digital payments market in Europe, which it believes will allow for fair competition among European payments providers. The alliance also intends to make Europe a leader in the global payments industry by bringing together payment experts from across the continent. The organization will be headquartered in Brussels, and Gilles Grapinet, chairman and CEO of Worldine, will serve as its first president.





Nium partners with Visa for payment cards in Australia

One solution aimed at facilitating smoother payments in the Australian market comes from FinTech Nium. The company recently partnered with Visa to become an issuer of payment cards in the country as part of Visa's FinTech Fast Track program.

The Singapore-based company plans to provide end-to-end issuing, processing and onboarding services to speed up these processes and accelerate the time it takes to issue cards to SMBs and enterprises. The card offering will allow users to make real-time fund transfers to Visa-branded

virtual credit and debit cards as well as physical cards. It will support a variety of currencies and spend management features for digital wallets.

Nium previously worked with Australian SMB banking solutions provider Budgetly on a corporate card solution to aid SMBs with cash flow monitoring and expense tracking services. The company plans to harness the expertise gained in this program, along with its APIs and turnkey infrastructure, to enhance its new offering.

PayCargo and IBS Software collaborate on digital payment options for air freight companies

The ongoing pandemic is having far-reaching effects on the shipping and logistics industry and is creating new payment challenges for businesses on both sides of the equation. Overall payment volumes are down, and vendors are seeing payments come through outside of business hours. This, in turn, is adding to the pressure of invoicing and

payments-related issues and also driving a push for electronic payments.

Freight payments company Pay-Cargo and software-as-a-service solutions provider IBS Software are seeking to resolve these challenges under a new partnership. The collaboration will offer digital payment options to air freight carriers and cargo ground handlers through a PayCargo digital payments integration on IBS' iCargo air cargo management platform.

The API-based integration will reportedly enable air cargo businesses to process invoices and authorize cargo releases without going through multiple payment systems, as is the case with many current legacy systems.

This solution will reduce the need for physical cash, checks and vouchers at a time when the COVID-19 pandemic is driving up



THE ONGOING PANDEMIC IS HAVING

FAR-REACHING EFFECTS ON THE SHIPPING AND LOGISTICS INDUSTRY.

demand for contactless payment methods, according to PayCargo president and CEO Lionel van der Walt. The offering is also expected to improve transparency and cost efficiency for these payments.

Amadeus and Troovo team up for B2B travel payments automation

The travel industry is another field that sees a high volume of cross-border payments, and merchants in the industry are intimately familiar with their obstacles and shortcomings. A new partnership from Spanish



travel payments solution provider Amadeus and process automation company Troovo aims to automate and simplify these payments through the use of a software robot. Amadeus will integrate Troovo's Robotic Process Automation (RPA) engine into its B2B Wallet, which will allow crucial travel-booking data to be automatically populated for each payment and booking by pulling it directly from hotels' and airlines' booking systems. This eliminates the lengthy and error-prone process of having a travel agent manually do so.

The system also permits travel agencies to pay hotels and airlines via virtual debit cards and can be deployed within the agencies' existing systems without the need for an upgrade. The RPA engine is intended to improve back-end efficiencies by providing cost savings, according to Damian Alonso, Amadeus' head of payer services and payments. It may significantly smooth the speed bumps associated with cross-border payments when combined with Amadeus' risk management and data visibility services.

TranSwap to integrate Currencycloud technology for improved cross-border payments

Another solution aimed at simplifying B2B payments comes from Singapore-based cross-border payments platform TranSwap, which recently partnered with B2B cross-border solutions provider Currencycloud to integrate its Global Borderless Virtual Account system. This will give TranSwap customers more flexibility in being able to convert B2B payments into other currencies.

TranSwap aims to add 10,000 new SMBs to its platform by the end of 2020. This integration was driven by record numbers of cross-border payments around the world: Their value hit \$29 trillion in 2019 and is expected to grow to \$39 trillion over the next two years.

USING BLOCKCHAIN FOR CROSS-BORDER PAYMENTS

Bank Frick leverages blockchain to accelerate cross-border payments

One technology currently being explored to secure and streamline cross-border payments is blockchain, although it is still



largely unproven. The European FI Bank Frick recently announced that it was replacing its use of SWIFT — the currently most-used cross-border payments method — with Circle's stablecoin USDC to conduct cross-border payments. These transactions will be converted into USDC and transferred to recipients before being converted back into the currency of their choice, which Bank Frick believes will be faster and cheaper than going through traditional cross-border payment channels.

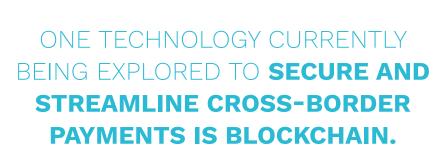
Bank Frick chose USDC over other cryptocurrencies because of its stability, as it does not fluctuate in value as rapidly as other currencies like bitcoin. The leading cryptocurrency to date for cross-border remittances has been Ripple's XRP, and Bank Frick's decision to go with USDC has been seen by experts as a game-changer in the crypto remittance industry. Other providers looking into blockchain-based cross-border payments may begin branching out to new currencies rather than using Ripple by default.

Apifiny launches blockchain-based payment platform

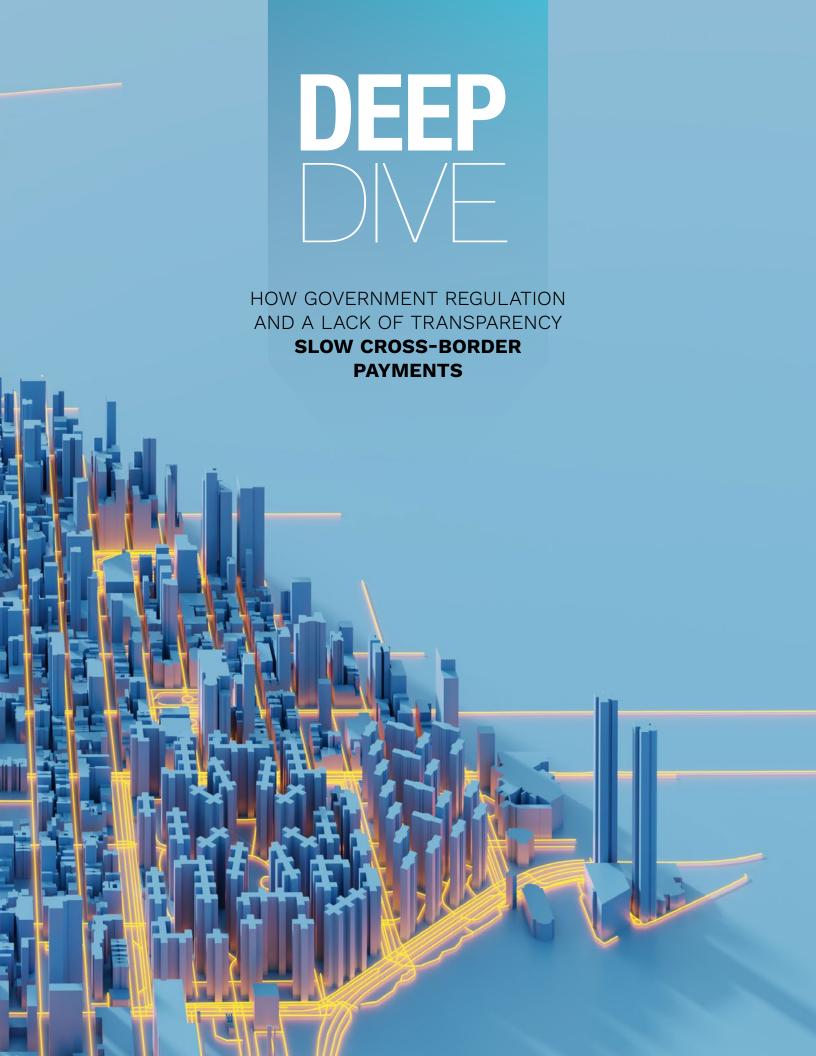
Another cross-border payments initiative relying on blockchain comes from payments company Apifiny, which recently launched a new payment clearing and settlement network called Roxe. The system relies on a new type of blockchain verification called Smart Proof of Ownership to settle payments, with each node on the blockchain maintaining custody of assets until the owner authorizes the fund transfer.

This verification system provides instant proof of ownership and is compatible with both fiat and digital currency on the same asset network.

This new system also weakens Ripple's hold on the blockchain-based cross-border payments market, with Apifiny deciding that its own approach would provide faster and more secure payments than Ripple's token-based system. Apifiny said that it was in partnership talks with several banks and that its system would support all fiat currencies in G20 nations as well as 50 different digital currencies.







usiness-to-business payments are the lifeblood of the global economy, with untold trillions of dollars changing hands around the world every year. More than 1.9 billion of such transactions occurred in the second quarter of 2019 alone, and they collectively valued \$18.2 trillion.

Many of these payments are conducted across borders, with funds flowing from paying companies in one country to receiving companies in another. Cross-border payments between two merchants can face a host of challenges, unlike domestic B2B payments, including being subject to inspections to ensure the validity of the payment and its compliance with each country's financial laws.

Making matters worse is that businesses transacting across borders often tend to have little transparency into the whereabouts of their payments, which can also create cash flow issues, especially for

SMBs. A recent study found that while most SMBs turn to their banks to conduct foreign transactions, 80 percent are unaware of the true costs of these payments, and costs can vary wildly between different banks.

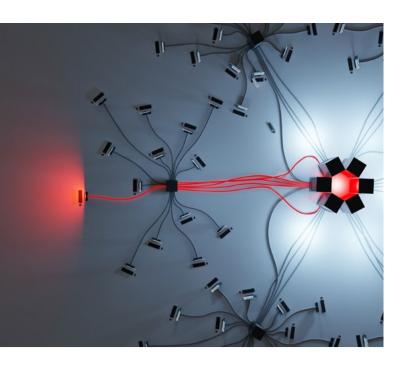
The following Deep Dive explores the hurdles associated with sending and receiving cross-border B2B payments as well as details the solutions intended to ease these struggles and provide a more seamless payments experience.

Challenges facing cross-border payments

Complying with anti-money laundering and know your customer (KYC) requirements is often a challenge intrinsic to sending and receiving cross-border payments. International transactions must be vetted not only by FIs in the sending and receiving countries but also by every correspondent bank the payments flow through along the way. Each of these checks can take up



precious time - especially when they are done manually. Between 2 percent and 5 percent of all cross-border B2B payments are subject to additional inquires or investigations, which may not seem like much but is a big number due to the massive scale of cross-border payments volume. These checks cause significant delays and also cost the banks themselves significant sums, with each investigation costing up to 35 times more than the cost of the payment processing itself. These costs are typically passed on to the SMBs making these payments, to their great exasperation. A survey of Australian SMBs found that their top cross-border payments concern was having to pay exorbitant fees, with 58.7 percent of respondents citing it as their number one frustration.



Further pain points can stem from the lack of transparency in these payment processes. A treasury employee at the sending company, for example, could receive a complaint from the receiving company that their payment had not arrived on time, and the sender would have no idea why. The payment could be held up in regulatory checks or could have been intercepted by a hacker, and though neither are either company's fault, each can result in broken trust between the two companies and potentially lost business. Sixty-one percent of treasury professionals in a recent survey said that the time involved in finding out why payments failed has been a drain on their company's resources.

Companies stand to lose not only their funds but also valuable data when cross-border B2B payments get intercepted by bad actors. A recent survey found that one-third of businesses were concerned about fraud in their cross-border payments, with an additional 26 percent worried about data security. Businesses nonetheless all too often rely on methods such as wire transfers, which are more susceptible to fraud. Sixty-nine percent of businesses surveyed said they use wire transfers despite their risks, which further heightens the likelihood of malfeasance.

These are just three of the multitude of frustrations associated with cross-border

payments. A variety of solutions aim to mitigate these pain points, however.

Accelerating payments through cooperation and APIs

Cooperation between regulators is one of the most important steps to easing B2B cross-border payments, as even banks within the same country often have wildly different compliance standards. A payment that might sail through one bank could be stopped dead at another due to their diverging guidelines. Cooperation between banks could dramatically decrease the amount of regulatory friction and time needed to process these payments, according to Olivier Miet, head of sales and network management global transaction banking at French multinational investment bank Societe Generale.

"It is very important for all of the financial services industry to unite behind technical and compliance standards for cross-border payments," he said. "If the industry manages to stay united behind standards, it will help everyone to improve the services that are provided to both retail and corporate clients."

APIs are another key technology that can help accelerate cross-border B2B payments. APIs permit developers to create algorithms and applications that access features or data or interact with other systems. Banks and payment providers can seamlessly interface with each other through the use of APIs rather than going through a series of correspondent banks that each have to conduct their own regulatory checks.

These payments must also be kept secure to ensure they are not intercepted by bad actors, however. Businesses can counter security threats by relying on RESTful APIs to access their payments channel. Any steps taken by the system or a human employee must also be recorded and made available for investigation. Security systems that rely on machine learning, with an automated program inspecting cross-border transactions to detect any suspicious activity, can help either stop attempted fraud in its tracks or flag it for review by a human analyst.

No single solution will be enough to solve every problem facing cross-border payments, but platforms that help solve for issues with regulatory compliance and offer APIs that can process payments in a fast and secure manner can go a long way toward reducing the frustration these payments often bring.



PYMNTS.com

PYMNTS.com is where the best minds and the best content meet on the web to learn about "What's Next" in payments and commerce. Our interactive platform is reinventing the way companies in payments share relevant information about the initiatives that make news and shape the future of this dynamic sector. Our data and analytics team includes economists, data scientists and industry analysts who work with companies to measure and quantify the innovations at the cutting edge of this new world.

NIUM

Nium is a global financial technology platform redefining the way consumers and businesses send, spend and receive funds across borders. The company is continuously innovating to provide the most relevant and agile solutions to meet the needs of consumers and businesses, having evolved from solely focusing on consumer remittance via Insta-ReM to also providing FinTech solutions for businesses from 2019. Nium is regulated in Australia, Canada, Europe, Hong Kong, India, Indonesia, Japan, Malaysia, Singapore and the United States of America, and processes billions of dollars a year for banks and payments institutions, next generation eCommerce players, OTAs and retail users across the world.

We are interested in your feedback on this report. If you have questions, comments or would like to subscribe to this report, please email us at SmarterPayments@pymnts.com.

DISCLAIMERS |

The Smarter Payments Tracker® may be updated periodically. While reasonable efforts are made to keep the content accurate and up to date, PYMNTS.COM: MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE CORRECTNESS, ACCURACY, COMPLETENESS, ADEQUACY, OR RELIABILITY OF OR THE USE OF OR RESULTS THAT MAY BE GENERATED FROM THE USE OF THE INFORMATION OR THAT THE CONTENT WILL SATISFY YOUR REQUIREMENTS OR EXPECTATIONS. THE CONTENT IS PROVIDED "AS IS" AND ON AN "AS AVAILABLE" BASIS. YOU EXPRESSLY AGREE THAT YOUR USE OF THE CONTENT IS AT YOUR SOLE RISK. PYMNTS. COM SHALL HAVE NO LIABILITY FOR ANY INTERRUPTIONS IN THE CONTENT THAT IS PROVIDED AND DISCLAIMS ALL WARRANTIES WITH REGARD TO THE CONTENT, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT AND TITLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF CERTAIN WARRANTIES, AND, IN SUCH CASES, THE STATED EXCLUSIONS DO NOT APPLY. PYMNTS.COM RESERVES THE RIGHT AND SHOULD NOT BE LIABLE SHOULD IT EXERCISE ITS RIGHT TO MODIFY, INTERRUPT, OR DISCONTINUE THE AVAILABILITY OF THE CONTENT OR ANY COMPONENT OF IT WITH OR WITHOUT NOTICE.

PYMNTS.COM SHALL NOT BE LIABLE FOR ANY DAMAGES WHATSOEVER, AND, IN PARTICULAR, SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, OR DAMAGES FOR LOST PROFITS, LOSS OF REVENUE, OR LOSS OF USE, ARISING OUT OF OR RELATED TO THE CONTENT, WHETHER SUCH DAMAGES ARISE IN CONTRACT, NEGLIGENCE, TORT, UNDER STATUTE, IN EQUITY, AT LAW, OR OTHERWISE, EVEN IF PYMNTS. COM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

SOME JURISDICTIONS DO NOT ALLOW FOR THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, AND IN SUCH CASES SOME OF THE ABOVE LIMITATIONS DO NOT APPLY. THE ABOVE DISCLAIMERS AND LIMITATIONS ARE PROVIDED BY PYMNTS.COM AND ITS PARENTS, AFFILIATED AND RELATED COMPANIES, CONTRACTORS, AND SPONSORS, AND EACH OF ITS RESPECTIVE DIRECTORS, OFFICERS, MEMBERS, EMPLOYEES, AGENTS, CONTENT COMPONENT PROVIDERS, LICENSORS, AND ADVISERS.

Components of the content original to and the compilation produced by PYMNTS.COM is the property of PYMNTS. COM and cannot be reproduced without its prior written permission. PYMNTS.COM in developing and asserting any available defenses in connection with a claim subject to indemnification by you under this Agreement.