



TABLE OF CONTENTS

Introduction
Part I
Part II
Case Study
Part III
Conclusion

PYMNTS.com



The New Singularity: Leveraging API Innovation For Cross-Border eCommerce was produced in collaboration with USEND, 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.

INTRODUCTION

anks, global businesses and FinTechs have a cross-border problem. With eCommerce growth expected to continue after the pandemic ends, businesses are pressed to support an increasing volume of cross-border transactions. Recent research established that more than \$120 trillion in payments volume flows between trading partners annually, and \$10 trillion of that volume stems from cross-border trading.1

Doing business across borders comes with unique challenges, however. Local payment frictions can be amplified when transacting internationally. Key among those has been a lack of timely payment alternatives for payors and receivers. Cross-border sales represent roughly 26 percent of the average total for United States and United Kingdom businesses, yet receipt of payment for these transactions takes 55 percent longer than it does for domestic sales. Cross-border transactions also face many other issues, including issues with fraud, data security, foreign currencies and conversion costs, a lack of transparency and transaction complexities.

To be successful in today's fast-paced world, financial institutions and eCommerce businesses need to optimize payment capabilities with accurate and efficient processes. Luckily, there is a solution. Application programming interfaces (APIs) can help streamline cross-border payments operations. APIs are computing interfaces that build integration and efficient communication between the software components businesses use to power their payments processes. They can therefore help financial institutions (FIs) and eCommerce businesses address the most complex cross-border payments frictions, such as authentication and payments processing, with the help of third-party payments providers. Using an API, for instance, users can pay or receive refunds in local currencies directly in apps or via companies' websites.² API innovation helps banks become more agile, innovative and better able to support customers' needs. API innovation also allows for the potential to provide enhanced, streamlined information sharing and payment solutions.3

The New Singularity: Leveraging API Innovation For Cross-Border eCommerce Growth, a collaboration with USEND, examines how advanced API-based solutions can help FIs, banks and FinTechs better support frictionless cross-border transactions to meet the needs of their eCommerce customers and end users.

¹ Innovating Cross-border Payments, What US And UK Businesses Need To Know. PYMNTS.com. 2021. https://securecdn.pymnts.com/wp-content/uploads/2021/03/PYMNTS-Innovating-Cross-Border-Payments-What-US-And-UK-Businesses-Need-To-Know-March-2021.pdf. Accessed December 2021.

² New Tech Greases Old Payment Rails To Allow Fast, Cheap Int'l Banking. PYMNTS.com. 2021. https://www.pymnts.com/digital-first-banking/2021/new-tech-greases-old-payment-rails-to-allow-fast-cheap-intl-banking/. Accessed December 2021.

³ Sehr, M., Leveraging APIs For A Faster And More Efficient Future. Financial IT. 2021. https://financialit.net/blog/fintech/leveraging-apis-faster-and-more-efficient-future. Accessed December 2021.



REGULATORY BARRIERS TO

CROSS-BORDER COMMERCE



THE MOUNTING COMPLIANCE IMPERATIVE





ment methods that are popular in different markets.4

Business-to-business (B2B) eCommerce, including wholesale, distribution and manufacturer sales, is also rising as digital-savvy millennials move into managerial positions with purchasing authority. Comfortable with digital payment and self-service capabilities, millennials have abandoned traditional modes of purchasing goods. One challenge that these sellers confront when moving to eCommerce is that B2B transactions often carry a higher price tag than business-to-consumer (B2C) purchases. This means that online merchants must build brand trust and create streamlined and personalized payment experiences.⁵

transfers, which can be slow and expensive. This electronic transfer of money requires that banks share information about the recipient, account numbers and payment amounts via secure message systems. Payments are made from the receiving banks' reserve, with the two banks settling when the transaction is complete. Outdated operational systems, slow payment processing and data privacy regulations are critical wire transfer frictions.6

Cross-border payments have traditionally relied on wire

Ensuring that transactions are smooth is not the only cross-border imperative for international businesses, however. They must also combat the rising risk of cybercrime. Identity theft, fraud and money laundering are growing more prevalent as businesses shift to conducting more of their transactions online.

These increases in cybercrime along with new regulatory reform are driving businesses to pay more attention to strong know your business (KYB) and know your customer (KYC) protocols.7 KYB/KYC processes help businesses verify their customers' identities and investigate whether individuals or businesses are indulging in illegal tax avoidance or money laundering activities.

PYMNTS.com

⁴ Pratt, M. The future of e-commerce: Trends, tips, traps to avoid. TechTarget. 2021. https://searchcio.techtarget.com/feature/The-future-ofe-commerce-Trends-tips-traps-to-avoid, Accessed December 2021

⁵ Author unknown. B2B Ecommerce. BigCommerce. https://www.bigcommerce.com/articles/b2b-ecommerce/. Accessed December 2021

⁶ Singh, T. Cross-Border Payments: Biggest Challenges And Solutions. Mobile App Daily. 2020. https://www.mobileappdaily.com/cross-border-payments-solutions. Accessed December 2021.

⁷ Author unknown. Why KYC and KYB are critical in Financial Industry?. PayPound. 2021. https://paypound.ltd/why-kycand-kyb-are-critical-in-financial-industry/. Accessed December 2021.

MARKET FRAGMENTATION

Businesses often have trouble ensuring regulatory compliance on a global scale because regulatory standards vary drastically by region. The result of these national-level regulations is a myriad of international data protection laws, some more stringent than others, and all just a little bit different. Keeping compliance amid this fragmented market is a burden to even the most established businesses, but doing so is necessary to establish a local market presence.

The European Union is sometimes regarded as the global leader in data privacy regulation. The KYB/KYC, anti-money laundering (AML) and data privacy regulations in the EU are often seen as the most stringent of all. The EUs General Data Protection Regulation (GDPR) defines strict limits on how businesses can use customer data. The GDRP also regulates electronic payment services through the revised Payment Services Directive (PSD2), which is designed to enhance digital payment security. PSD2's strong customer authentication protocol requires that banks use two authentication factors for payments and account access online or via mobile apps. It also calls for stricter requirements on what is considered an authentication factor. PSD2 also allows third parties access to bank infrastructure, enabling banks to extend their platform and services to FinTech innovators via open API technology.8 International businesses looking to expand into the EU must abide by these strict regulations or forgo the chance to tap into the European market entirely.

⁸ Author unknown. Everything you need to know about PSD2. BBVA. 2019. https://www.bbva.com/en/everything-need-know-psd2/. Accessed December 2021.

Strong data privacy legislation is not limited to the EU. Many countries have detailed regulations to protect personal information. Australia's Privacy Principles, for instance, consist of 13 principles to guide how business must handle personal information openly and transparently. Canada's Personal Information Protection and Electronic Data Act also stipulates that businesses be clear on how they collect, store and use information from online customers.⁹

In August, China announced its data privacy standards, the Personal Information Protection Law (PIPL) 2021, which went into effect in November. Like GDPR, PIPL requires that global businesses doing trade or offering services online comply with stringent data protection measures. Under GDPR, businesses can collect personal data if a customer shows "legitimate business interest." PIPL has stricter requirements for customer consent.¹⁰

The international eCommerce ecosystem is replete with highly localized compliance standards like these. Each market has its own unique rules governing how businesses must verify their users' identities and handle user data. This fragmentation makes it difficult for companies to ensure compliance in cross-border transactions.

⁹ Author unknown. What's Data Privacy Law In Your Country?. Privacy Policies. 2021. https://www.privacypolicies.com/blog/privacy-law-by-country/. Accessed December 2021.

¹⁰ Holland, J. China's Privacy Law Adds to International Compliance Patchwork. Bloomberg Law. 2021. https://news.bloomberglaw.com/privacy-and-data-security/chinas-privacy-law-adds-to-international-compliance-patchwork. Accessed December 2021.

APIS EASE REGULATORY WOES

APIs can help eCommerce businesses alleviate cross-border compliance frictions, enhance the end-user experience and keep transactions transparent, simple and secure. They do so by extracting users' personal information. When users interact with a platform or a mobile application, API algorithms store their personal information and behaviors. Enterprises can then use this data to personalize their services and products or even to create new businesses. They can also use APIs to gather data and predict consumer behavior, providing insight into new business opportunities as users interact with mobile apps or websites.¹¹

API solutions also help eradicate many cross-border compliance problems. An API provides instant access to critical regulatory information, responding to specific queries and inputting relevant data. When integrated into banking systems, customer relationship management software and other digital platforms, regulatory compliance APIs can deliver automated cross-border compliance at any phase of an eCommerce transaction.¹²

In addition to helping deliver more streamlined B2B and B2C payments, APIs can also enhance efficiency in payment transactions. The connective capabilities of APIs allow businesses to integrate their payments systems more easily with those of third-party payment service providers (PSPs). PSPs then access bank data or data in businesses' existing enterprise resource planning (ERP) software or accounting systems and use it to streamline and even automate the payments processes they provide. APIs can access payment beneficiary information, validate beneficiary bank details and apply and adjust exchange rates, addressing several cross-border frictions in one simple step once a payment or invoice has been approved.¹³

¹³ Saiko, D. How API's are shaping the future of banking and international payments. Cambridge Global Payments. $2018.\ https://www.cambridgefx.com/blog/how-apis-are-shaping-the-future-of-banking-and-b$ international-payments/. Accessed December 2021.



¹¹ Author unknown. How the large e-commerce players are using APIs. BBVA. 2018. https://www.bbvaapimarket.com/en/api-world/how-largee-commerce-players-are-using-apis/. Accessed December 2021.

¹² Author unknown. APIs and the Future of Digital Compliance. Indigita. 2021. https://www.indigita.ch/post/apis-and-the-future-of-digital-compliance, Accessed December 2021,



PART II:

TAPPING APIS TO BUILD

GLOBAL FINANCIAL

PRODUCTS AND SERVICES

THE ROLE OF FIS AND FINTECHS:

ENABLING NEW PAYMENTS CAPABILITIES



pplication programming interfaces are an effective cross-border payments facilitator and a key value-added technology that FIs, banks and FinTechs can provide their business clients and end users. Many banks and FinTechs are already using APIs to help deliver on their business clients' demands for digital services and capabilities.

Many banks' mobile apps, for instance, connect with third-party APIs to provide advanced payment services along with standard checking and savings account access. Banking-as-a-service APIs provide third-party companies with direct access to banking data.

BNY Mellon is one example. Open banking enables BNY Mellon's Unified Payments API to integrate with existing banking systems to automate payment processes and enable customized reporting and transaction services. Its API provides secure access to global payment and transaction management capabilities through a single endpoint, allowing clients to transact across multiple devices via the cloud.14 This move to open banking enables eCommerce businesses to look beyond their banks for payment capabilities that are automated and streamlined with seamless software integration — and such solutions make it easier for applications to share data in real time.

Banks are not the only industry players using APIs to enhance their business clients' and end users' payments experiences. FinTechs are also developing API-based payment solutions that provide apps and services for business clients to incorporate into customer-facing platforms.¹⁵

One example of this can be seen with Stripe, an established player in the payment gateway arena. Stripe provides an API solution that integrates into eCommerce sites or mobile apps and accepts payments made from around the globe. To meet the security challenges of cross-border payments, the Stripe platform uses APIs that help eCommerce merchants mitigate fraud threats. The Stripe Radar API uses machine learning to detect and block fraud and monitors user behavior to provide real-time fraud protection. Stripe's Radar for Fraud Teams enables fraud professionals to customize protection and gain deeper insights into fraudulent activity.16

⁴ Sehr, M. Leveraging APIs For A Faster And More Efficient Future. Financial IT. 2021. https://financialit.net/blog/fintech/leveraging-apis-faster and-more-efficient-future. Accessed December 2021.

¹⁵ Miller, B. Why APIs Are the Future of Fintech Innovation. Rapyd. 2021. https://www.rapyd.net/blog/fintech-api/.

⁶ Author unknown. Radar. Stripe. https://stripe.com/docs/radar. Accessed December 2021.



FLEXIBLE, OMNICHANNEL EXPECTATIONS

Not all payment capabilities are created equal in the cross-border arena. Businesses and consumers expect their banks and other FIs to deliver a consistent user experience across numerous digital channels, whether via web browser, mobile app or otherwise. This means FIs must provide agile cross-border payments offerings that are compatible with a wide array of digital technologies to deliver the omnichannel capabilities that end users expect.

Banks' legacy IT infrastructures often lack the functionality to support the digital and mobile payment options that end users expect, however, which is where third-party APIs come in. Third-party APIs present a cost-effective way for banks to support these functions. The alternative would be for banks and other FIs to rebuild their IT infrastructures from scratch, which could take more time and resources than many can afford to expend.

APIs deliver omnichannel experiences using data gathering and analytics. They can be integrated with banks' or eCommerce businesses' ERPs, which gather data from those institutions' digital applications. This data is compiled into one location and used to harmonize end users experiences, regardless of whether they are accessing information via mobile app, web browser or any other digital touchpoint.¹⁷ End users therefore encounter the same personalized banking and payments experiences across every channel.

The infrastructural flexibility APIs provide also gives banks and other FIs access to a broad array of back-end technologies that can facilitate smoother cross-border transactions. The SWIFT ISO 20022 messaging standard is one of the most important. ISO 20022 allows banks to quickly send and receive transaction information used to identify sending and receiving banks. ISO 20022 uses international bank account numbers, SWIFT and routing codes and AML documentation. This information can then be used to streamline and automate digital cross-border payments while providing the real-time payments data that end users need to track the progress of their cross-border transactions.

¹⁷ Author unknown. Understanding APIs and the Role They Play in Your Ecommerce Tech Stack. BigCommerce. https://www.bigcommerce.com/articles/ecommerce.website-development/api-guide/. Accessed December 2021.

¹⁸ Saiko, D. How API's are shaping the future of banking and international payments. Cambridge Global Payments. 2018. https://www.cambridgefx.com/blog/how-apis are-shaping-the-future-of-banking-and-international-payments/. Accessed December 2021.



CASE STUDY:

TAPPING INTO PAYMENT INNOVATION:

TRANSFORMING

THE LATIN AMERICAN

e COMMERCE MARKET





CROSS-BORDER eCOMMERCE ... HAS BEEN ACCELERATED BY THE INCREASED DIGITAL ENABLEMENT AND GENERAL GLOBALIZATION OF GOODS AND SERVICES THAT A GLOBAL PANDEMIC REQUIRED.

"As COVID-19 demonstrated, the world is more interconnected now than ever before out of sheer necessity," according to Luiz Ribeiro, principal at global investment firm General Atlantic. "Cross-border eCommerce, which already had a solid foundation pre-2020, has been accelerated by the increased digital enablement and general globalization of goods and services that a global pandemic required."

PYMNTS spoke to Ribeiro about how cross-border eCommerce is taking shape and developing across the Latin American region. He provided insight into the cross-border payment trends that merchants and payment providers need to know as the market continues to grow.

"In Latin American, in particular, countries have dozens of various local payment methods, which has birthed an industry that enables seamless cross-border eCommerce, allowing a broader range of consumers to have access to goods and services that they otherwise could not have," he said.

Ribeiro noted the importance of enabling access to cross-border payment options and expressed certainty in the transformative impact of payment innovation across the region.

"Merchants need to make sure they offer their customers all the dozens of local payment methods they can use to pay for their purchases, and payment providers need to be able to provide broad solutions to merchants, allowing the transactions to happen," he said.

There are unique challenges associated with cross-border eCommerce in a multinational region such as Latin America that need to be overcome to ensure that easy, swift payments can be made between consumers in different regions, despite potential foreign exchange (FX) risks according to Ribeiro.

"Like with any multinational region, many sectors in the Latin American space are fractured, with a vast spectrum of regulation, access to technology and capital from country to country," he said. "Factors like the skills gap in the workforce, regulatory and tax complexities, and overall volatility — including FX — are all considered challenges."

He added that such a complex landscape as Latin America requires technological innovation to help address these cross-border payment issues.

"There is a significant opportunity for companies that create systems that enable or consolidate the multitude of local payment options that exist in each country and can understand and handle all the regulatory, tax and FX complexity to allow a transaction to be successfully completed."

Mobile wallets and other digital payment methods, for instance, play a crucial role in the Latin American cross-border ecosystem, and their usage continues to grow as more Latin American consumers and merchants grow comfortable with online shopping and payments.

"We believe from experience through our partnerships with payment platforms like dLocal that local payment methods, including mobile wallets, are already a necessary tool for companies that want to tap into the emerging Latin American market and global consumer base, and that the demand for creative tech-based solutions is only poised to grow," he said.

According to Ribeiro, cross-border eCommerce will continue to evolve as different corners of the world become increasingly interconnected, requiring innovative tools that aid and support the proliferation of cross-border commerce and integration.



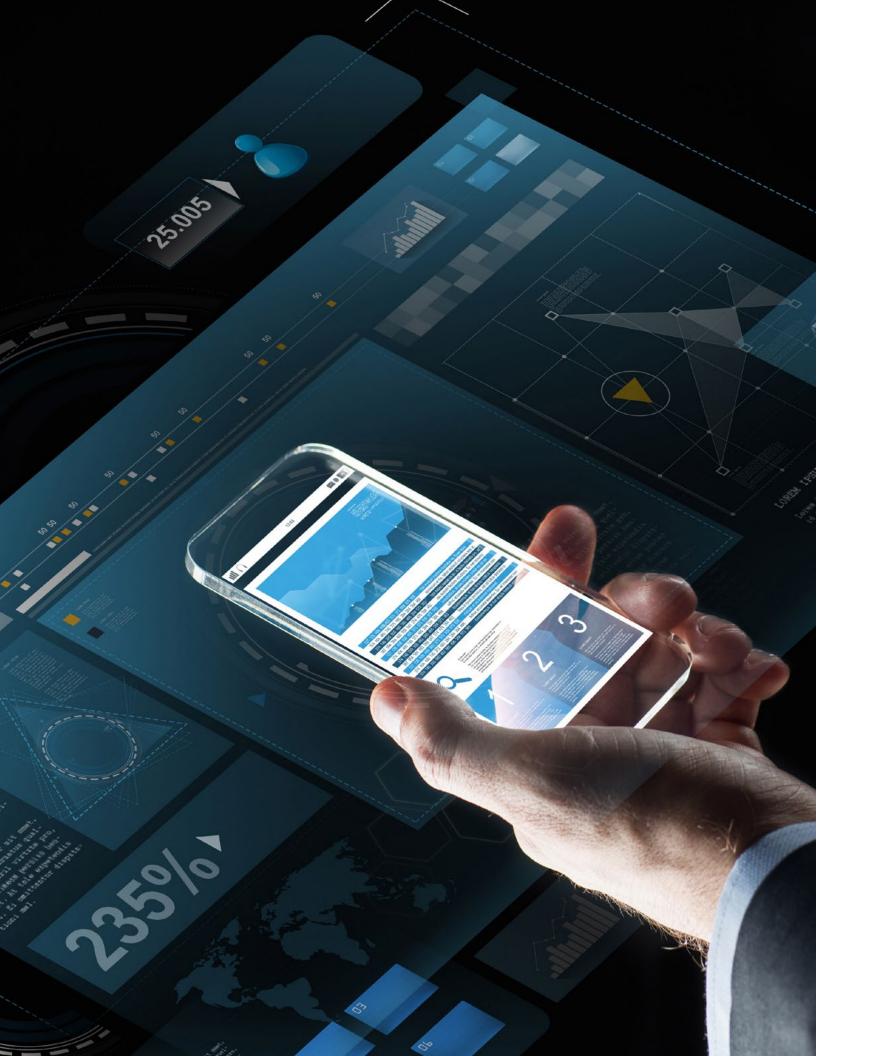
FACTORS LIKE THE SKILLS GAP IN THE WORKFORCE, REGULATORY AND TAX COMPLEXITIES, AND OVERALL VOLATILITY - INCLUDING FX -ARE ALL CONSIDERED CHALLENGES.



THE CROSS-BORDER

API INNOVATION GUIDE

HOW
FIS AND
FINTECHS ARE
LEVERAGING APIS





eading players in the payment space are leveraging APIs to differentiate themselves with improved consumer experiences by tapping into proprietary data about their customers, providing heightened data security and integrating with third parties to enable innovative services.

One such example is peer-to-peer payment solution Zelle. Zelle integrates into leading banking apps, enabling consumers and small businesses to send money between participating banks. Zelle's APIs provide access to personal data and behavior to secure and fine-tune the customer experience. When users first enroll with Zelle, they take measures to validate their identities. As users continue to transact on the Zelle network, their digital identities become more robust, because Zelle gathers more data about senders and receivers to enable seamless consumer interactions while putting anti-fraud safeguards in place.¹⁹

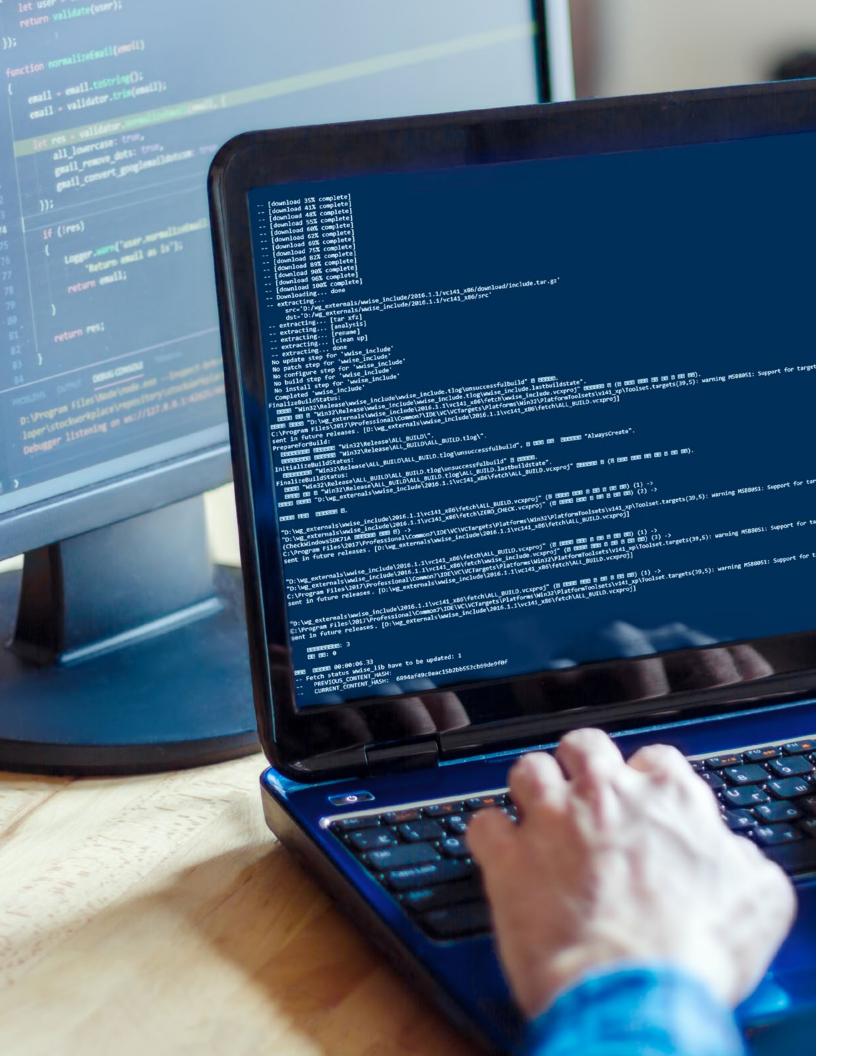
HSBC, the second-largest bank in Europe, is also taking advantage of PSD2 to drive thirdparty innovation and extend its brand. The Britain-based multinational FI now supports market-facing APIs, providing direct access to its API tools. This enables customers and developers to integrate the bank's APIs into their products for access to treasury payment and account information as well as trade processing, custody holdings, bank guarantee status and global disbursements. The portal also allows third-party providers in the 15 open banking markets to access payment and account information APIs for retail, business and corporate banking.²⁰

FIVE QUESTIONS TO ASK WHEN EVALUATING YOUR CROSS-BORDER PAYMENTS STRATEGY:

- Which cross-border payment platforms meet your industry or market needs?
- Should you invest in developing your own APIs or seek help from a third-party provider?
- · What are the regulatory compliance requirements of the various countries in which you transact?
- How can a new payment gateway engage your customers with more personalized and localized payment experiences and let you innovate new value-added services?
- What third-party API solution can help remove your eCommerce business's payment frictions and streamline the customer payment experience?

¹⁹ It's Time To Shore Up User Authentication As Digital Identities, Payments Converge. PYMNTS.com. 2021. https://www.pymnts.com/pymnts-post/authentication/2021/its-time-to-shore-up-user-authentication-assumed and the properties of the properdigital-identities-payments-converge/. Accessed December 2021.

¹⁹ Dabo, M. HSBC launches API Developer Portal. Retail Banker International. 2021. https://www.retailbankerinternational.com/news/hsbc-launches-api-developer-portal/.Accessed



THE NEW SINGULARITY

CONCLUSION

inancial institutions and merchants must provide their customers with frictionless payment experiences to remain competitive in an increasingly global eCommerce market-place. This means enabling fast, simple and transparent cross-border payments while ensuring data security and guaranteeing compliance with a host of global regulations. With the help of third-party APIs, global FIs and enterprises can address these challenges head-on. APIs designed to address regulatory compliance and data security challenges can help streamline cross-border payments. With APIs, businesses can access customer data, leveraging this insight to develop innovative products and service offerings that engage customers and expand their global reach.

ABOUT

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 in which companies in payments share relevant information about the initiatives that shape the future of this dynamic sector and make news. Our data and analytics team includes economists, data scientists and industry analysts who work with companies to measure and quantify the innovation that is at the cutting edge of this new world.



Established in 2007, Pronto Money Transfer, Inc. (dba Pontual Money Transfer) has become the most trusted American money transfer company dedicated to Brazil. With more than a decade operating under a traditional agent business model, it later developed its proprietary technology and, in 2014, launched Enviouchegou.com, a web-based and mobile application to serve Brazilians in the United States. Combining its expertise and state-of-the-art technology, the company later launched **USEND** and began offering services to other countries as well.

All USEND money transfers are completely regulatorily compliant. This means that, unlike many traditional remittance service providers, USEND remittances are processed in adherence with United States regulatory compliance requirements, including the U.S. Patriot Act, Anti-Money Laundering, Bank Secrecy Act, OFAC, NACHA, CHAPS and BACS processing policies, as well as the laws of each transfer's destination country.

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

DISCLAIMER

The New Singularity: Leveraging API Innovation For Cross-Border eCommerce 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.