



Evolving Payments

Orchestrating and optimising for profitable business growth.





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Experts explore the evolving payments landscape.

The payments landscape is always evolving. From innovative technologies to regulatory requirements, change is everywhere, and leaders of large businesses can find it hard to know the best path forward for profitable business growth. We're here to help.

This ebook is a collection of perspectives from PayPal's product and industry experts regarding the challenges facing large, global organisations — and strategies to overcome them. The experts discuss everything from growth orchestration to authorisation rates to faster payouts and more, on a micro and macro level. Common themes appear around driving conversions, expanding reach, mitigating risk, and simplifying payouts — and the experts break it all down to help you apply their understanding of the payments landscape to your business strategies.

Wherever you are in your journey, we hope their experience can help you to strengthen your organisation and give you confidence to thrive in an ever-changing world.



The State of Payments

- ▶ The state of the payments landscape.
- ▶ It all starts with vault.
- ▶ Card processing: Past, present, and future.
- ▶ Treasury services on a large scale.
- ▶ Integrating with PayPal Braintree.

The state of the payments landscape.

By Cindy Turner

In today's economic climate, we've seen businesses shift from a "growth at all costs" mentality toward an intense focus on profitable growth. In recent years, businesses have tolerated a wide range of activities that increased revenue — despite the potential risks and the fraud or chargeback costs associated with some of them. Today, that tolerance has vanished.

As a result of this intense focus on profitable growth, more businesses are also seeking ways to simplify the management of their technically complex payments systems, spanning from the front-end transaction processing to the back-end funding flows. Payments providers are fulfilling this need by evolving from mere payment processors into technology-driven strategic growth solutions for large businesses.

Increasing customer conversion and driving revenue.

There are two keys to increasing customer conversion rates and driving revenue:

- Identifying known customers and delivering the shopping experience they want, which includes a frictionless checkout.
- Safeguarding against bad actors who are likely to commit fraud, particularly as the cost of fraudulent transactions increases.

Payment service providers (PSPs) are offering advanced technical capabilities, such as artificial intelligence (AI) and machine-learning tools, to help businesses achieve these goals. For example:

- Identity and authentication tools that securely store customers' payment credentials, and enable businesses to tailor their checkout experiences for each customer.
- Authorisation rate optimisation tools, such as retry tools, that help make intelligent decisions regarding when to retry a failed transaction.
- Fraud detection tools that use machine learning to analyse customer and transaction data to help prevent fraudulent transactions and successfully contest chargebacks.

Orchestrating growth.

Businesses with ambitious growth plans are seeking payments orchestration services — the management of a business's entire payments ecosystem through a single application programming interface (API) integration.

Today, businesses are advancing their strategies while remaining mindful of costs. Businesses would rather invest time and money in their core services — not expand internal technical teams to manage their payments stack. Orchestrators can help to empower businesses to focus on growth while helping them to deliver positive customer experiences that will maximise revenue.

Forward-thinking businesses know that they shouldn't manage their payments systems alone. Now is the time for PSPs to flex their technical expertise and capabilities to show how they can manage payments successfully and ultimately help organisations meet their conversion and revenue goals.



Cindy Turner

Vice President and General Manager,
PayPal Braintree



Businesses have shifted from a 'growth at all costs' mindset to a hyperfocus on profitable growth. Payment service providers must evolve to meet the needs of large businesses that want to aggressively grow revenue while keeping an eye on costs.

– Cindy Turner

It all starts with vault.

By Adam Hachtel and Mindy Chon

At its core, a vault stores a customer’s sensitive data — including payment information — on behalf of a business. When a customer transacts on a business’s website, the business can save important payment information — name, address, and credit card information — to facilitate future checkout. This simplifies the customer’s future checkout experience, which can result in quicker transactions.



At the heart of any payments infrastructure lies the vault. Beyond storing a customer’s sensitive data, the vault is the key to providing value-added services that give a business a robust, interconnected payments network so it can grow wherever and whenever it needs.

– Adam Hachtel

Rather than storing this sensitive data within its own database, a business can send that information to its payment solution’s vault for safe storage. Beyond storing customer data to help facilitate positive shopping experiences, a vault makes it easier for a business to offer value-added services using the vaulted data. These services can help with conversion and revenue goals by:

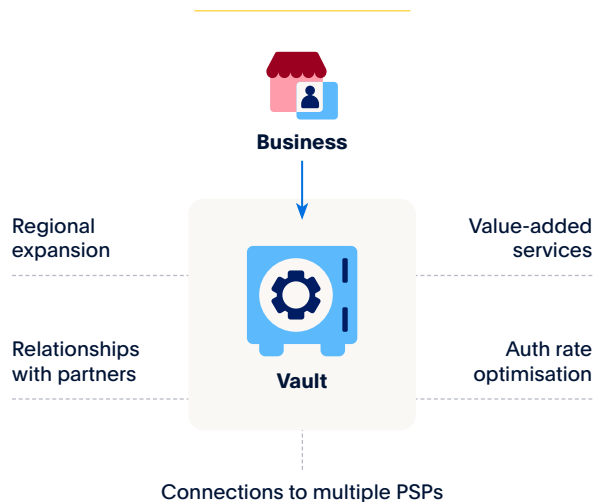
- **Expanding reach.** Large businesses typically work with multiple payment service providers (PSPs) to ensure business continuity in case one PSP experiences an outage. Orchestration helps businesses to connect to many PSPs through one secure connection. A vault is central to facilitating

this orchestration. Vaulted payment data can be seamlessly shared so businesses can easily route transactions to any PSP they choose, for any reason.

- **Driving conversion.** A vault can help to reduce cart abandonment and create a frictionless checkout experience by enabling a card to be automatically presented to a customer. Additionally, a vault securely stores sensitive payment data, such as business-specific network tokens. These network tokens are assigned by the networks, so networks perceive them as more secure and can quickly approve transactions associated with their network tokens. Higher authorisation rates can lead to more completed transactions — increasing revenue.
- **Increasing efficiency.** Just as a vault can store customer information, it can also safely store data on sellers — which is critical for facilitating payouts. A vault helps to ensure that payments can be processed swiftly, securely, and reliably.

Providing an exceptional customer experience on the front end requires a powerful back end tailored to a business’s needs — with a vault at its core.

Scale with a Centralised Vault



Adam Hachtel
Senior Product Manager, PayPal



Mindy Chon
Lead Product Manager, PayPal

Card processing: Past, present, and future.

By Jon Krauss and Jay Mok

Globally, credit and debit cards (49%) are the most trusted payment methods among consumers, followed by digital wallets (40%).¹ That means card processing, or card-on-file processing, should remain a top priority for large, global businesses.

In addition to processing cards, payment service providers (PSPs) work to help businesses improve their conversion rates and costs — and have traditionally achieved this by offering lower processing costs than the competition. However, in recent years, PSPs have strengthened their value-added services to help drive conversion and encourage growth.

The future of a PSP's card processing offering is deeply intertwined with the range of value-added services it can provide. Services such as payments orchestration capabilities and fraud management tools can help businesses to increase customer conversion, reduce costs, and even find new customers. With the right data,

certain PSPs can help businesses reach new customers at precisely the right time or in new regions.

PSPs also offer strategic value to their large business customers through their knowledge of and influence over card network relationships. As networks impose additional card-processing rules and fees, PSPs can help businesses to navigate these new realities, and they can advise on how to best manage overall processing costs.

PSPs possess a wealth of customer and transaction data. Many already leverage the data to develop and offer additional services. As a large global business, consider working with a payment solution that has the scale, data, and relationships to optimise conversion and costs — even beyond card processing.



While the payments landscape continues to evolve, one thing is certain — card processing is still king. The top priority for large global businesses today remains the same: Provide a seamless checkout experience that improves conversion at the lowest cost.

— Jon Krauss



Jon Krauss
Head of Braintree Product Operations and Strategy, PayPal Braintree



Jay Mok
Director of Product Management, PayPal

¹ IDC InfoBrief, sponsored by PayPal, 'Do Retailers Really Know What Digital Shoppers Want?' Doc. # US49041822, May 2022. The survey conducted by IDC among 505 large enterprises and 10,054 consumers in five markets (United States, United Kingdom, Australia, Germany, and France).

Treasury services on a large scale.

By Avi Reddy

An authorised transaction represents just one step in the journey. Other important lifecycle events still need to take place. Businesses require rapid access to their payment data so they can manage their customers' orders, payments, and subscriptions. And they want money in their accounts as quickly as possible so they can settle their bills.

In the post-processing world, payment service providers (PSPs) should be supporting businesses to achieve these goals through:

- **Funding.** PSPs should be orchestrating the most-efficient ways to transfer money to a business's bank account and facilitate payouts to multiple sellers or suppliers. In many cases, this entails establishing local relationships to expedite the process and avoid cross-border fees.
- **Pricing.** Massive payment volume leads large global businesses to shoulder significant transactional expenses. A PSP should be influential in working with networks, knowledgeable about fee structures, and transparent with its pricing to help businesses minimise their fees.
- **Dispute management.** A large business's fraud and chargeback volume increases as its e-commerce volume grows. From a data and coverage perspective, PSPs are well-positioned to help businesses protect their revenue by arbitrating and presenting evidence to networks and bank issuers. And on the technical side, PSPs can help standardise the way a business manages disputes around the world and across payment methods.



Post-processing trends are dependent on the broader macroeconomic environment, such as higher interest rates. However, the demand for quicker access to funds and payments data is constant and will continue to shape the services that PSPs provide for e-commerce businesses. PSPs can distinguish themselves with comprehensive offerings that provide payments processing, treasury services, data insights, and possibly lending services as well.



Avi Reddy
Director, Post Processing,
PayPal



Businesses are demanding faster access to funds and payments data. It's symptomatic of the current macroeconomic environment, but we expect this trend to continue.

– Avi Reddy

Integrating with PayPal Braintree.

By Mudita Tiwari



Large businesses, developers, and customers want choice and control, and that's exactly what payment solutions should deliver.

– Mudita Tiwari



Developers expect a payments integration to be a seamless experience for themselves and their customers. Large global businesses tell PayPal Braintree that their developers seek payment choices, ease of integration, security, and reliability and stability in their payment integration experience, which is precisely what PayPal Braintree can deliver.

Businesses choose PayPal Braintree because it allows them to retain control of their operations. PayPal Braintree supports a variety of payment methods around the world, empowering businesses to pick and choose what they want to offer their customers. PayPal Braintree also delivers choice in implementation, whether it's a server SDK or application programming interface (API) implementation tailored for mobile or web experiences. Developers can decide what's best. Comprehensive documentation and a robust sandbox environment for testing payment integration are key to helping developers handle integrations more efficiently.

In addition to offering these choices, PayPal Braintree delivers value-added service solutions by providing checks and balances and controls, such as additional layers of authentication during the checkout process.

As business needs have evolved, PayPal Braintree has responded. We've evolved our expertise, tools, and proven solutions to give large businesses the front-end and back-end payments experiences they want — all while focused on helping businesses to maximise their profitable growth. PayPal Braintree equips developers with a powerful payment solution and peace of mind while handing sensitive information. Get a customised payments infrastructure from a versatile product set, built by industry trailblazers.



Mudita Tiwari
Senior Product Director,
Developer Experiences, PayPal



Drive Conversion

- ▶ The power of a unified solution.
- ▶ Preventing lost sales with account updater tools.
- ▶ Improving authorisation rate performance with network tokens.
- ▶ To retry or not to retry.
- ▶ Developing an authentication system.

The power of a unified solution.

By Sandipan Chatterjee and Purnima Chaudhry

Businesses must adapt to changing economic environments, evolving customer preferences, and new ways to shop. The transaction authorisation rate can serve as a barometer of their success. They aim to provide exceptional customer experiences that facilitate more-successful transactions without incurring incremental fraud and chargebacks.

The authorisation rate represents the percentage of transactions that successfully complete a checkout process. High authorisation rates indicate that more transactions are approved. This drives incremental revenue and encourages repeat customers.

For a large business, a change of a few basis points in its authorisation rate could translate into up to millions in additional revenue. Consider what that additional revenue could fund: a new project, further product development, or global expansion.

Businesses can benefit from a powerful payment solution equipped with a suite of intelligent authorisation rate optimisation tools that include:

- **Account updater.** Keep a customer’s stored card credentials updated without any effort from the customer or business — to easily complete transactions and reduce declines due to outdated or lost cards.
- **Network tokens.** Keep customer payment information secure with credentials that are substitutes for the actual card numbers, which receive updates to help prevent declines and can benefit from higher authorisation rates.
- **Intelligent retries.** Employ machine learning (ML) to create an optimal retry strategy. ML should balance transaction costs and authorisation rates to help recover transactions.
- **3D Secure (3DS).** Dynamically invoke 3DS by use case or region to help improve authorisation rates and detect and deter fraudsters.
- **Fraud management.** Effective fraud management helps to keep out malicious users, while enabling your legitimate customers to complete their payments successfully.

When working together, these tools can help a business to combat declined transactions, fraud, and chargebacks — all while delivering a streamlined experience for customers and helping to drive authorisation rates.

Auth Rate Optimisation Tools

<p>1 Account updater Securely store customer card credentials, keep them up to date, and minimise declines due to outdated, lost, or stolen cards.</p>	<p>2 Network tokens Replace traditional PANs with secure equivalents that receive real-time updates and help to minimise lifecycle management declines.</p>	<p>3 Intelligent retries Employ machine learning to intelligently retry declines by examining various types of customer and payment data.</p>	<p>4 3D Secure (3DS) Dynamically invoke 3DS to get an extra authentication layer, help improve authorisation rates, and meet SCA requirements.</p>	<p>5 Fraud management Manage risk with powerful machine-learning tools that let you choose your risk tolerance and help to reduce false declines.</p>
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Delivering an exceptional front-end customer experience and optimising back-end payments performance can each drive revenue — but examining both is critical to maximising revenue.

– Purnima Chaudhry



Sandipan Chatterjee
Senior Director of Product Management and Head of Payments Optimisation, Orchestration, and Risk; PayPal



Purnima Chaudhry
Director of Product Management, PayPal

Preventing lost sales with account updater tools.

By Ellen Reeder



Account updater tools keep customer credit and debit card information, or primary account numbers (PANs), fresh in their vaults. When there are changes in information such as numbers, expiration dates, and account status, the data in your vault is updated, helping to prevent unnecessary declines and avoiding the need for additional customer interaction.

Using account updater tools helps businesses:

- **Improve conversion.** A payment provider that offers account updater tools uses its relationships with card networks to check for PAN updates in the back end — even before a customer starts a transaction. Updating card details helps to reduce friction at checkout, which can help to prevent cart abandonment. And businesses benefit from fewer declined transactions stemming from outdated credentials, which can also help to drive authorisation rates.
- **Save time.** Account updater tools automatically update a customer's payment information should it change or become out of date — saving the business from the time-consuming and cumbersome task of asking the customer to input the correct details at checkout.
- **Store data securely.** Card information is securely stored in a vault, protecting your customers' data while requesting and receiving updates to your vault.

If a business accepts credit and debit card transactions, it should take advantage of account updater tools to help identify outdated card information and prevent lost sales.



Ellen Reeder
Product Manager, PayPal



Account updater tools stay deep in the background, but their impact can't be overstated on the front-end customer checkout experience. They ensure saved credit and debit card information is continually updated on the business's side, so returning customers never have to worry about re-entering their card credentials. More-seamless payments. One less barrier to buying.

– Ellen Reeder

Improving authorisation rate performance with network tokens.

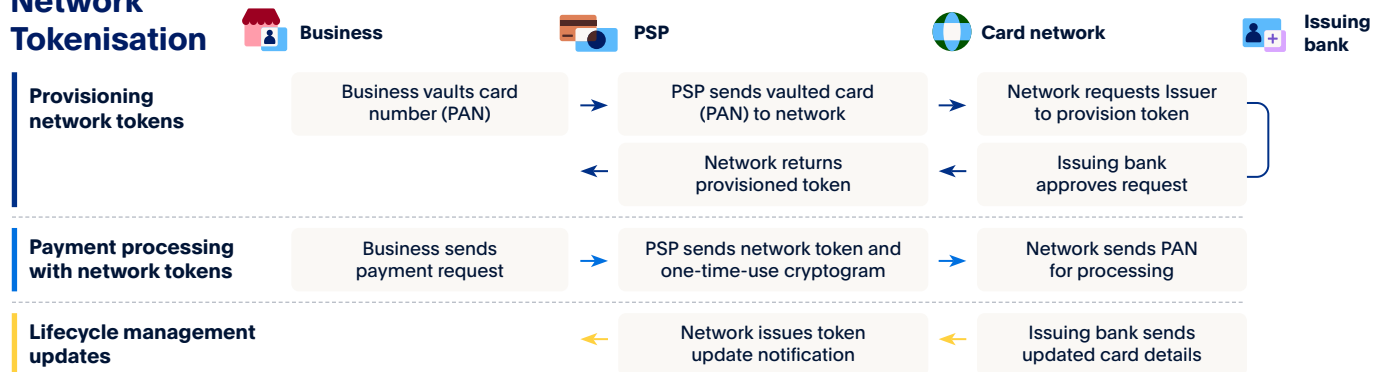
By Jim Judd and Annika Begley

Businesses aim to provide secure payment experiences that drive authorisation rates, reduce friction for customers, and capture incremental sales. Network tokenisation is one way that organisations can achieve this.

Network tokenisation replaces a primary account number (PAN) with a business-specific token that can only be used to transact at that particular business. One PAN can be used to create many business-specific tokens. Card networks such as Visa and Mastercard issue these network tokens to payment processors, who maintain them. If a credit card is lost, stolen, or expires, the token can be updated in real time and still be used.

“
 If we can move away from less-secure primary account numbers, we can imagine a payments world where we minimise fraud, boost authorisation rates, and maximise revenue. It’s possible with network tokenisation.
 – Jim Judd

Network Tokenisation



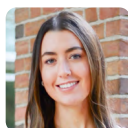
Network tokens can help:

- **Provide a secure way to share data.** Network tokens are stored in a centralised vault and can only be decrypted by the card network that generated the token. They are unique to every customer card and are not shared between any two businesses, helping to reduce the effectiveness of stolen cards.
- **Drive authorisation rates performance.** Since network tokens can be continually updated, even when a card’s details change, transactions are less likely to be declined — which helps to increase authorisation rates. Network tokens also provide additional information to issuers and are authenticated using details specific to each business, which helps to increase an issuer’s confidence and the probability that a transaction will be approved. Issuers may also be more inclined to approve transactions involving network tokens because they consider them to be more secure.
- **Reduce interchange fees.** Businesses that use network tokens may experience reduced interchange fees, as some card networks may impose higher rates for non-token transactions.

While issuer adoption is the primary driver of network tokenisation, we believe that this will become the standard for processing card-on-file transactions in the future — bringing to reality a future of token-first payments.



Jim Judd
 Senior Product Manager, PayPal



Annika Begley
 Technical Product Manager, PayPal

To retry or not to retry.

By Sana Haque and Devang Gaur

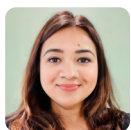
The concept of retrying a declined transaction isn't new. Businesses understand that a declined transaction can result in an abandoned shopping cart. Retries can potentially salvage transactions, helping businesses complete more orders and increase revenue. However, each transaction retry can carry an additional fee. Excessively retrying transactions can quickly lead to high operating costs.

Businesses should seek out intelligent retry strategies that support positive customer experiences without raising costs. An optimised retry process can lead to fewer interruptions for customers, which helps to create a smoother checkout experience. This is crucial for customer retention and loyalty, while reducing fees associated with unoptimised payment retries.



Machine learning is driving a new era of customer insights that can help optimise payment processing — particularly when it comes to enhancing how and when to retry declined transactions. Intelligent payment retries can help businesses to drive revenue, boost authorisation rate performance, and manage costs.

– Sana Haque



Sana Haque
Senior Technical Product Manager,
PayPal



Devang Gaur
Product Manager,
PayPal



Artificial intelligence and machine learning are transforming how and when transactions should be retried. Traditionally, a retry strategy followed predetermined parameters and a specific path. Now, with machine learning, a transaction can be retried more thoughtfully. By examining patterns in previously declined transactions, intelligent decisions can be made regarding whether to retry a transaction based on its likelihood of acceptance. As these technologies access more data over time, they get more adept at determining when a retry would be valuable. Using these intelligent retry solutions can help to reduce the overall number of retries, minimise costs, and increase transaction success rates.

The future of how and when to retry is becoming increasingly complex as networks seek to curb excessive retries by imposing fines on retry attempts. It's imperative that businesses work with payment solutions that have relationships with card networks so they can better understand how to optimise their retry strategies.

Intelligent payment retries are integral to the overall payments strategy for large global businesses. Frictionless checkout experiences, more transactions, and high authorisation rates await.

Developing an authentication system.

By Vik Westermann

New standards and tools are continuously emerging, and the authentication process has accordingly evolved from one-time password requests to much broader identity and authentication solutions. Increasingly, the strategy involves capturing a large number of data elements to validate identities, and using machine learning to select the necessary type of authentication. This can help businesses:

- Increase authorisation and conversion rates.** A bank is more likely to approve a transaction with a strong customer authentication credential attached to it, leading to higher authorisation rates and increased conversions.
- Maintain regulatory and network compliance.** Regulatory requirements are always changing, and payment service providers (PSPs) can leverage local acquiring licences and third-party partnerships to help businesses comply with country-specific authentication requirements. PSPs can also leverage the vast volume of transactions they process through a network to develop specialised and up-to-date knowledge of network requirements.
- Combat fraud.** More-sophisticated authentication solutions have never been more necessary as the use of generative AI skyrockets. PSPs should be employing industry-leading tools to confidently decline transactions from malicious actors and approve transactions from trustworthy customers, decreasing the number of costly and time-consuming chargebacks.
- Customise an authentication solution.** As the expectation for authentication increases, so does the ability to develop authentication solutions that align with a business's strategy.



Customers are progressively valuing authentication features as a vital component in the broader payments story. The general expectation for authentication is on the rise, leading to a growing interest in tailored authentication for specific scenarios. It seems we're moving toward the idea of an advanced 'authentication system'.

– Vik Westermann



3D Secure 2 is a prominent authentication tool, but it's just one amongst many. PSPs can help a business to develop intelligence regarding which authentication tool to use for different transaction types and circumstances. PSPs can also employ machine learning to determine which customers are trustworthy and which customers need to be run through a strong authentication flow. This can all help a business to optimise its authentication flow by creating a powerful "authentication system".



Vik Westermann
Senior Product Manager, PayPal



Expand Your Reach

- ▶ Expanding checkout and accepting more ways to pay.
- ▶ Unlocking the power of orchestration.
- ▶ Optimising multiple PSPs through orchestration.
- ▶ Orchestrating a path to borderless commerce.

Expanding checkout and accepting more ways to pay.

By Shirish Kandekar and Aurora Qiu

Many businesses are seeking to expand their customer reach into new global markets, but each market has its own payment preferences. It's up to businesses to tailor their checkout experiences to each specific market.

This is what alternative payment methods (APMs) were made for: giving people the payment methods they want, while empowering businesses to expand their reach and drive conversions around the world. APMs serve as alternatives to traditional credit and debit cards. They include local payment methods (LPMs), which allow customers to pay using banks, digital wallets, or other means that operate only in specific regions of the world.

Selecting the right payment methods for each new market can be overwhelming for any organisation. Businesses need a trusted payment provider that can advise them on the right mix of LPMs to offer in each region — whether it's digital wallets, bank redirects, vouchers, or direct banking transfers. Furthermore, they need a payment solution that can handle the seamless integration of these methods.

A payment solution can also help a business to navigate the adoption of payment methods based on bank transfers (account-to-account payment methods), which are gaining ground in countries outside the United States. These APMs have lower processing costs than credit cards, which can help businesses to grow while keeping costs low. The rise of open banking will encourage further adoption of bank-transfer-based payment methods.

Businesses must adopt comprehensive APM strategies that include popular LPMs and digital wallets, and they must be nimble enough to alter their APM mix as they grow. To deliver the optimal checkout experience, payment method quality — or relevance — may take precedence over quantity.



A business can grow its bottom line when it offers more ways to pay. And with customer preferences continuously evolving, it's up to businesses to stay on top of their exact mix of payment methods in every single market. Push the hard work to a payment provider with industry relationships around the globe — and the technical capabilities to add new payment methods without additional integration work.

– Shirish Kandekar



Shirish Kandekar
Lead Product Manager, PayPal



Aurora Qiu
Product Manager, PayPal

Unlocking the power of orchestration.

By Carol Schimmelpfeng

An effective payments orchestrator can be the difference between stagnation and global growth.

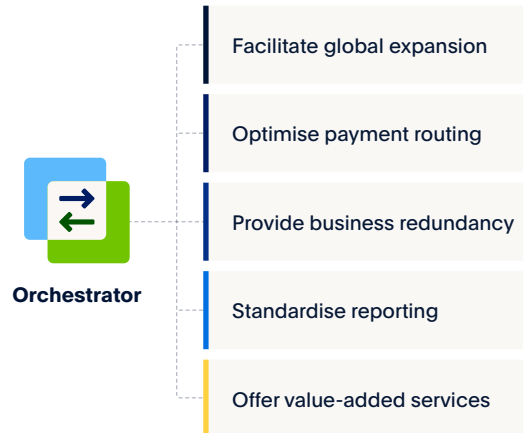
Beyond integrating and managing payment providers on a business's behalf, a payments orchestrator should facilitate business continuity and overall optimisation efforts, while handling the complexities of multiple tech stacks. This frees up the business to concentrate on its strategic goals, often centred around ambitious global expansion.

Through a single integration, a payments orchestrator can open the business to as many microservices and payment service providers (PSPs) as they want or need — now and in the future. And this is done without spending engineering or product management resources to integrate each service provider on its own.

A payments orchestrator helps a business to execute its payments strategy, and can help:

- **Facilitate global expansion.** Since an orchestrator can connect with PSPs in specific countries, a business may be able to offer relevant, regional payment methods. By offering preferred payment methods, businesses can deliver personalised shopping experiences that help to streamline checkout and increase conversions. Moreover, a business doesn't need to spend its own time and resources building these connections.
- **Optimise payment routing.** Most large businesses work with multiple PSPs. When one PSP is performing better than another, an orchestrator can direct traffic to the better performer, as well as retry a failed transaction to increase authorisation rates.
- **Provide business redundancy.** Working with multiple PSPs also ensures business continuity should one PSP fail. An orchestrator can route to another PSP and retry a transaction without impacting the front-end payment experience for a cardholder.
- **Standardise reporting.** Managing multiple PSPs

Benefits of Orchestration



can lead to data reconciliation complexities. An orchestrator can help standardise and consolidate reporting and reconcile differences across multiple PSPs.

- **Offer value-added services.** Orchestration allows businesses to offer additional, third-party e-commerce services without complicating the checkout experience. For instance, a travel company could offer cardholders the ability to purchase trip insurance from another business while booking a holiday package, all within one checkout experience.

Businesses with ambitions to expand to new markets, while optimising their operations and costs, will benefit from a payment service provider that can manage payments orchestration on their behalf. Orchestrators can help to deliver a smooth payment experience, while businesses can focus on scale and growth.



The ideal payments orchestrator will help manage the many microservices that make up a business's payments ecosystem, allowing businesses to focus on scalability and growth.

– Carol Schimmelpfeng



Carol Schimmelpfeng
Product Director, Vault, Extensibility, and Orchestration; PayPal

Optimising multiple PSPs through orchestration.

By Irina Nichol

Large global businesses maintain complex payments systems. Multiple payment service providers (PSPs), multiple fraud management tools, and even multiple vaults can all comprise one business's payments setup. As businesses expand to grow their businesses, they often add more tech systems and third-party vendors, creating increasingly complex operating models.

It is these large global businesses that stand to benefit from payments orchestration. Orchestration helps them to automate the management of their increasingly complex, end-to-end payments network. This can result in cost savings, as businesses could better maximise their resources, focus internal teams to manage these networks, and help realise additional benefits from value-added services from their PSPs.

For large businesses that work with multiple PSPs for payment processing redundancy, a payment solution equipped with orchestration capabilities can help to optimise these service providers' performances — all while helping to ease the management burden for businesses. Orchestration can also help mitigate the risk of a payments system outage. Should one PSP fail, payment processing can easily be routed to another PSP.

Multi-PSP payments optimisation can also translate into cost savings when it comes to payment processing. PSPs can charge different fees for different transaction types. An orchestrator can help route transactions to specific PSPs to help minimise overall costs. A business simply needs to share its specific payment processing goals with an orchestrator, and the orchestrator can build the logic for optimised transaction routing.



Challenges with multi-platform reality

- ▶ Multiple, complex integrations
- ▶ Management of multiple vaults
- ▶ Limited vault sharing
- ▶ Duplicate costs for vault freshness tools
- ▶ Inability to scale quickly



Benefits of centralised vaulting and orchestration

- ▶ Reduce tech and integration costs
- ▶ Unlock routing options with a variety of PSPs
- ▶ Expand with access to local markets
- ▶ Enable broader customer reach and engagement
- ▶ Provide redundancy options

By automating back-end processes, orchestration can help large businesses continue to grow without increasing the complexity of their payments systems. Businesses can diversify their payments platforms, while managing redundancy and risk — all while remaining competitive in terms of costs and performance.



Intelligent multi-PSP strategies are possible with orchestration. Large global businesses with complex payment setups can rely on orchestration to optimise payment processing and get the most out of their back-end systems. They can get the support they need to thrive.

– Irina Nichol



Irina Nichol
Head of Product,
Braintree Processing,
PayPal

Orchestrating a path to borderless commerce.

By Mindy Chon and Sam Sherman

Businesses aspire to meet customers around the globe. Orchestration can play a pivotal role in empowering them to enter new markets swiftly and more efficiently — while lowering costs and reducing technical debt.

Rather than connecting with a local payments processor in each new market, a business can simply connect to one provider that can orchestrate connections to processors worldwide. Businesses avoid the lengthy, costly development work of building out a local connection: An orchestrator can connect with the processor on the business's behalf, condensing a process that could take six months to six weeks.

Businesses may also eliminate substantial cross-border fees for each transaction by processing locally via an orchestrator. Let's say a Brazilian customer wants to use their preferred payment method — a regional credit card — but the business can't process the transaction locally. This transaction would likely require processing by a US bank connected to the business's payment processor. That bank may decline the overseas transaction, or accept it but impose a cross-border fee. With a payment orchestrator that has local connections, this transaction could have been processed locally.

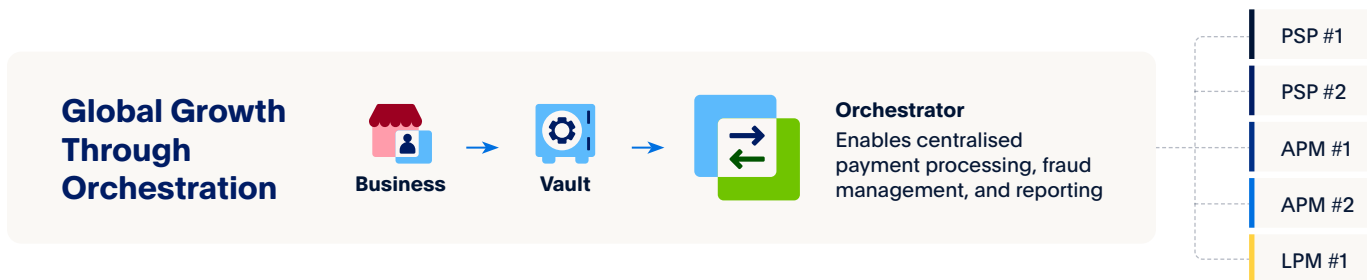


Orchestration can provide an opportunity to deliver a global commerce experience. Instead of connecting with many local payments processors in every new market, a business can leverage its one connection to its orchestrator to get started. Instead of connecting to many, you're connecting to one. A six-month integration process can be done in six weeks.

– Mindy Chon

Establishing local relationships can also help a business to increase its authorisation rates. Since regional banks are more familiar with local credit cards and payment methods, they are more inclined to approve the transaction.

For businesses seeking to reach more global customers, it's imperative to employ an orchestrator that can connect with as many local processors as possible. Orchestrators can quickly get businesses up and running in new markets and help to lower costs. When it concerns payment processing, orchestration is the key to truly borderless commerce.



Mindy Chon
Lead Product Manager, PayPal



Sam Sherman
Head of Payments Orchestration Solutions, PayPal



Help Mitigate Risk

- ▶ Leveraging data to manage fraud.
- ▶ Using intelligent tools to minimise costly chargeback volume.

Leveraging data to manage fraud.

By Sandipan Chatterjee

Every business’s goal is to create ideal shopping experiences that capture the most sales. While businesses focus on easing the shopping experience for their target customers, they may also be easing the shopping experience for potential fraudsters. Simplifying checkout for good customers also makes it easier for bad actors to defraud.

Global fraud management does not aim to eliminate fraud entirely — an impossible feat. Rather, global fraud management concentrates on flagging as many fraudulent transactions as possible, while impacting the fewest number of legitimate customers. Finding the right balance — and using machine-learning technology — is key.

The total cost of e-commerce fraud to businesses is expected to exceed USD\$48 billion globally in 2023, from just over USD\$41 billion in 2022.²

Data on purchase history, device used, card type, and location play a role too. This information can help a payment service provider (PSP) determine whether a transaction using a credit card that was linked to a fraudulent transaction from a different business will likely be fraudulent too.

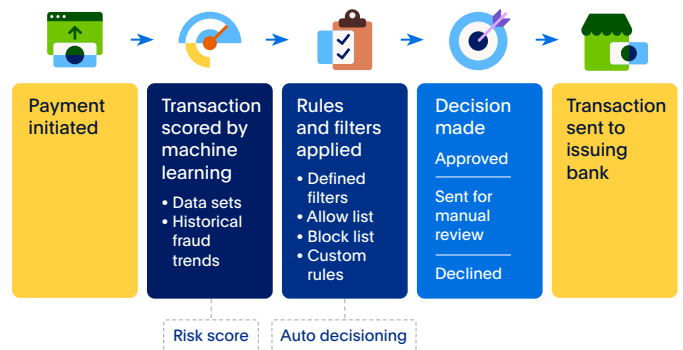
By using machine learning to profile continually changing purchase patterns, PSPs can identify potentially risky customers and transactions and present this information to businesses. They examine purchase data and turn them into actionable insights for the business — a true



Intelligent businesses will seek fraud management capabilities that can help them to recognise fraudsters and their purchase patterns without sacrificing the good customers.

– Sandipan Chatterjee

Intelligent Fraud Management with Machine Learning



value-add and confidence-boosting service. And because PSPs analyse purchase patterns — not people — they can equip businesses with the right information to help curb fraud while maintaining customer privacy.

A business that focuses on eliminating all fraud itself is not sustainable in the long term. Without intelligent fraud management tools, customers would theoretically have to complete time-consuming security checks. If this is the case, you risk losing your customers to a competitor with a simpler shopping experience. It’s possible to deliver a seamless experience that drives sales without fraudsters eating away at revenue. Intelligent fraud management tools are powerful ways to detect and deter those malicious actors and keep businesses in control of their systems.



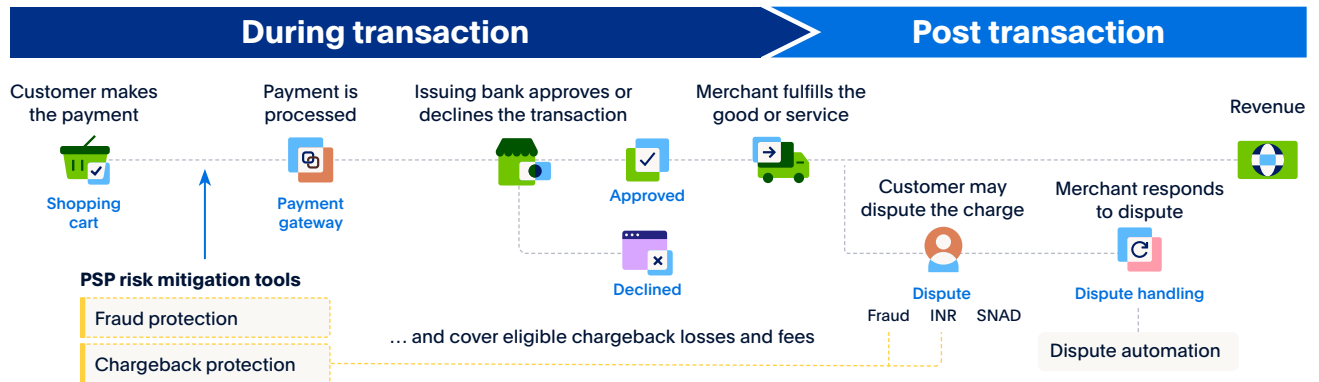
Sandipan Chatterjee

Senior Director of Product Management and Head of Payments Optimisation, Orchestration, and Risk; PayPal

² Juniper Research, ‘eCommerce Losses to Online Payment Fraud to Exceed \$48 Billion Globally in 2023’, Oct 2022.

Using intelligent tools to minimise costly chargeback volume.

By Arpit Kumar



When a customer can't resolve a dispute directly with a business, they can file a post-transaction payment dispute — or chargeback — where they request a transaction reversal from their debit or credit issuer. It could be that a product never arrived or there was an unauthorised transaction. Whatever the reason, businesses work to avoid chargebacks as they're expensive and quickly eat away at profit margins.

After a customer initiates a chargeback event, the disputed amount plus a chargeback fee is typically deducted from the business's account. The business is then required to provide documentation to 'win back' the disputed amount.

The process of contesting a chargeback is time-consuming and cumbersome. Completing contestation documents can take several hours, and each issuer has its own requirements and guidelines. It is often unclear how to win a chargeback, and there are no guarantees of success.

Payment service providers (PSPs) can help businesses to minimise chargebacks by helping them to decide whether a transaction should be approved or denied in the first place. With PSPs, businesses can get:

- **Fraud protection.** PSPs can use risk mitigation tools to analyse each transaction in real time, leveraging a vast amount of transaction data and machine learning. This can help to reduce the risk of fraudulent transactions and increase the



Chargebacks are extremely frustrating for business. They reduce profit and involve a lot of uncertainty — as well as being time-consuming. Ideally, businesses put measures in place to minimize fraud and rely on experts who can help navigate a complicated chargeback environment.

– Arpit Kumar

authorisation rate of good customers. Fraud filters can be set to match a business's unique risk tolerance and business needs.

- **Chargeback protection.** Making intelligent transaction-approval decisions to prevent fraud is always the first step. However, when chargebacks do occur, PSPs can help to reduce operational costs by shouldering the burden and liability of certain types of chargebacks.

In addition to being costly and frustrating, chargebacks are also potentially damaging to a business's brand, so PSPs should be using a wide range of intelligent tools to help businesses mitigate the ever-evolving risks associated with fraud and chargebacks.



Arpit Kumar
Product Management Manager, PayPal



Simplify Payouts

- ▶ Facilitating fast, reliable payouts to global sellers.

Facilitating fast, reliable payouts to global sellers.

By Michael Ting

More global businesses are seeking to efficiently disburse payments to large communities of recipients, thanks in part to the enduring popularity of the gig economy and marketplace companies that connect buyers and sellers.

Businesses want to deliver seamless shopping experiences to their customers and positive payment payout experiences to their sellers. Payment service providers (PSPs) have an opportunity to help large businesses deliver both experiences.

Working with a provider on payouts can help businesses to pay global sellers quickly through local banks — and deposit those funds directly into sellers' own bank accounts. Since these payments are processed locally, businesses don't have to worry about substantial cross-border fees. They can pay their sellers as frequently as needed — even daily. This helps to increase the efficiency of their payment processing.

Beyond facilitating fast and reliable payouts to sellers en masse across many markets, an integrated payouts provider can help a business:

- **Avoid the burden of a complicated payments architecture.** Businesses don't need to build and maintain payments infrastructures that would require connections to multiple PSPs to reach their global users. A solution with payouts platform technologies can manage the administrative workflow and cash management.
- **Sidestep the complexity and costs of global fraud management and data compliance.** Entering each new market creates more data to use and store, which means new risk factors and compliance requirements. A payments provider can shoulder this work so businesses don't have to focus on them.



- **Offer choices to sellers, which can maximise retention.** Using a robust payouts platform that lets businesses offer choices to its sellers can make the difference between a seller choosing to work with you or a competitor. Businesses can let their sellers choose how and where they want to receive their funds, in what currency, and even how quickly.

Businesses are rapidly growing internationally, frequently faster than they predict. This speed pressures them to have reliable and more globally distributed payout capabilities that can move money fast. Rely on a payment solution with global payouts capabilities to disburse local payments.



Payouts are central to the value proposition of many large global businesses, where paying sellers is at the heart of what they do. Finding a solution with the relationships and capabilities to disburse payments locally is key to ensuring secure, reliable payouts. Businesses can operate efficiently, keep sellers happy, and scale the business without scaling the challenges.

– Michael Ting



Michael Ting
Head of Product, Payouts, PayPal



PayPal Braintree is an end-to-end payment platform built for growth.

We provide the global commerce tools needed to deliver seamless checkout experiences on a large scale. Our proven solutions are informed by PayPal's global network and can be adapted to your business infrastructure, giving you confidence to thrive in a continually changing world.

Payment processing made simple.

From optimising your processing tools to leveraging PayPal's industry relationships around the globe, PayPal Braintree can help you to boost your business with a robust, connected processing platform.

A tech stack that puts you in control.

Delivering an exceptional customer experience on the front end requires a powerful back end that's tailored to your needs. PayPal Braintree can help to optimise your customer experience quickly and on a large scale with intelligent and agile optimisation.

Intelligent authentication to help maximise approvals and minimise declines.

We can help you to boost your authorisation rate performance with tools and features that intelligently keep cards up to date and leverage machine learning to intelligently retry declined transactions to help increase transaction recovery.

Effective fraud management.

We help you to protect your business with an integrated and customisable suite of fraud tools, including risk services such as Fraud Protection.

Discover how PayPal Braintree can help you to evolve your payments for profitable growth.

Our sales and support teams are here to answer your questions.

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