Optimizing Payments: *How Orchestration Enhances Efficiency and Growth*

In an era of expanding e-commerce and increasing payment complexity, strategic payment orchestration is the key to seamless operations and sustained business growth.

24.7%

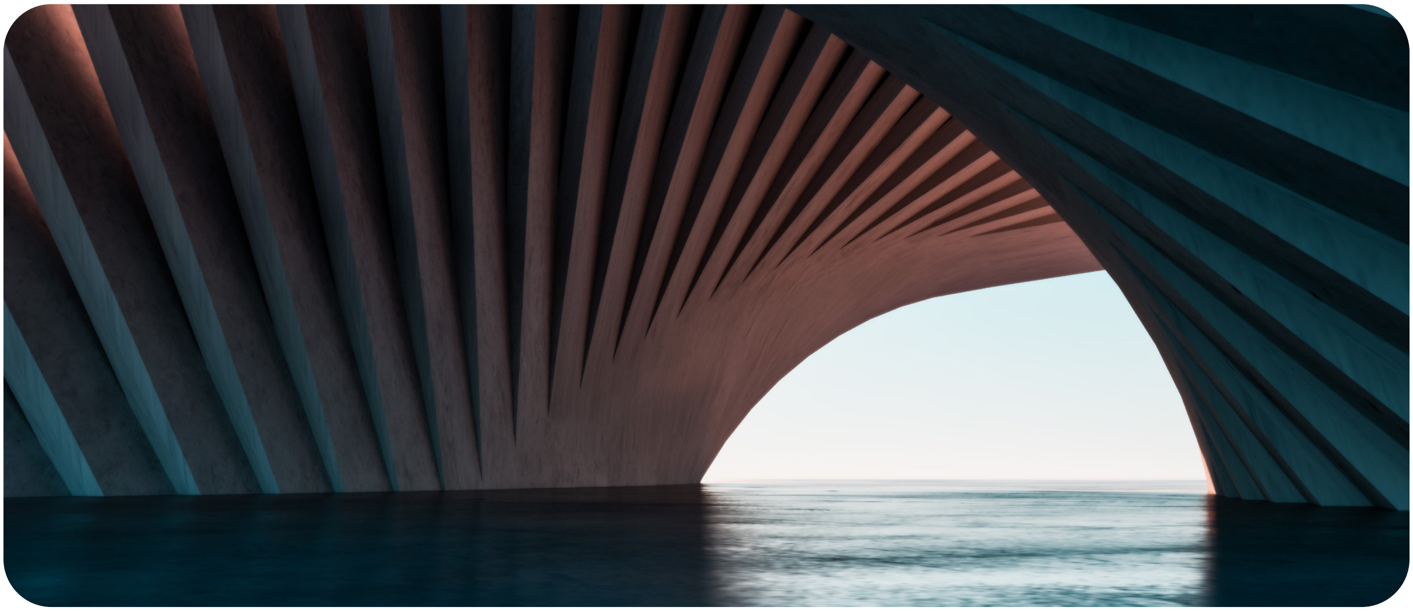
Compound annual growth rate of revenue generated by the global payment orchestration platform market

Payment orchestration – a software layer between a merchant's sales process and its payment service providers (PSPs) that facilitates optimal transaction routing – is a hot topic in e-commerce. The global payment orchestration platform market generated revenue of $1.39 billion in 2023 and is expected to reach $6.52 billion by 2030 – a compound annual growth rate of 24.7%.[1]

Growth is being driven by a number of factors. Most obviously, e-commerce continues to expand, with nearly all merchants now incorporating online as part of a broader multi-channel strategy. As payments play a crucial role in user experience, they have become a key focus for businesses.

At the same time, the payments landscape is becoming increasingly complicated. The rise of digital wallets, buy now, pay later options, and open banking payments presents merchants with a vast and potentially overwhelming array of choices.

[1] https://www.grandviewresearch.com/horizon/outlook/payment-orchestration-platform-market/



E-commerce is also becoming more global, adding another layer of complexity. Each jurisdiction has its own preferred payment methods, making it challenging for retailers to align with local consumer preferences while maintaining operational efficiency.

With competition intensifying and profit margins under pressure, businesses must ensure that every transaction is successfully completed. Payment failures – whether due to PSP downtime, authorization issues, or regional restrictions – can result in lost revenue. Payment orchestration can help mitigate these risks by routing transactions through the most reliable providers and making the ecosystem more connected.

In an uncertain business and financial environment, cost optimization remains a priority. Companies seek to lower transaction costs by choosing PSPs with the most favorable fee structures based on transaction size, currency, and region.

Regulatory requirements are also becoming more stringent in certain markets, compelling merchants to implement strong customer authentication and other compliance measures. Orchestration platforms can help e-commerce businesses navigate these complex regulatory landscapes more effectively.

Orchestration Benefits

Payment orchestration offers a range of benefits for different teams within e-commerce companies.

- For **treasury teams**, whose priority is ensuring secure, stable, and cost-efficient operations, payment orchestration strengthens resilience. In simple terms, it provides contingency: if one payment provider experiences downtime, transactions automatically shift to the next best available option, minimizing disruptions.
- For **payment teams**, where the focus is on revenue, profit margins, and growth, orchestration can improve authorization rates, helping to avoid abandoned carts and lost sales. Similarly, having a backup PSP means that downtime does not shut down sales. In addition, orchestration can provide insights into the performance of PSPs and consumer payment preferences, potentially informing changes to business strategy.
- Cost optimization is critical for both payment and treasury teams. Payment orchestration routes transactions to the most cost-effective providers, balancing fees and operational efficiency. By streamlining payment processes, businesses can protect revenue, optimize global operating models, and maintain a seamless customer experience.

Should You Build or Buy A Payment Orchestration Solution?

Historically, larger e-commerce companies with dedicated technology teams have built their own orchestration capabilities, while the cost and resource requirements of an in-house build locked small and medium-sized enterprises out of orchestration. Now, the emergence of third-party providers is enabling smaller companies to consider orchestration. For all corporates, the decision to build or buy involves weighing a range of factors, some are summarized below.

Factor	In-House	Third-Party
Speed of Development/ Deployment	Longer time to develop and deploy (months/years for return on investment).	Faster implementation, minimal downtime, accelerates time to market.
Build/Operating Cost	High initial development. Maintenance costs vary but are typically low.	Various pricing models exist but typically lower initial costs. Flexible pricing (e.g. pay-per-transaction) can reduce total ownership costs.
Reliance on External Parties	No reliance on external parties for core functionality.	Dependent on third-party provider's stability, performance, and support.
Customization and Control	Full control, bespoke solution, exclusive IP ownership. New functionality requires specific investment/decision.	Less direct control may have customization limitations. However, functionality updates may be automatic.
Scalability	Scalable with investment but requires additional resources for growth.	Cloud-based, scalable, handles high transaction volumes easily.
Expertise and Maintenance	Requires in-house expertise, ongoing maintenance by internal team.	Access to specialists, ongoing maintenance by provider.
Impact of Company Size	More feasible for large enterprises with resources.	More suitable for SMEs due to lower costs and faster deployment.

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Payment Routing Criteria

The key function of payment orchestration is to determine the optimal processing route for each transaction based on specific scenarios, payment methods, or channels.

When a customer initiates a payment, the orchestration platform selects the best payment gateway. Routing decisions can be based on various factors, including:

- **Reliability:** Failover and contingency is the most important reason to be able to switch to another PSP. If a PSP faces technical issues and approval rates suddenly drop, it is essential to be able to re-route payments.
- **Cost:** PSP costs often remain stable over time. This means if an e-commerce company wants to route specific transaction types (e.g., Mastercard) to a particular PSP, that decision seldom needs to be revisited.

  However, cost structures do vary between providers: some charge a percentage fee, while others use flat fees, so merchants often choose to preprogram their preferences. Flat fees, for example, might be more cost-effective for high-value transactions.
- **Performance:** If a provider's failure rate increases, payments can be automatically rerouted to another PSP until performance improves. Minimizing payment failures is critical for companies with large subscriber bases (such as streaming services or telecoms). Rejections can alert customers to a transaction that they might otherwise have been unaware of, leading to frustration and higher churn rates.
- **Payment Options:** Orchestration helps facilitate access to region- or country-specific payment methods, such as local digital wallets or card schemes. Offering locally-preferred payment options is important to attract new business: if they do not offer such options, companies risk losing sales to competitors.

Example Payment Routing Decision Tree

1. Transaction Type

Is the payment a credit card?

- **Yes** → Proceed to step 2 (Credit Card Routing)
- **No** → Process to APM routing

2. Credit Card Routing

Determine Optimal Path by Card Issuer

- **Route A**
- **Route B**

3. Cost-Based Rules

Based on the transaction ticket size:

- **High-value** → Route C (fixed price processing fee)
- **Low-value**

4. Performance-Based Rerouting

Have the last 5 transactions via the selected PSP experienced delays/errors?

- **Yes** → Reroute to alternative PSP based on performance ranking
- **No** → Continue with selected PSP

5. Failure Contingency

Does the authorization fail?

- **Yes** → Automatically reroute to backup PSP for this payment type
- **No** → Transaction proceeds

Artificial Intelligence could be used to analyze multiple parameters (cost, approval rates, customer location) and dynamically route payments for optimal results.

Spring by Citi® *increases transparency across the payment lifecycle and automates reconciliation* by confirming when funds settle at the itemized transaction level.

Overcoming Payment Orchestration Challenges

While working with multiple PSPs offers advantages, it also introduces challenges for e-commerce businesses. Companies must handle additional contracts and providers, and incur fees (for instance, monthly licensing or per-transaction costs) when using a third-party orchestration provider.

In addition, each PSP requires technical integration, which can be time-consuming. Providers may report transaction data in different formats, potentially complicating reconciliation and reporting. Merchants should seek to minimize the number of providers they work with, while ensuring they have a sufficient number to achieve their orchestration goals.

Despite these challenges, the benefits of orchestration – cost optimization, enhanced resilience, and higher sales – can far outweigh the drawbacks. Strategic provider selection and comprehensive integration support can further ease the operational burden.

Choosing the Right PSP to Orchestrate to

Payment orchestration is now standard practice among leading e-commerce firms and is increasingly being adopted by other merchants. As businesses expand their PSP networks to improve reliability, reduce costs, and boost revenue, selecting the right providers is crucial. Providers should offer differentiated payment solutions, address specific business needs, and be able to integrate seamlessly with multiple orchestration layers.

Working with a specialized PSP can help companies work towards achieving their payment orchestration objectives. Spring by Citi is our end-to-end payment acceptance solution enabling e-commerce and B2B transactions in 25 global markets. Built on Citi's proprietary payments network, it delivers frictionless, market-relevant payment experiences alongside globally-consistent treasury solutions, including embedded FX.

Moreover, Citi is a leading Mastercard issuer in the US (with a 10% market share), and in Singapore and Hong Kong. Collaboration between our consumer division and Citi Services facilitates higher approval rates and minimizes false negatives and soft declines by addressing a subset of decline codes. Processing costs for card transactions can also be optimized when Citi is both a card issuer as well as the acquirer. In addition, reconciliation is simplified as transaction data flows seamlessly within Citi's ecosystem. Spring by Citi increases transparency across the payment lifecycle and automates reconciliation by confirming when funds settle at the itemized transaction level.

By leveraging the right payment orchestration strategy and collaborating with an industry leader such as Citi, e-commerce businesses can enhance transaction efficiency, reduce costs, and drive long-term growth.

25-C5DC231B 12/25