



WHITE PAPER  
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# The future of payment facilitation: The rise of PayFac as a Service



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# Foreword



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Amid significant changes across the global payments landscape, PayFac as a Service (PFaaS) is proving to be transformative for acquirers, Payment Facilitators (PayFacs), and Independent Software Vendors (ISVs) looking to extend their market presence and expand their operations.

This white paper illuminates the strategic advantages and operational efficiencies that PFaaS brings to the small and medium enterprises (SME) payments ecosystem, positioning them as critical enablers for growth, scale, and innovation.

Mastercard is dedicated to supporting and empowering the payments acceptance community, including acquirers, PayFacs, and ISVs, and acknowledges the game-changing impact that PFaaS provides. We are optimistic about the opportunities and fast-paced scale they offer.

These insights offer a strategic roadmap for collaboration and growth within this dynamic environment.

We invite you to explore how PFaaS can serve as a catalyst for success within your organization.



# Executive summary

The payments industry has been undergoing a significant transformation with the emergence of PFaaS. This white paper explores how PFaaS is reshaping the payments landscape, offering new opportunities for acquirers, PayFacs and ISVs.

## Key findings:

- PFaaS simplifies the complex process of becoming a PayFac, allowing acquirers, PayFacs and ISVs to quickly and cost-effectively offer integrated payment solutions.
- This approach can collapse the time to market for new PayFacs from months to weeks and significantly reduce merchant onboarding time from weeks to minutes, enhancing user experience and accelerating platform time-to-revenue.
- The market for PFaaS is growing rapidly, with several key players emerging and offering increasingly sophisticated solutions.
- PFaaS platforms include capabilities to handle the regulatory compliance and risk management burden, lowering the risk for new PayFacs and their sponsor acquirers.
- The future for PFaaS looks promising, with predictions of continued growth of the Payment Facilitation model, hundreds of new PayFac formations a quarter, their expansion into new verticals, and further innovation in risk assessment and fraud prevention.

This white paper concludes that PFaaS platforms are not just a trend but a fundamental shift in how the payment industry operates. They push traditional payment processors to innovate, enhance the merchant experience, and empower ISVs to become key players in the payment ecosystem. As the technology matures and adoption increases, PFaaS is poised to play a central role in shaping the future of digital payments and embedded finance.



# Introduction

The global payments industry is undergoing a profound transformation driven by technological advancements, the rise of digital commerce, and changing consumer expectations. At the heart of this evolution is a new software approach that is reshaping how organizations integrate payment processing into their operations: **PayFac as a Service (PFaaS)**.

PFaaS platforms are significantly transforming the payments industry landscape. They collapse the time and cost for acquirers and their new PayFacs to get to market, streamline merchant onboarding processes, and enable ISVs to rapidly integrate seamless payment capabilities and new revenue streams through processing fees – all without shouldering the full burden of becoming a fully licensed operator. By reducing costs and compliance complexities, PFaaS has lowered barriers to entry, spurring increased competition and bolstering innovation in the payments space.

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65%<sup>1</sup> of ISVs and marketplaces that do not offer payment acceptance functionality plan to do so in the future.

PFaaS brings transformational efficiencies, reducing time to market to 4–8 months (compared with 12–24 months for PayFac setup).

Setting up a PayFac operation continues to cost between \$2.45m–2.9M<sup>2</sup>, as well as ongoing spend on management, international expansion and technical capabilities.

**PFaaS is a modular offering – you select the services applicable to your needs**



Automated onboarding with regulatory compliance checks



Payment reconciliation and reporting



Risk management



Chargeback dispute resolution services



Settlement services



Omni-channel gateway services

1. Platform Business Survey: The Rise of Embedded Payments, November 2023 Report, by Carat from Fiserv.

2. "Payments, Processors, & FinTech – If Software is Eating the World... Payments Is Taking a Bite", January 2020, by Credit Suisse.



# The evolution of PayFacs and PFaaS

## The evolution of PayFacs



### Traditional payment processing

In the past, connecting businesses with acquiring banks to accept electronic payments was time-consuming, and costly, particularly for SMEs and startups.



### The rise of Payment Service Providers (PSPs)

With e-commerce growth, PSPs streamlined the process by grouping multiple merchants under one account, while still needing detailed underwriting and onboarding processes.



### Introduction of the PayFac model

The PayFac model, introduced in the early 2010s, let master merchants easily onboard sub-merchants, reducing risk and compliance burdens and lowering the barrier to entry.



### Expansion and maturation

As the PayFac model grew, it offered more than payment processing, including fraud protection and data analytics, driving adoption in different sectors.



### The shift towards PFaaS

The industry is moving towards PFaaS, combining the benefits of PayFacs into a service for platforms and software providers, boosting reach and efficiency.

The concept of "PayFac" has undergone significant evolution since its inception, driven by the need for more efficient and accessible payment processing solutions. PFaaS platforms subsequently emerged to simplify payment processing for businesses, especially SMEs.

To understand the emergence of PFaaS, we must first appreciate the rapidly accelerating growth of PayFacs, caused by a perfect storm of market conditions and demand for seamless digital payment acceptance experiences:

1. Underserved SMEs
2. Regulatory shifts
3. Increased ISV adoption and the imperative for ISVs to integrate payment services
4. The evolving role of acquirers in the PayFac market



## Underserved SMEs

SMEs have historically faced challenges accessing payment facilitation. Here are some key examples:

- **Complex integration:** Implementing payment systems often requires technical expertise that SMEs may lack in-house.
- **Lengthy onboarding approval processes:** Traditional banks and payment providers often have complex protocols that can delay an SME's ability to accept payments.
- **Cash flow issues:** Delayed settlement times can create cash flow problems for SMEs that need quick access to funds.
- **Lack of customisation:** Many payment solutions don't offer the flexibility SMEs need to tailor the payment experience to their specific business model.
- **Historical lack of experience in the vertical the SME operates in.**

Traditional acquirers often overlooked this segment due to lower profit margins. Meanwhile, many small businesses that were looking for greater value and seamless experiences started opting for payment solutions bundled with their business management software.

## Regulatory shifts

The PayFac model enables integrity and security, as each sub-merchant undergoes thorough onboarding that spans Know Your Customer (KYC), Anti-Money Laundering (AML), Counter Terrorist Financing (CTF) checks, and underwriting. They also undertake payment training, and are serviced by a regulated/authorised payment service provider.

This convergence of factors created the ideal market opportunity for the PayFac model to thrive – offering a solution that addressed the needs of SMEs, aligned with the growth of SaaS platforms, and satisfied regulatory concerns.

## Increased ISV adoption and the imperative for ISVs to integrate payment services

Payments became an increasingly important part of the software that SMEs used to run their operations. Some industry players capitalized on this trend, evolving into regulated entities and establishing their own PayFac businesses.

In today's digital-first business environment, ISVs face increasing pressure to expand their offerings beyond core functionalities. Integrating payment services has become not just an option, but a strategic necessity.

Due to a convergence of market demands and technological advancements, ISVs increasingly want to offer payment services embedded into their core software offerings – the merchant signs up for the ISV service and also benefits from a payment service relationship. This integration serves multiple purposes: it provides a seamless user experience by eliminating the need for customers to switch between platforms to complete transactions, opens new revenue streams through transaction fees and value-added financial services, and gives ISVs access to valuable transaction data. This data can be leveraged to

gain deeper insights into customer behaviour and market trends, ultimately informing product improvements and new feature development.

By incorporating payment functionality, ISVs enhance their value proposition and position themselves more competitively in an increasingly integrated digital ecosystem where users expect comprehensive, all-in-one solutions.

## The evolving role of acquirers in the PayFac market

Acquirers in the payments industry increasingly recognise the importance of the PayFac model in capturing and retaining SME businesses. As the SME segment continues to grow and evolve, acquirers are seeking efficient ways to scale their operations and meet the unique needs of these merchants. The traditional onboarding and underwriting processes for SMEs can be time-consuming and resource-intensive, leading acquirers to explore more streamlined solutions.

Driven by market demand and the intention to drive revenue by unlocking underpenetrated verticals, as well as enabling modern digital experiences, many acquirers are turning to white-label PFaaS solutions. These platforms allow acquirers to leverage the benefits of the PayFac model without the substantial investment and regulatory complexities associated with building their own PayFac infrastructure. By adopting these solutions, acquirers can rapidly deploy PayFac capabilities, offering SMEs faster onboarding, simplified pricing structures, and integrated payment solutions. This approach helps acquirers scale their SME business more effectively and enables them to compete in a market increasingly dominated by fintech companies and specialised payment service providers (PSPs).

62%

Percentage of small businesses using an ISV or transitioning to an ISV – we expect this to continue to increase over time<sup>3</sup>

57%

U.S. SMB acquiring revenue market share forecast for 2028, up from 42% in 2023<sup>4</sup>

50%+

It is not unusual at scale for mature SaaS companies to generate more than half of their revenue from payments and fintech<sup>5</sup>

3. "As ISVs disrupt payments, can merchant acquirers stay relevant?", September 2022, by McKinsey & Company

4. "Payments, Processors, & FinTech – If Software is Eating the World...Payments Is Taking a Bite", January 2020, by Credit Suisse

5. Mastercard observations, company accounts



# Although growing in number, PayFacs face many challenges

PayFacs operate in a complex and rapidly evolving financial ecosystem, facing many challenges. The primary obstacles PayFacs currently face are:

## Regulatory compliance

- Keeping up with evolving financial regulations across different jurisdictions.
- Ensuring compliance with AML and KYC requirements.
- Navigating complex data protection laws (e.g., GDPR).

## Risk management

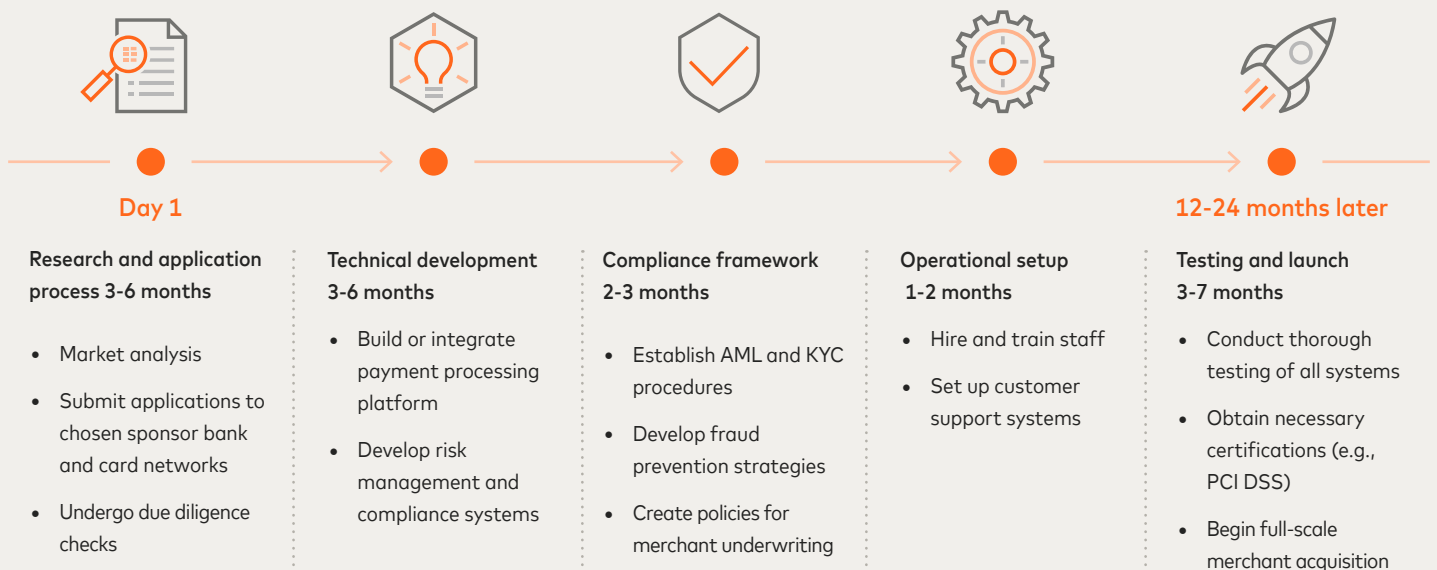
- Balancing rapid onboarding with thorough risk assessment of sub-merchants.
- Managing fraud risks across a diverse portfolio of merchants.
- Handling chargebacks and disputes efficiently.

## Technology infrastructure

- Maintaining robust, scalable systems to handle growing transaction volumes.
- Ensuring high availability and minimal downtime.
- Keeping up with rapid technological advancements in the payments industry.

## Complex and costly PayFac setup timeline

Setting up as a PayFac typically takes between 12 to 24 months, involving a complex and costly process of regulatory compliance, technology development, partnerships, and operational setup:





## PayFac setup: Critical elements for success

Part of becoming a successful PayFac requires significant investment in people, systems, and processes. This presents a substantial barrier to entry for many businesses. The costs and complexity involved in building out the necessary infrastructure,

hiring specialised employees, and implementing robust risk management and compliance frameworks can be prohibitive. Additionally, ongoing maintenance and upgrades to keep pace with evolving regulations and technologies further compound the challenge.

## Here's an overview of key people, processes and system requirements:



### People

**Risk management team:** experts in underwriting, fraud detection, and ongoing risk monitoring

**Compliance officers:** professionals well-versed in payment industry regulations and standards

**Technical team:** developers and engineers skilled in payment processing technologies

**Customer support:** dedicated team to assist sub-merchants with onboarding and ongoing issues

**Sales and marketing:** team to drive sub-merchant acquisition and retention



### Systems

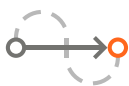
**Onboarding platform:** automated system for quick and efficient sub-merchant registration and verification

**Payment gateway:** robust and secure platform for processing transactions

**Risk scoring engine:** advanced analytics system for assessing and monitoring sub-merchant risk

**Reporting and analytics:** comprehensive tools for transaction monitoring and business intelligence

**API infrastructure:** well-documented and flexible APIs for integration with various platforms



### Processes

**Underwriting criteria:** clear guidelines for sub-merchant approval and risk assessment

**Compliance framework:** policies ensuring adherence to card network rules, AML regulations, and data security standards

**Funds flow management:** procedures for managing settlement and payouts to sub-merchants

**Dispute resolution:** policies for handling chargebacks and disputes

**Ongoing monitoring:** regular review processes for sub-merchant activities and risk profiles

## Stakeholder perspectives on PayFacs

Like any significant shift in the financial landscape, the PayFac model has various implications for different stakeholders. Let's examine the key perspectives:

### Schemes (card networks)

#### Advantages

- Transparency into the end merchant of their payment scheme
- Enhanced innovation in payment processing

#### Challenges

- Ensuring PayFacs maintain compliance with network rules
- Managing potential increased risk from sub-merchant aggregation

### Merchants

#### Advantages

- Faster onboarding and easier access to payment processing
- Often more competitive pricing due to volume aggregation
- Integrated payment solutions within software platforms

#### Challenges

- Potential limitations in customisation of payment solutions
- Dependence on PayFac's stability and compliance
- Possible restrictions on high-risk industries

### ISVs

#### Advantages

- Ability to offer embedded payments, enhancing product value
- New revenue streams from payment processing
- Improved customer retention through comprehensive solutions

#### Challenges

- Navigating the complexities of payment regulations and compliance
- Balancing payment features with core software functionality
- Managing customer expectations for payment services

### Acquirers

#### Advantages

- Expanded market reach through PayFac partnerships
- Reduced operational costs for merchant onboarding and management
- Access to new market segments and verticals

#### Challenges

- Potential disintermediation by PayFacs
- Adapting risk models to accommodate PayFac structures
- Maintaining relevance in a changing payment landscape

### Regulators

#### Advantages

- Improved oversight of end-user merchant
- Encouragement of innovation in the payments industry
- Opportunity to modernise regulatory frameworks

#### Challenges

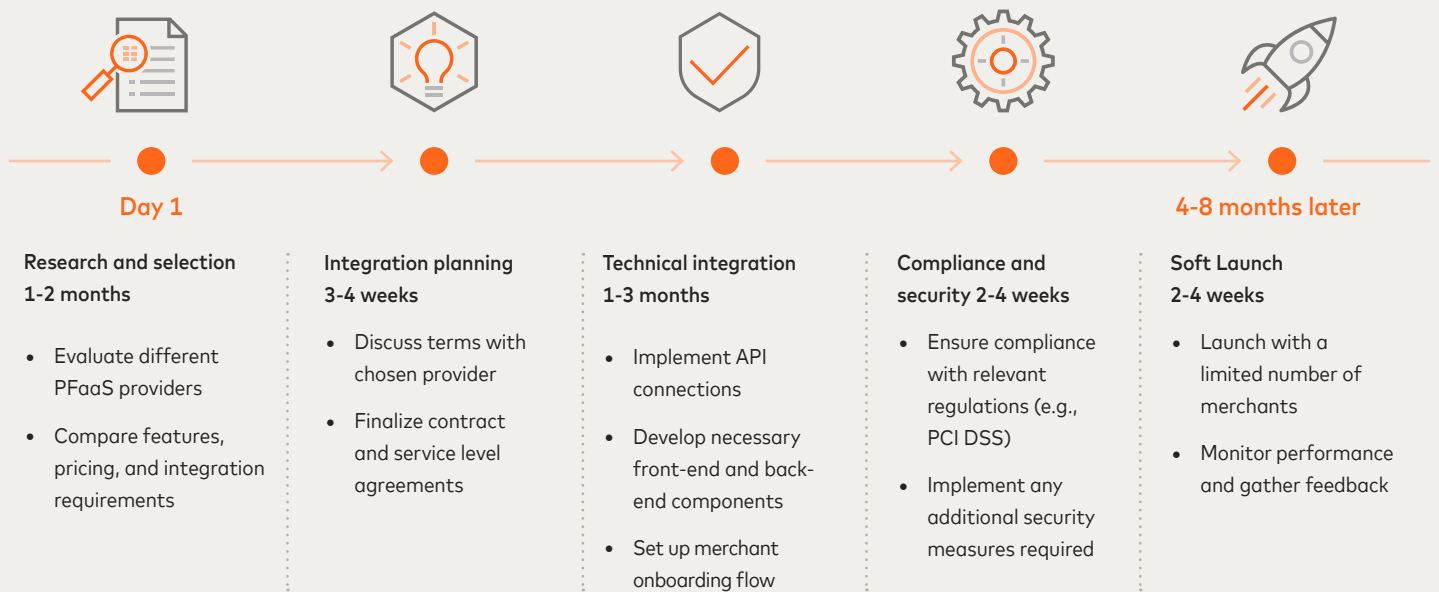
- Ensuring adequate consumer protection in a rapidly evolving landscape
- Developing appropriate regulatory frameworks for new payment models
- Balancing innovation with financial system stability and security



# Streamlining payments: The operational efficiencies of PFaaS platforms

## PFaaS setup timeline: What to expect

PFaaS providers bring time and cost efficiencies to PayFacs, helping them to overcome difficulties. Onboarding PFaaS typically takes between **4-8 months**.



This time can be reduced to just a few weeks if the sponsor acquirer is able to offer a pre-integrated and preconfigured PFaaS to their new PayFac, a strategy that more forward-thinking acquirers are adopting.

By significantly reducing setup time, costs, and regulatory complexities, PFaaS platforms enable businesses to focus on their core competencies while still capitalizing on the revenue opportunities and enhanced customer experiences that come with offering integrated payment solutions.





PFaaS platforms bring several efficiencies:

### **Faster time-to-market**

PFaaS platforms provide pre-built infrastructure, allowing PayFacs to launch their services more quickly without having to develop everything from scratch.

### **Reduced compliance burden**

PFaaS platforms often handle much of the complex regulatory compliance, including Payments Card Industry Data Security Standards (PCI DSS), AML/CFT, and KYC requirements, reducing the burden on PayFacs.

### **Scalability**

PFaaS platforms are typically designed to handle high transaction volumes, allowing PayFacs to scale their operations more easily as they grow.

### **Cost-effectiveness**

By making use of shared infrastructure, PayFacs can reduce their operational and development costs compared to building and maintaining their own systems.

### **Access to advanced technology**

PFaaS providers offer pay-as-you-go "acquirer grade" fraud detection, machine learning-based risk assessment, and other advanced features that would be costly for individual PayFacs to develop or negotiate their own agreements for.

### **Simplified integration**

PFaaS platforms usually provide robust APIs and Software Development Kits (SDKs), making it easier for PayFacs to integrate payment processing into their own systems or offer it to their sub-merchants.

### **Ongoing updates and improvements**

PFaaS providers continuously update their platforms, ensuring PayFacs always have access to the latest features and security enhancements without managing upgrades themselves.

### **Expertise and support**

PFaaS providers offer specialised knowledge in payment processing, risk management, and compliance, which PayFacs can leverage to improve their services.

### **Flexibility in pricing models**

PFaaS platforms often allow PayFacs more flexibility in structuring their pricing for sub-merchants, potentially enabling more competitive offerings.

### **Improved reporting and analytics**

PFaaS providers typically offer comprehensive reporting tools, giving PayFacs better insights into their overall performance and that of their sub-merchants.



# Vertical examples of PFaaS in practice

For verticals like construction, with its intricate network of contractors and subcontractors, healthcare, with its mix of public and private funding, and real estate, with its high-value transactions and recurring payments, PFaaS platforms can provide tailored solutions that address sector-specific challenges while streamlining payment processes.



## Real estate

- Compliance with local property regulations and Tenant Fees Act
- Integration with local property portals (e.g., Rightmove, Zoopla)
- Support for stamp duty payments in property transactions
- Facilitation of deposit protection scheme payments



## Medical

- Integration with systems for healthcare payments
- Compliance with local data protection regulations (e.g., GDPR)
- Support for private healthcare insurance claims processing



## Construction

- Compliance with construction industry schemes
- Integration with accounting software (e.g., Sage, Xero)
- Facilitation of VAT reverse charge payments
- Support for domestic scheme transactions

PFaaS providers like Cardstream are opening their platforms to allow third-party developers to build and integrate additional services.



# Future trends and predictions

As PFaaS continues to mature, several key trends are emerging that will likely shape its future trajectory and impact on the industry:

## Increased adoption

More ISVs are likely to adopt PFaaS solutions to streamline payment processing for their merchants or users. This allows them to offer integrated payment capabilities without becoming full PayFac themselves.

## Enhanced features

Providers may expand their offerings to include more advanced risk management tools, AI-driven and machine learning supported automated underwriting, and improved sub-merchant onboarding processes.

## Focus on verticalization

PFaaS providers may develop more industry-specific solutions tailored to the unique needs of verticals like healthcare, construction, or real estate.

## Integration with other fintech services

There could be increased integration between PFaaS and other financial technologies, such as lending, accounting software, or business intelligence tools.

## Regulatory adaptation

As regulations evolve, PFaaS providers will be likely to need to adapt their compliance frameworks and offer more robust tools to help their clients navigate complex regulatory environments.

## International expansion

Many providers may focus on expanding their services globally, addressing the complexities of cross-border payments and local regulations.

## Emphasis on data analytics

Leveraging transaction data to provide valuable insights to both platforms and their sub-merchants could become a key differentiator.

## Competition and consolidation

The market may see increased competition, potentially leading to consolidation as larger players acquire innovative startups.

## Blockchain and cryptocurrency integration

Some providers might explore integrating blockchain technology or cryptocurrency support to expand payment options.

## Enhanced security measures

With growing concerns about fraud and data breaches, providers are likely to invest heavily in advanced security features and fraud prevention tools.

As these trends unfold, they'll shape not just the PFaaS landscape but the entire payment ecosystem. For businesses operating in this space, staying ahead of these developments will be crucial to seizing new opportunities and navigating potential challenges.



# Conclusion

PFaaS is reshaping the payment landscape, offering inventive solutions to traditional processing challenges. This approach enables ISVs and PayFacs to quickly offer embedded payment services, rapidly grow, and innovate in the market.

## The changing face of payments

PFaaS is fundamentally changing the dynamics of the payment ecosystem. This innovative approach blurs the lines between software providers and payment processors, accelerating the trend towards embedded finance and invisible payments and democratizing access to sophisticated payment capabilities for businesses of all sizes. These changes are reshaping how companies approach payments, integrating them more seamlessly into their operations and customer experiences.

## Implications for industry stakeholders

The rise of PFaaS has significant implications for various industry stakeholders. ISVs must now consider payment integration as a core strategic decision, not just an add-on feature. Traditional payment processors need to innovate and potentially pivot their business models to remain competitive in this changing landscape. Merchants should expect and demand more integrated, user-friendly payment solutions from their software providers. Finally, regulators will need to evolve their frameworks to address the unique challenges posed by the PFaaS approach, ensuring that the industry remains secure and compliant while fostering innovation.

## Looking forward

As we look to the future, several factors will likely shape the evolution of PFaaS. Continued technological advancements, particularly in AI, machine learning, and blockchain, are expected to drive innovation in payment processing and risk management. A growing emphasis on data security and privacy will influence how PFaaS providers handle sensitive financial information. Additionally, the increasing demand for cross-border and alternative payment methods will push these platforms to expand their capabilities and global reach. Finally, the industry may see consolidation as established players seek to maintain their market position, while simultaneously witnessing the emergence of new, innovative entrants that disrupt traditional payment ecosystems.

## Final thoughts

The payment landscape of tomorrow will be shaped by those who recognize and harness the power of integrated, flexible, and user-centric payment solutions. PFaaS is at the forefront of

this transformation, paving the way for a more interconnected and efficient financial ecosystem.

As stakeholders in this rapidly evolving space, it is crucial to stay informed, adaptable, and ready to embrace the opportunities that PFaaS will continue to bring to the world of payments.

Comprehensive PFaaS solutions such as Cardstream, Mastercard's StartPath programme partner, can help acquirers set-up their PFaaS offering to unlock underpenetrated verticals, while ISVs can use it to offer integrated payment experiences to their SMEs, enabling a one-stop-shop seamless experience.



## About Cardstream

Multi-award winning Cardstream is the UK's largest independent provider of white label payment software and services. Its mission is to become the global standard for the most complete outsourcing payment platform. Everything the company does is designed to give its partners the freedom, flexibility and control to deliver the unhindered achievement of their business objectives.

Cardstream's breadth of relationships, advanced portfolio of features and acquirer independence ensures that its partners can build a payment proposition that they control and that delivers the maximum financial return.



## About Mastercard

Mastercard is a global technology company in the payments industry. Our mission is to connect and power an inclusive, digital economy that benefits everyone, everywhere by making transactions safe, simple, smart and accessible. Using secure data and networks, partnerships and passion, our innovations and solutions help individuals, financial institutions, governments and businesses realise their greatest potential. With connections across more than 210 countries and territories, we are building a sustainable world that unlocks priceless possibilities for all.



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