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The evolution of payment facilitation models: Why managed PayFac is reshaping the fintech landscape

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Abstract

The evolution of payment facilitation models has fundamentally transformed how platforms monetize transaction flows in the embedded finance ecosystem. This article examines four distinct approaches to payment facilitation: Referral Partnerships, which offer simplicity with minimal revenue potential; Independent Sales Organizations (ISOs), which provide enhanced control with moderate operational requirements; Full Payment Facilitator (PayFac) models, which maximize revenue while demanding substantial investment; and Managed PayFac solutions, which offer a strategic hybrid approach. Each model presents unique characteristics across dimensions including implementation timeline, capital requirements, revenue potential, operational complexity, merchant experience control, technical architecture, regulatory considerations, and scalability factors. The comparison reveals how Managed PayFac has emerged as a compelling solution for many platforms by effectively decoupling the economic benefits of payment facilitation from its technical and compliance burdens, enabling organizations to optimize payment monetization while maintaining operational agility and regulatory compliance.

Keywords: Payment Facilitation; Embedded Finance; Saas Monetization; Merchant Acquisition; Fintech Integration

1. Introduction

The embedded finance revolution has created unprecedented opportunities for platforms to monetize payment flows. As digital marketplaces, SaaS providers, and vertical software solutions increasingly integrate financial services, selecting the optimal payment facilitation model has become a critical strategic decision. According to recent market analysis, the global embedded finance market is projected to grow from USD 115.8 billion in 2024 to USD 251.5 billion by 2029, at a CAGR of ~16.8% [1]. This substantial growth trajectory underscores the increasing importance of embedded payment solutions within the broader financial technology ecosystem.

The architecture of these payment models not only impacts revenue potential but also determines operational complexities, compliance responsibilities, and go-to-market timelines. Industry research indicates that integrating appropriate payment facilitation models can enhance customer experience by streamlining checkout processes and reducing friction, which are key factors contributing to the expansion of the embedded finance market [1]. These improvements in user experience have become essential competitive differentiators as platforms seek to optimize conversion rates and transaction volumes.

This technical analysis examines the evolution of payment facilitation models, from traditional referral partnerships to the emerging Managed PayFac paradigm. Recent studies on digital payment adoption reveal that security concerns are the primary factors influencing merchant decisions when selecting payment processing solutions [2]. The growing preference for integrated payment systems is particularly evident among retailers and service providers who recognize

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that simplified onboarding and reduced compliance burdens directly impact adoption rates and merchant satisfaction scores.

By providing decision-makers with a comprehensive framework for evaluating which approach best aligns with their business objectives and technical capabilities, this analysis addresses the documented challenges in payment technology integration. The significant market growth in embedded finance is being driven by several factors, including the increasing adoption of API-based financial services, growing demand for seamless customer experiences, and the accelerating digital transformation across industries [1]. Similarly, industry research indicates that merchants' decisions to integrate digital payment systems are influenced by technological factors such as system compatibility and security, as well as by trust and perceived reliability [2].

As platforms navigate this complex landscape, understanding the nuanced differences between payment facilitation models becomes increasingly crucial for strategic positioning and competitive advantage in a market projected to nearly quintuple over the next decade.

2. Referral partnerships the traditional approach

Referral Partnerships represent the entry-level model for platforms seeking to monetize payment flows with minimal complexity. In this arrangement, platforms establish a basic connection to payment processors, creating a streamlined pathway for merchants while maintaining operational simplicity. The operational structure involves platforms simply directing merchants to a third-party payment processor, which allows software companies to focus on their core business while still capturing value from payment flows.

These partnerships typically involve lightweight technical integration via basic API connections, avoiding the need for deep infrastructure investments or operational overhaul. Research indicates that modern payment systems must process transactions in milliseconds rather than seconds, with high-performance payment platforms capable of handling over 100,000 transactions per second during peak periods [3]. Referral partnerships benefit from this processing capability without needing to build the underlying infrastructure, enabling them to leverage the payment processor's existing high-throughput systems.

From a revenue perspective, referral partnerships generally yield modest returns through either a fixed referral fee per merchant or a small revenue share, typically ranging from 1-5% of payment processing fees. This model creates a straightforward monetization path with minimal operational overhead. The risk profile represents perhaps the most significant advantage of referral partnerships, with near-zero risk exposure as all merchant underwriting, compliance, and processing remains with the payment provider.

Studies examining payment service providers have identified several critical factors—such as economic considerations, service quality, and security—that significantly influence merchant adoption in referral partnerships [4]. Referral partnerships benefit from the established reputation of payment processors in these areas but face significant technical limitations, including restricted control over the merchant onboarding experience, minimal data visibility, and limited ability to customize payment flows. Research shows that merchant payment solution adoption is significantly influenced by perceived usefulness and compatibility with existing systems, areas where referral partnerships may struggle to provide optimal experiences due to these technical constraints [4].

Implementation timelines for referral partnerships typically range from 2-4 weeks for basic integration, making them an attractive starting point for platforms new to payment monetization. While this approach offers rapid deployment and minimal operational requirements, research indicates that merchant satisfaction relies heavily on reliability and security features, which are largely controlled by the payment processor in referral partnerships [4]. This dependency creates significant limitations in user experience cohesion, brand consistency, and long-term revenue potential—factors that ultimately explain why many platforms migrate to more sophisticated payment facilitation models as they mature.

Table 1 Referral Partnership Payment Integration: Features and Performance Characteristics [3, 4]

Metric	Value	Notes
Time to Market	2-4 weeks	Basic integration timeline
Transaction Processing Speed	Milliseconds	Leveraging processor infrastructure
Transaction Volume Capacity	100,000+ per second	During peak periods [3]
Revenue Share	1-5%	Of payment processing fees
Risk Exposure	Near-zero	Payment provider handles risk
Merchant Onboarding Control	Limited	Restricted customization
Data Visibility	Minimal	Limited merchant insights
Operational Overhead	Minimal	Focus on core business
Technical Integration Complexity	Low	Basic API connections
Key Adoption Factor: Economic Considerations	High impact	Influences merchant decisions
Key Adoption Factor: Service Quality	High impact	
Key Adoption Factor: Security	High impact	
Key Adoption Factor: Perceived Usefulness	High impact	
Key Adoption Factor: System Compatibility	High impact	

3. Independent Sales Organizations (isos)

3.1. Increased Control with Overhead

The ISO model provides platforms with enhanced capabilities but introduces additional operational requirements. This intermediate approach to payment facilitation enables software platforms to maintain closer merchant relationships while leveraging established payment processing infrastructure [5]. In this model, platforms operate as registered sales entities for payment processors while establishing more direct merchant interactions than simple referral partnerships allow.

3.2. Operational Structure

ISOs register with payment networks and processors, enabling them to sign merchants directly under their umbrella. This structure provides greater control over merchant onboarding, pricing, and ongoing support compared to referral partnerships.

3.3. Merchant Acquisition and Management

ISOs actively recruit merchants, handle initial underwriting assessments, and provide ongoing account management. They serve as the primary point of contact for merchants while the processor handles backend transaction processing.

3.4. Technical Requirements

ISO implementations require merchant management systems for onboarding, transaction monitoring, and customer support. These systems integrate with processor APIs but focus on merchant relationship management rather than core payment processing infrastructure.

3.5. Revenue Model

ISOs earn revenue through profit-sharing arrangements with processors, typically receiving 10–30% of processing fees, with revenue potential increasing with merchant volume and retention rates.

3.6. Compliance Requirements

ISOs must maintain registration with payment networks, adhere to processor compliance standards, and implement merchant monitoring procedures. They share certain underwriting responsibilities while processors retain primary risk management obligations.

This model balances increased revenue potential with moderate operational complexity, making it suitable for organizations seeking enhanced merchant control without full payment facilitation responsibilities. This integration framework allows ISOs to deliver more sophisticated payment experiences while maintaining reasonable implementation complexity.

Research indicates that organizations implementing ISO-based payment models in conjunction with Enterprise Resource Planning (ERP) systems experience an average reduction in payment processing costs while achieving some improvement in processing efficiency [6].

Technical infrastructure requirements for ISOs are more robust than referral partnerships, necessitating merchant management systems, enhanced security protocols, and formalized compliance procedures. Studies show that organizations implementing ISO-based payment frameworks experience reduced payment reconciliation discrepancies and a slight decrease in manual payment handling [6]. However, this improved performance requires significant infrastructure investment, with implementation timelines typically spanning 2–4 months, including registration and certification processes.

While ISOs benefit from improved economics and greater merchant relationship control, they must navigate payment network registrations, compliance frameworks, and operational overhead. Research and industry observations indicate that despite these challenges, organizations adopting ISO-based payment systems often report improvements in payment visibility and modest gains in straight-through processing rates, demonstrating the tangible operational benefits that offset the increased complexity [6].

4. Full PayFac Model: Maximum Control and Complexity

The Full PayFac model represents the most sophisticated approach, offering complete ownership of the payment value chain. This model enables platforms to achieve comprehensive control over merchant experiences while maximizing revenue potential, though with correspondingly higher complexity and resource requirements.

Operationally, a platform becomes a fully-registered payment facilitator, directly sponsoring sub-merchants under its master merchant account. Recent research analyzing multi-paradigm approaches to embedded finance found that platforms adopting the Full PayFac model demonstrated superior merchant onboarding efficiency, with merchants reporting satisfaction with the streamlined application process compared with traditional acquisition methods [7]. This operational structure creates a seamless experience for sub-merchants and allows the platform to control all critical customer touchpoints.

Technical integration within the Full PayFac model requires comprehensive payment infrastructure development, including proprietary underwriting systems, risk management tools, and compliance frameworks. In sophisticated PayFac environments, platforms often implement advanced machine learning algorithms for fraud detection—offering improved detection rates and reduced false positives compared to traditional rule-based approaches. This technical architecture requires significant expertise but delivers substantial performance improvements across crucial payment processing functions.

From a revenue perspective, the Full PayFac model delivers maximum economic potential, with platforms typically capturing 50–80% of payment processing fees and unlocking opportunities for additional financial product monetization. The risk profile is correspondingly elevated, requiring full assumption of merchant-related risks including fraud, chargebacks, and compliance violations. This comprehensive risk responsibility necessitates robust technical infrastructure and advanced security measures.

The technical requirements for Full PayFac operations are extensive, with security and compliance being paramount concerns. Research examining full-stack development frameworks highlights that implementing PCI DSS Level 1 compliance necessitates addressing major requirement categories encompassing various security controls and best practices [8]. The study found that organizations adopting comprehensive security frameworks experienced fewer

security incidents compared to those implementing partial measures, underscoring the importance of thorough compliance implementation in the PayFac model [8].

Implementation timelines for Full PayFac deployments typically range from 12–24 months, with development and certification costs ranging from $1–3M+. Contemporary analysis of full-stack security frameworks indicates that organizations allocating a smaller portion of their development budget to security and compliance achieved certification timelines shorter than industry averages [8]. While substantial, these investments enable platforms to maintain comprehensive control over the entire payment experience.

The Full PayFac model delivers optimal economics and complete control but demands significant expertise, capital investment, and ongoing operational resources. Achieving operational excellence in this sophisticated payment facilitation approach relies on robust security architectures, including comprehensive compliance measures such as PCI DSS Level 1 certification, to safeguard data integrity and maintain platform reliability.

5. Managed PayFac The Emerging Hybrid Solution

The Managed PayFac (Embedded PayFac) model offers a strategic middle ground that has gained significant traction in the evolving payment facilitation landscape. This hybrid approach effectively balances control and complexity, providing platforms with a sophisticated solution that minimizes implementation challenges while maximizing revenue potential.

The Managed PayFac model enables a platform to present as a full PayFac to merchants while outsourcing critical infrastructure and compliance functions to a specialized provider. Research on digital payment platforms demonstrates the effectiveness of partnership-based models in achieving sustainable growth [9]. This hybrid structure creates a seamless merchant experience where the platform maintains brand ownership and customer relationships, while backend complexities such as regulatory compliance, risk management, and technical infrastructure are handled by experienced providers. The model effectively bridges the gap between simple referral partnerships and full payment facilitation, allowing platforms to deliver sophisticated payment capabilities without the corresponding operational burden or regulatory expertise requirements.

Technical integration within the Managed PayFac model leverages modular API-based architecture, allowing platforms to selectively determine which components to control versus outsource. This approach aligns with established enterprise architecture frameworks that emphasize capability-based planning and service-oriented architecture to optimize organizational efficiency. By adopting structured architectural approaches, platforms can systematically evaluate which payment capabilities align with their core competencies and which are better delegated to specialized providers.

From a revenue perspective, the Managed PayFac model delivers competitive economics, with platforms typically earning 30-60% of payment processing fees while benefiting from substantially reduced operational costs. This economic advantage derives from the specialized efficiency of dedicated payment infrastructure providers.

The risk profile of the Managed PayFac model implements a shared risk structure with the provider handling critical compliance and regulatory functions. The technical architecture encompasses several key components, including white-labeled merchant onboarding flows, abstracted underwriting and risk management services, embedded KYC/AML verification, simplified PCI compliance scope, and provider-managed regulatory monitoring.

Implementation timelines for Managed PayFac deployments are significantly faster than traditional payment facilitation models for initial deployment, with phased expansion capabilities enabling incremental functionality enhancements. Industry observations suggest that Managed PayFac models can accelerate time-to-market compared to fully internalized payment operations while maintaining comparable service quality metrics [9]. This rapid deployment capability represents a critical competitive advantage in the increasingly dynamic fintech landscape.

This model effectively decouples the economic benefits of the PayFac model from its technical and regulatory complexities, creating an optimal balance for many platforms. Leveraging structured architectural frameworks allows platforms to achieve enterprise-grade payment capabilities without the implementation burden or operational complexity of fully internalized solutions.

Table 2 Comparative Advantages of the Managed PayFac Model in Payment Processing [9, 10]

Metric	Value	Comparison/Note
Revenue Share	30-60%	Of payment processing fees
Operational Structure	Distributed responsibility	Platform presents as full PayFac to merchants
Technical Integration	Modular API-based	Selective component control
Risk Profile	Shared risk	Provider handles compliance and regulatory functions
Key Components	White-labeled onboarding	Maintains brand consistency
	Abstracted underwriting	Reduces operational complexity
	Embedded KYC/AML	Simplifies compliance
	Simplified PCI scope	Reduces security burden
	Regulatory monitoring	Outsourced compliance management

6. Comparative analysis: key decision factors

When evaluating payment facilitation models, platforms should consider several critical dimensions that significantly impact implementation success and long-term performance. Understanding these comparative factors enables decision-makers to align model selection with organizational capabilities and strategic objectives.

Industry observations show that faster deployment times can create substantial early-mover advantages in rapidly evolving markets, with time-to-market significantly influencing competitive positioning. This temporal advantage translates to increased market share within the initial operating year [11].

Initial investment requirements span from $10–50K for Referral partnerships to $1–3M+ for Full PayFac models, with Managed PayFac requiring $50–150K. These capital differences directly impact financial planning and return calculations. Studies applying multi-criteria decision analysis to payment systems implementation found that Managed PayFac models often achieve the highest efficiency scores due to their balanced investment-to-capability ratio [11].

Revenue potential increases proportionally with implementation complexity, ranging from low (1-5%) for Referral models to high (50-80%) for Full PayFac, with Managed PayFac approaching similar economics (30-60%) at reduced complexity. Recent research analyzing digitization in financial services indicates that revenue optimization in payment facilitation corresponds strongly with control over customer experience touchpoints, explaining the higher monetization potential of more sophisticated models [12].

Operational complexity varies significantly across models, from minimal for Referral partnerships to extensive for Full PayFac implementations. Technical requirements follow similar patterns, with basic API integration for Referral models compared to comprehensive full-stack development for Full PayFac implementations. Research on digital payment systems adoption indicates that aligning technical complexity with organizational capabilities is critical, as implementation failures are more likely when complexity exceeds internal technical readiness [12].

Merchant experiences control improves with implementation sophistication, ranging from limited in Referral models to complete in Full PayFac, with Managed PayFac achieving high control through white-labeled interfaces. Studies examining digital payment user experience show that merchant onboarding satisfaction scores average higher in models with greater interface customization capabilities [12]. This experience quality directly impacts merchant retention and processing volume.

Regulatory burden and scalability challenges present important operational considerations. Systems with outsourced compliance functions demonstrate lower operational costs related to regulatory activities compared to internally managed compliance frameworks [11]. This efficiency advantage helps explain the growing popularity of models with distributed compliance responsibility.

Technical decision-makers must assess these factors against their organization's current capabilities, strategic objectives, and growth trajectory. For rapidly scaling platforms with limited fintech expertise, research indicates the

Managed PayFac model frequently emerges as the optimal solution. Its balanced investment-to-capability ratio offers superior overall performance, helping organizations achieve sophisticated payment capabilities without corresponding operational burdens [11].

Table 3 Decision Factors Across Payment Facilitation Approaches: A Comparative Analysis [11, 12]

Decision Factor	**Referral Model**	**ISO Model**	**Full PayFac**	**Managed PayFac**
Revenue Potential	Low	Medium	High	High
Operational Complexity	Minimal	Moderate	Extensive	Moderate
Merchant Experience Control	Limited	Partial	Complete	High
Technical Requirements	Basic API	Merchant Systems	Full Stack	Flexible APIs
Regulatory Burden	Minimal	Moderate	Extensive	Outsourced
Scalability Challenges	Partner Dependent	Registration Limits	Operational Overhead	Provider Capabilities

7. Conclusion

The landscape of payment facilitation continues to evolve, with the Managed PayFac model representing a significant paradigm shift in how platforms approach embedded finance. By effectively decoupling the economic benefits of payment facilitation from its technical and regulatory complexities, this model has democratized access to sophisticated payment capabilities. For SaaS platforms, marketplaces, and vertical software solutions focused on core product innovation rather than payment infrastructure, the Managed PayFac approach offers an optimal balance of control, economics, and operational efficiency. As embedded finance becomes increasingly central to platform monetization strategies, organizations must conduct thorough technical and operational assessments to determine which model best aligns with their capabilities and objectives. While referral partnerships offer simplicity and ISOs provide enhanced economics, the Managed PayFac model has emerged as the "best of both worlds" solution—combining the revenue potential and merchant experience control of the Full PayFac model with dramatically reduced time-to-market, capital requirements, and compliance burdens.

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