

WINDSOR DRAKE

PayFac/Payment Rails & Orchestration Valuation

JANUARY 2026

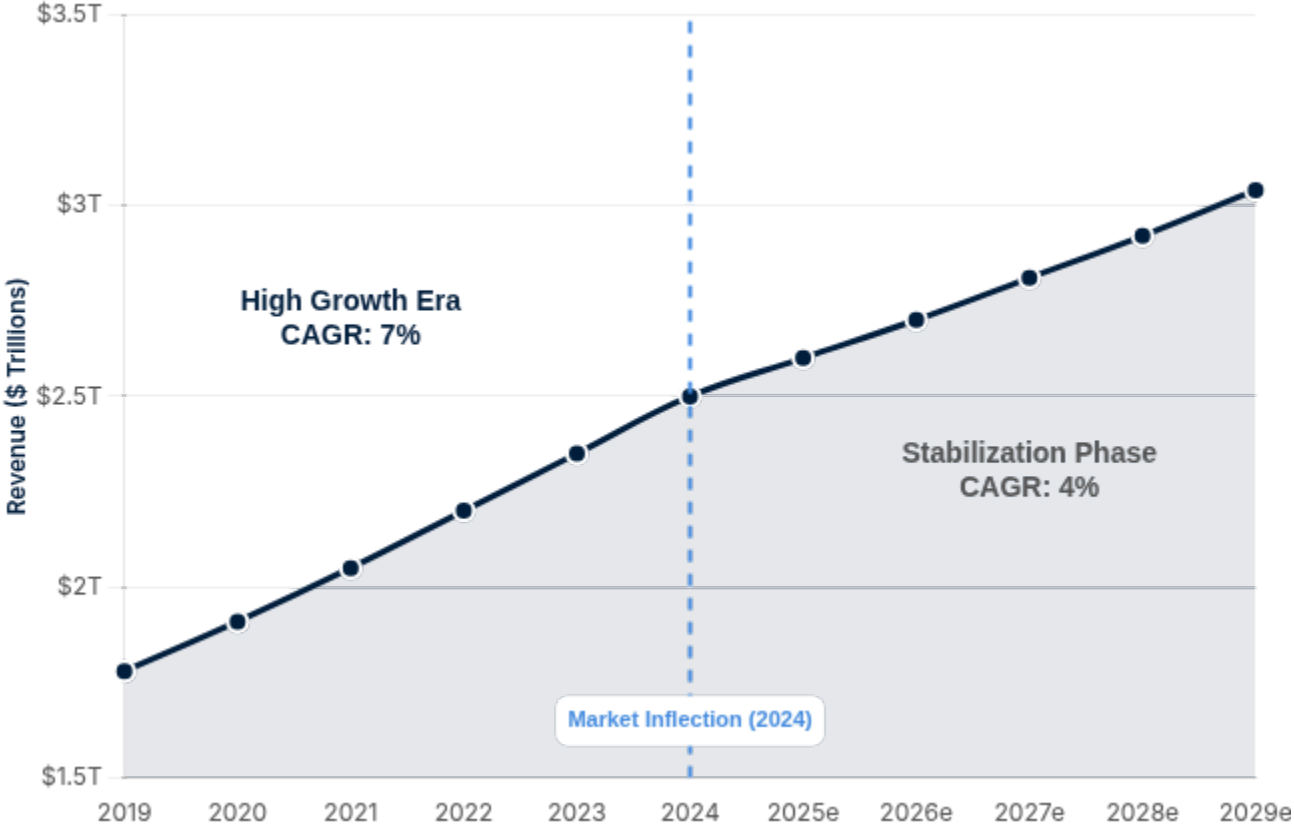
Executive Summary — What Founders Need to Know

Global Payments Market	\$2.5T in 2024	Projected to reach ~ \$3.0T by 2029
Growth Deceleration	7% (2019-2024) → 4% (2024)	Structural reset from capital abundance to unit economics
Valuation Hierarchy	PayFac: 3-6x Orchestration: 10-15x	Infrastructure assets command premium 12-20x revenue
Regional Growth Leaders	LatAm: 11% APAC: -1%	Geographic "alpha" found in emerging markets vs. saturated Asia
Orchestration Market	\$1.8B (2025) → \$13.4B (2034)	Explosive 24.5% CAGR driven by fragmentation complexity
AI Premium	+242% Valuation Uplift	For AI-enabled startups vs. traditional fintech peers
Valuation Floor	Rule of 40	Minimum threshold for premium multiples (Growth + Profitability > 40%)

CEO FAQ — PayFac vs Orchestration vs Rails

Critical Question	Strategic Answer & Valuation Impact
Which business model commands premium multiples and why?	Infrastructure/Rails (12-20x) and Orchestration (10-15x) command premiums over PayFacs (3-6x) due to higher gross margins (70%+) , lower liability exposure, and scarcity of assets.
Is TPV still the primary valuation driver?	No. "Revenue Quality" has replaced TPV. Investors prioritize Net Revenue Retention (NRR) , gross margin profile, and control over payment data rather than empty volume.
What financial metrics matter most?	Rule of 40 is the floor for premium valuation. NRR >110% proves stickiness. Gross Margins >70% signal software/orchestration economics vs commodity processing.
How does liability exposure impact valuation?	High liability (fraud/chargebacks) acts as a valuation drag . PayFacs bear this risk; Orchestrators do not. Reducing liability exposure expands multiples.
Should we build, partner, or buy orchestration capabilities?	Enterprise merchants increasingly prefer agnostic partners over building internal tools to ensure redundancy and negotiation leverage against processors.
What's the typical implementation timeline and ROI?	Implementation for enterprise orchestration typically spans 12-24 months for full ROI, driven by authorization uplift, routing savings, and operational automation.

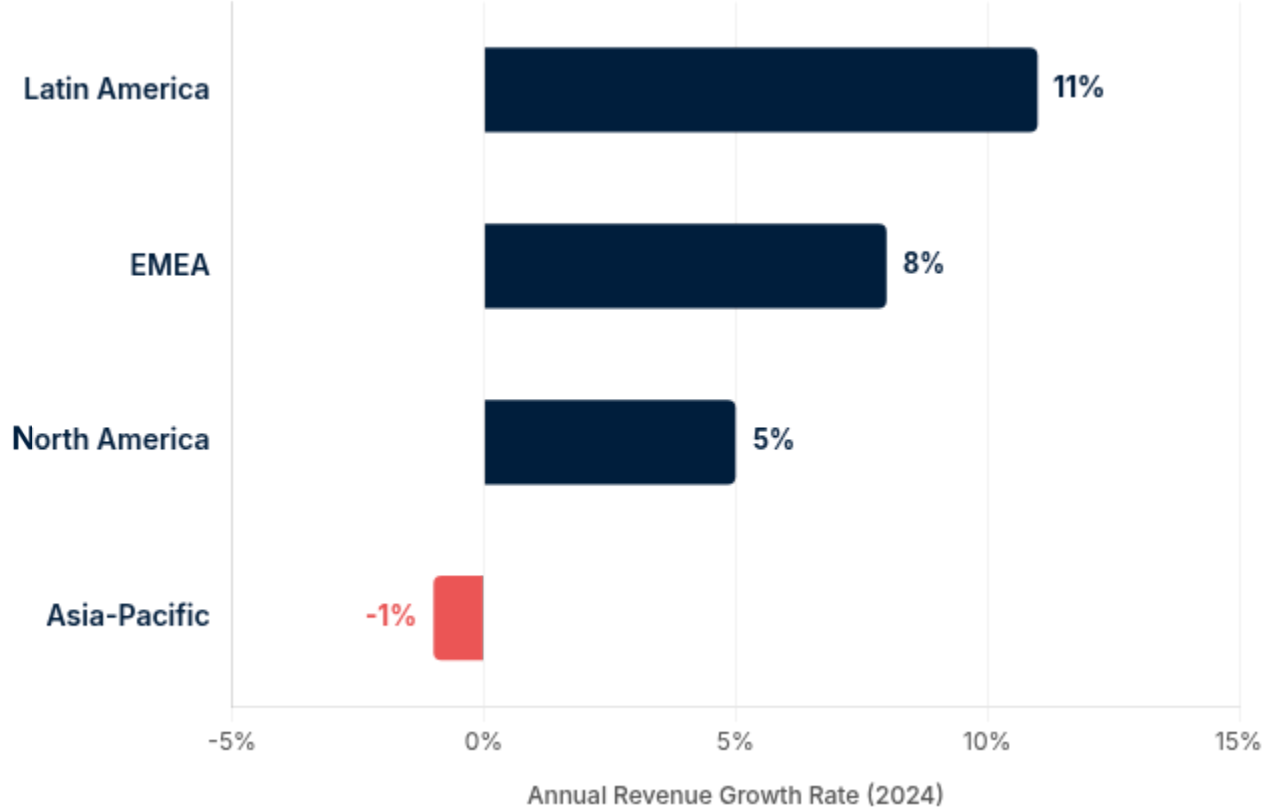
Global Payments Market — Size and Growth



Structural Deceleration & Value Migration

- **Growth Reset (7% → 4%):** The era of "growth-at-all-costs" has ended. Normalization of post-pandemic adoption and stabilizing interest rates have compressed annual growth from 7% (2019–2024) to a steady 4%.
- **Revenue Quality Bifurcation:** Transaction-related revenues are projected to grow at **6%** annually, significantly outpacing non-transactional (float/fees) revenue growing at <3%.
- **Strategic Shift:** Value creation is migrating away from passive balance sheet operations toward active, software-enabled fund movement and orchestration.

Regional Revenue Divergence — Where Alpha Resides



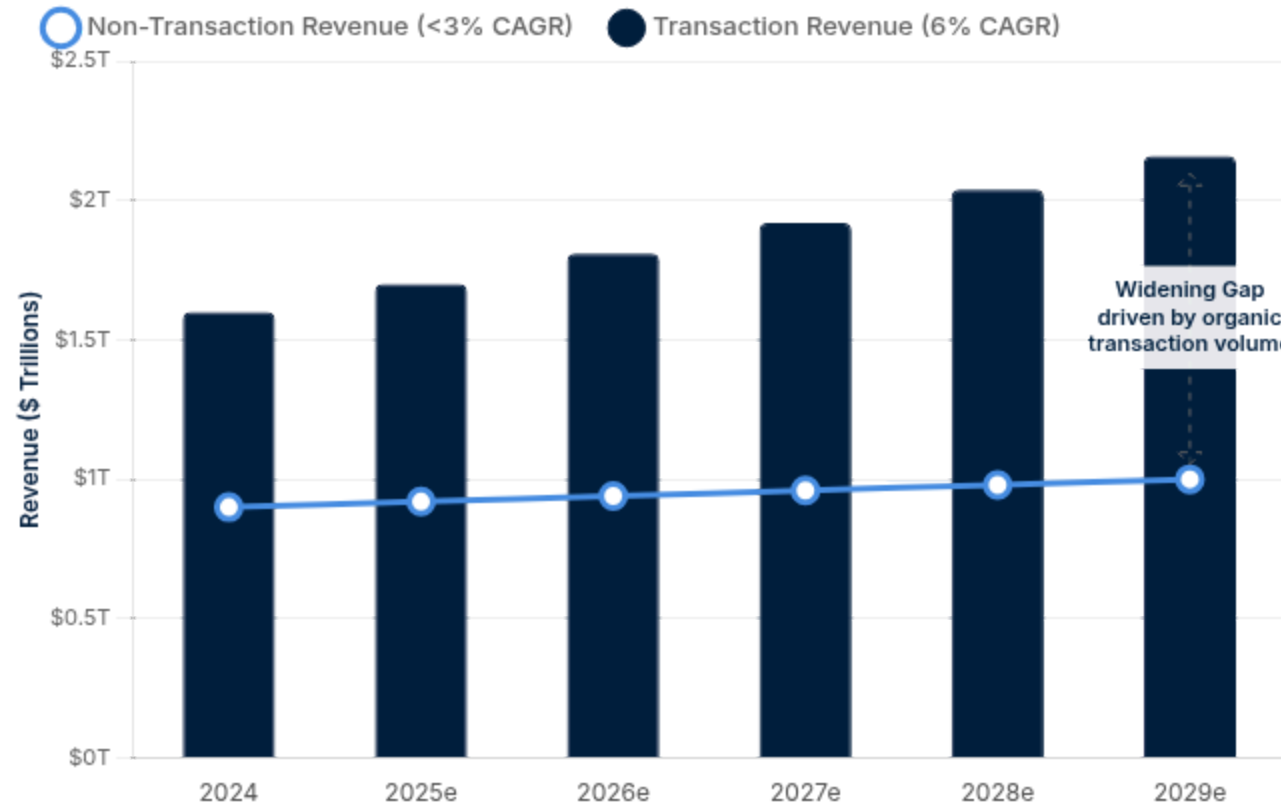
Key Insights

- **LatAm "Alpha" (11%):** Outperformance driven by massive adoption of sovereign rails (Pix) and financial inclusion initiatives digitizing cash economies.
- **EMEA Resilience (8%):** Regulatory mandates (PSD3, Open Banking) creating complexity that favors specialized orchestrators and consolidation plays.
- **North America Maturity (5%):** Growth stabilizing; value migrating from pure processing volume to vertical software integration (ISV) and embedded finance.
- **APAC Saturation (-1%):** Super-app dominance (Alipay, WeChat) and deflationary pressure creating headwinds for new market entrants.

STRATEGIC VALUATION IMPLICATION

Investors are applying a "**Growth Corridor Premium**" of 2-3x revenue multiples for assets with significant exposure to high-velocity markets like Brazil or cross-border connectivity, versus purely domestic developed market players.

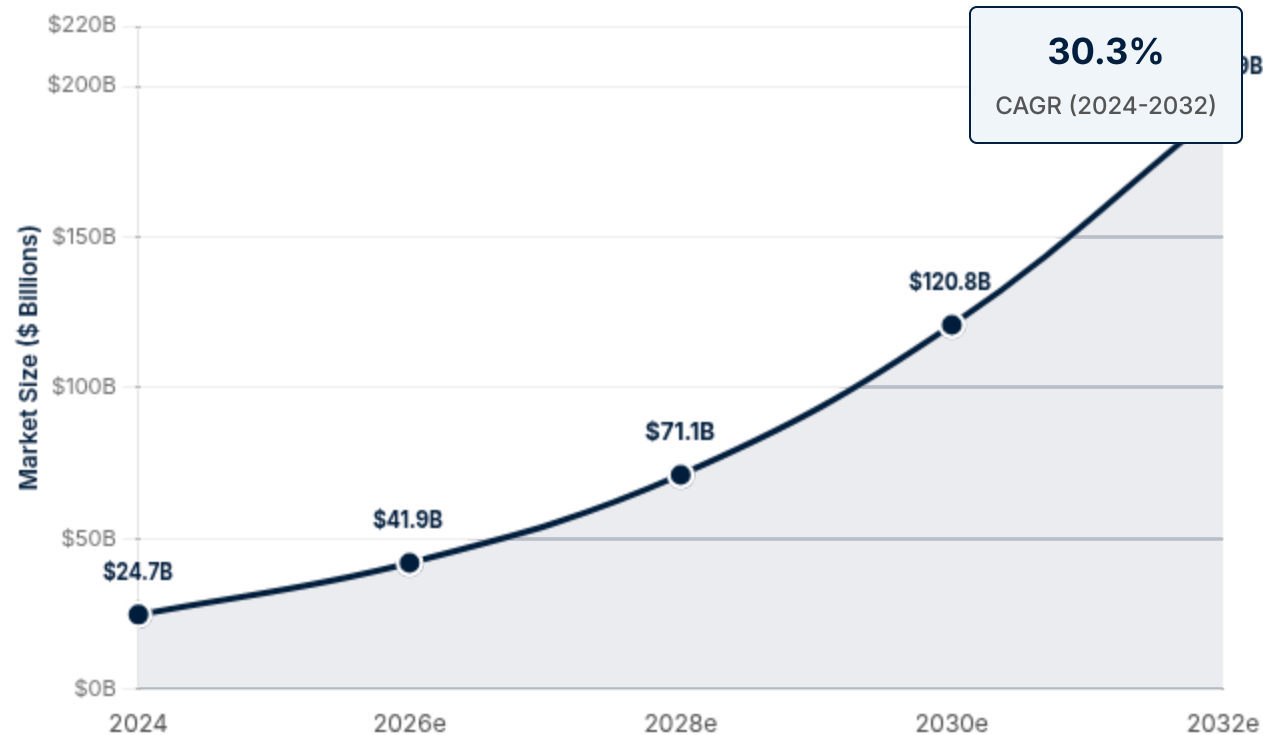
Transaction vs Non-Transaction Revenue — The Divergence



Key Strategic Implications

- **Structural Bifurcation:** Transaction revenues (fees) are decoupling from float-based income, driven by the stabilization of global interest rates.
- **Value Migration:** Economic value is shifting from passive balance sheet operations (holding funds) to active software-enabled movement (moving funds intelligently).
- **Valuation Impact:** Investors are re-rating asset classes; pure-play transaction facilitators with software margins command a premium over float-dependent legacy banks.

Embedded Payments — Distribution via Vertical SaaS



Strategic Insights

- **New Distribution Channel:** Vertical SaaS platforms are displacing traditional banks as the primary financial interface, driving massive adoption velocity.
- **Valuation Pivot:** Investors have shifted focus from raw Gross Payment Volume (GPV) to **Net Revenue Retention (NRR)** and margin quality as key valuation drivers.
- **Monetization Depth:** Revenue models are evolving beyond simple transaction take-rates to productized financial services (lending, issuing, treasury).
- **Implication for Founders:** Valuation premiums now accrue to platforms proving deep "embeddedness"—evidenced by adoption rates >40% within the install base.

B2B Payments Digitization — The \$135T Opportunity

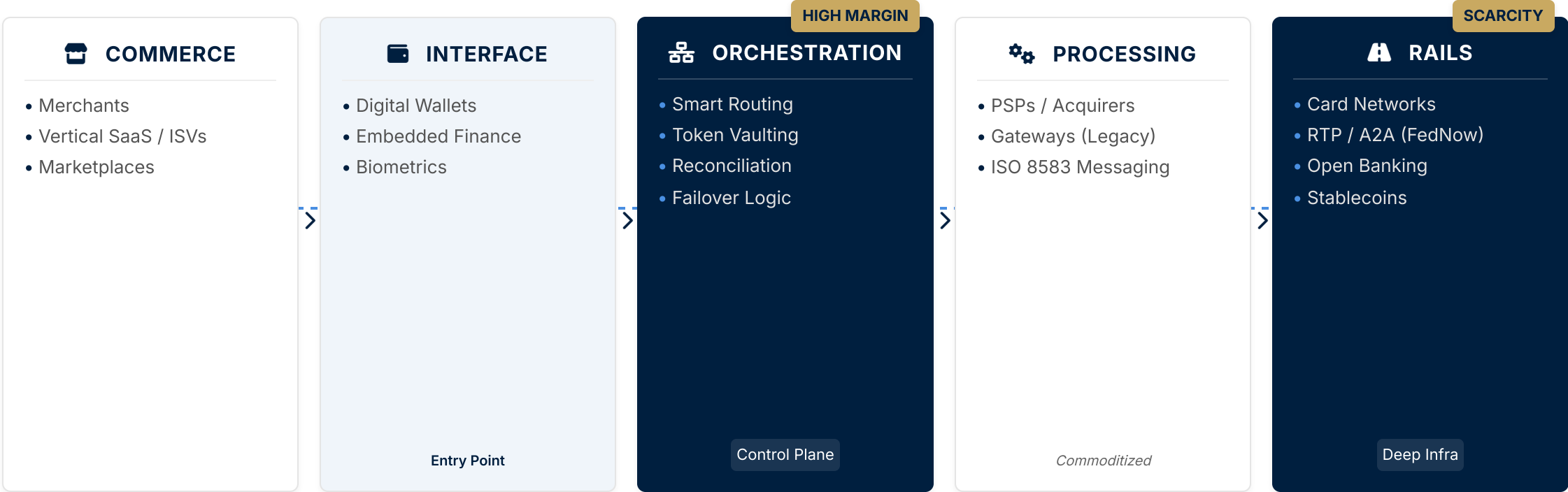


Key Insights

- **Massive Untapped TAM:** \$135 Trillion market opportunity is largely analog, with only 7-10% fully digitized, presenting enormous runway for modernization
- **Workflow Automation Value:** True value lies beyond processing; automated AP/AR reconciliation and ERP integration drives 25-30% operational cost reduction
- **Superior Economics:** B2B platforms demonstrate 3-4x higher LTV than consumer fintech due to sticky workflows and larger transaction volumes
- **Valuation Resilience:** Lower churn rates (<5% annual) and mission-critical nature support premium valuation multiples even in volatile markets

Market Segmentation — Payment Value Chain Ecosystem

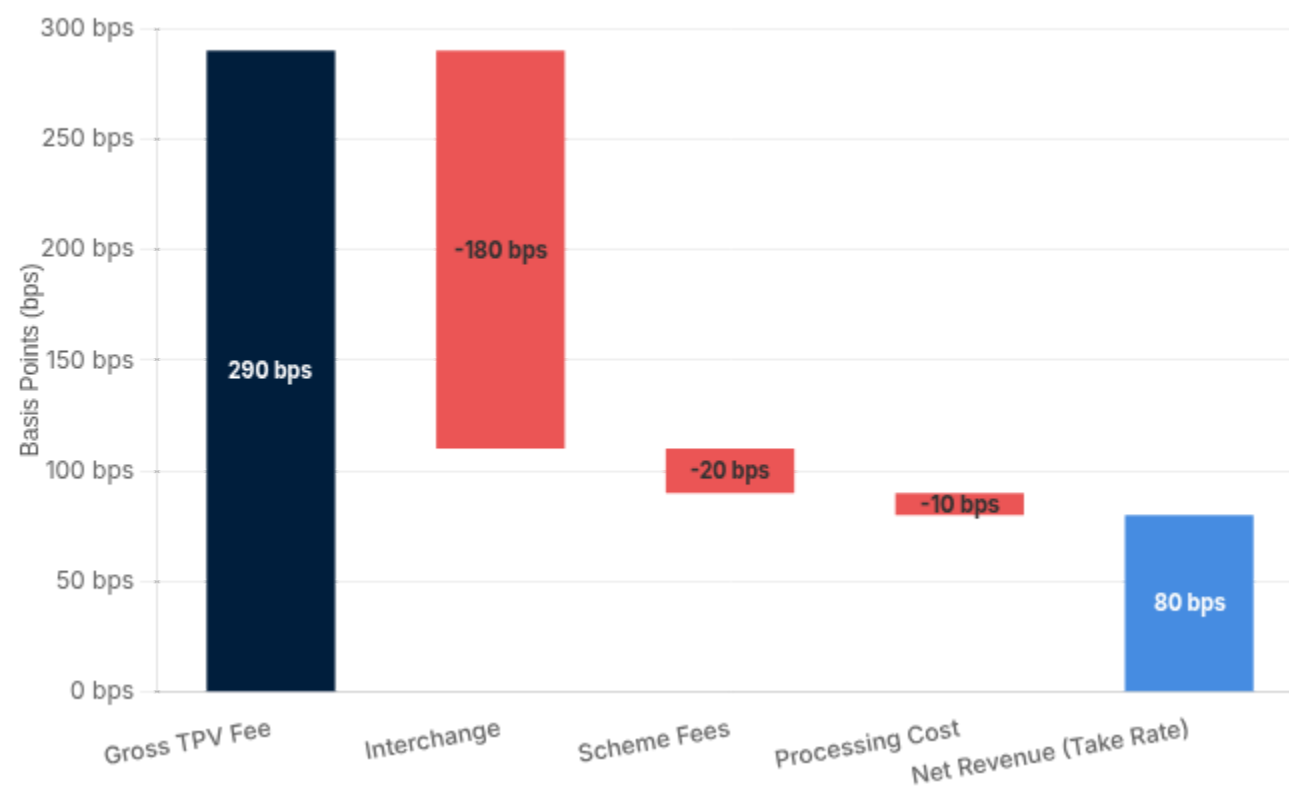
Value is structurally migrating from commodity processing layers to **Orchestration (Control Plane)** and **Infrastructure Rails (Scarcity)**. The "Decoupled Era" favors entities that manage complexity or own the settlement rails, creating distinct margin pools.



Risk & Fraud Layer | KYC / AML • Transaction Monitoring • Identity Verification • Chargeback Management | **Spans Ecosystem**

PayFac Model Deep Dive — Unit Economics & Risk

PayFac Unit Economics Waterfall (Basis Points)



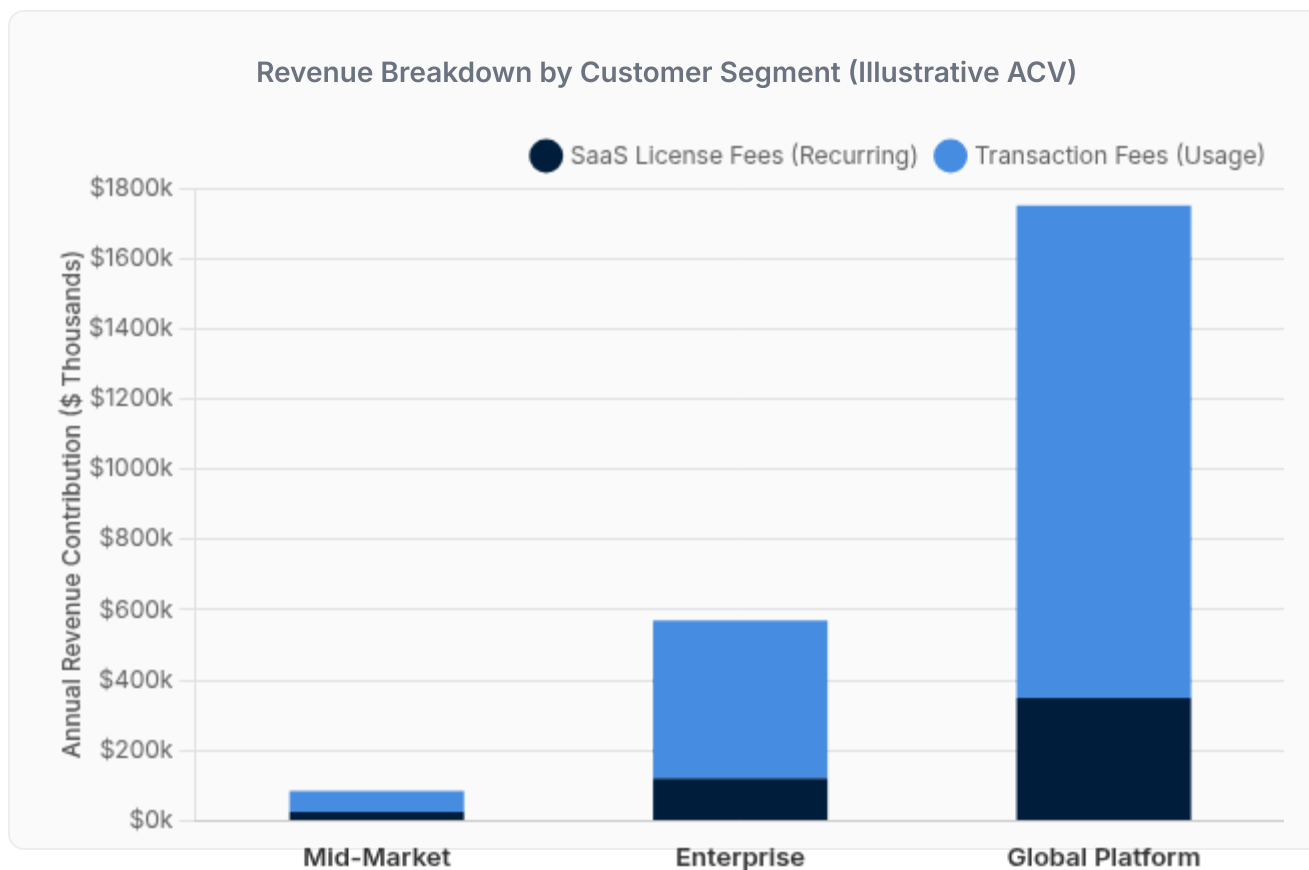
Mechanics & Valuation Implications

- Structurally Capped Margins:** While capture is high (~2.9%), the majority (1.8%-2.2%) flows directly to interchange and schemes, capping PayFac gross margins at **40-60%**.
- Risk Liability Drag:** PayFacs bear 100% liability for fraud and chargebacks. This risk exposure is priced into valuation multiples, keeping them in the **3x-6x** range vs. pure software.
- PFaaS Evolution:** Shift toward PayFac-as-a-Service (e.g., Tilled, Finix) allows platforms to monetize payments (20-40 bps net) without assuming balance sheet risk.

Card Mix Sensitivity

Every 10% shift from Debit to Rewards Credit reduces net margin by ~15-20 bps due to higher interchange.

Payment Orchestration — The Control Plane

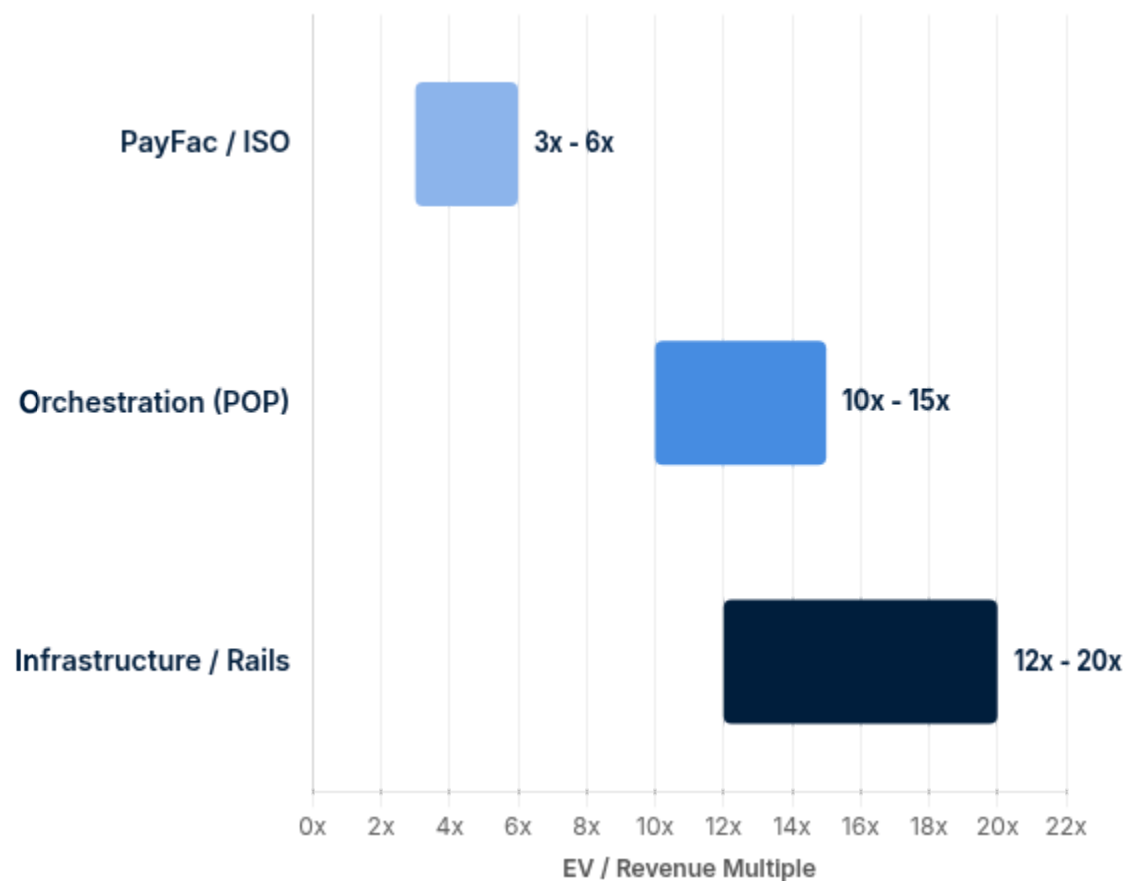


BUSINESS MODEL ARCHITECTURE

High-Margin SaaS Economics

- **70–85% Gross Margins:** Unlike PayFacs, Orchestrators do not touch the funds or pay interchange. Revenue is pure technology licensing + utility transaction fees.
- **Routing Optimization:** Smart failover and multi-acquirer routing increase authorization rates by 2–5%, directly impacting merchant top-line revenue.
- **Strategic Lock-in:** The Token Vault captures the shopper credential, creating high switching costs. Data visibility across processors enables real-time cost arbitrage.
- **"Control Plane" Positioning:** Valued as critical enterprise infrastructure rather than a commodity gateway. Scales linearly with volume but with fixed support costs.

Valuation Multiples by Model (2025–2026)



The Valuation Hierarchy

- **Infrastructure Premium (12-20x):** Scarcity value drives the highest multiples. Building direct connectivity to schemes like FedNow, SEPA, or creating proprietary cross-border rails (e.g., Thunes, Volt) creates defensible moats that are difficult to replicate.
- **Orchestration Value (10-15x):** Investors pay for the "control plane." High gross margins (70-85%) and vendor neutrality position orchestrators as strategic SaaS platforms rather than commodity pipes.
- **PayFac Compression (3-6x):** Despite popularity, PayFac multiples remain compressed due to fraud liability exposure and lower gross margins (40-60%) constrained by interchange fees.

Key Valuation Driver: Technical Sovereignty

Market assigns premium value to entities that control the "token vault" and routing logic vs. those simply reselling processing access.

Valuation Methodologies — EV/Revenue vs EV/EBITDA

Methodology	When to Use	Typical Ranges	Key Adjustments	Advantages	Limitations
EV / Revenue	Early-stage, high-growth companies prioritizing market share over immediate profitability.	3-7x Base 8-12x SaaS (Premium Orchestration)	<ul style="list-style-type: none"> • Net Revenue Retention • Forward Growth Rate • Gross Margin Profile 	<ul style="list-style-type: none"> • Simplicity • Growth-focused • Comparable across pre-profit firms 	<ul style="list-style-type: none"> • Ignores cost structure • Can mask poor unit economics • Less relevant for mature assets
EV / EBITDA	Mature, profitable businesses with stable cash flows (Legacy Processors, Infrastructure).	10-18x+ (High-quality Infrastructure)	<ul style="list-style-type: none"> • Rule of 40 Compliance • Unit Economics • CapEx Requirements 	<ul style="list-style-type: none"> • Reflects profitability • Standard for PE buyouts • Accounts for OpEx efficiency 	<ul style="list-style-type: none"> • Penalizes heavy R&D investment • Subject to accounting adjustments • Misses future growth potential

📌 Strategic Decision Guide

Use EV/Revenue when valuing Payment Orchestration Platforms and high-growth PayFacs where the primary value driver is recurring revenue expansion (SaaS model) and market penetration.

Use EV/EBITDA for legacy acquirers and mature infrastructure assets where cash flow generation and operational efficiency are the primary investment thesis (PE roll-ups).

Revenue Quality & NRR — The New North Star

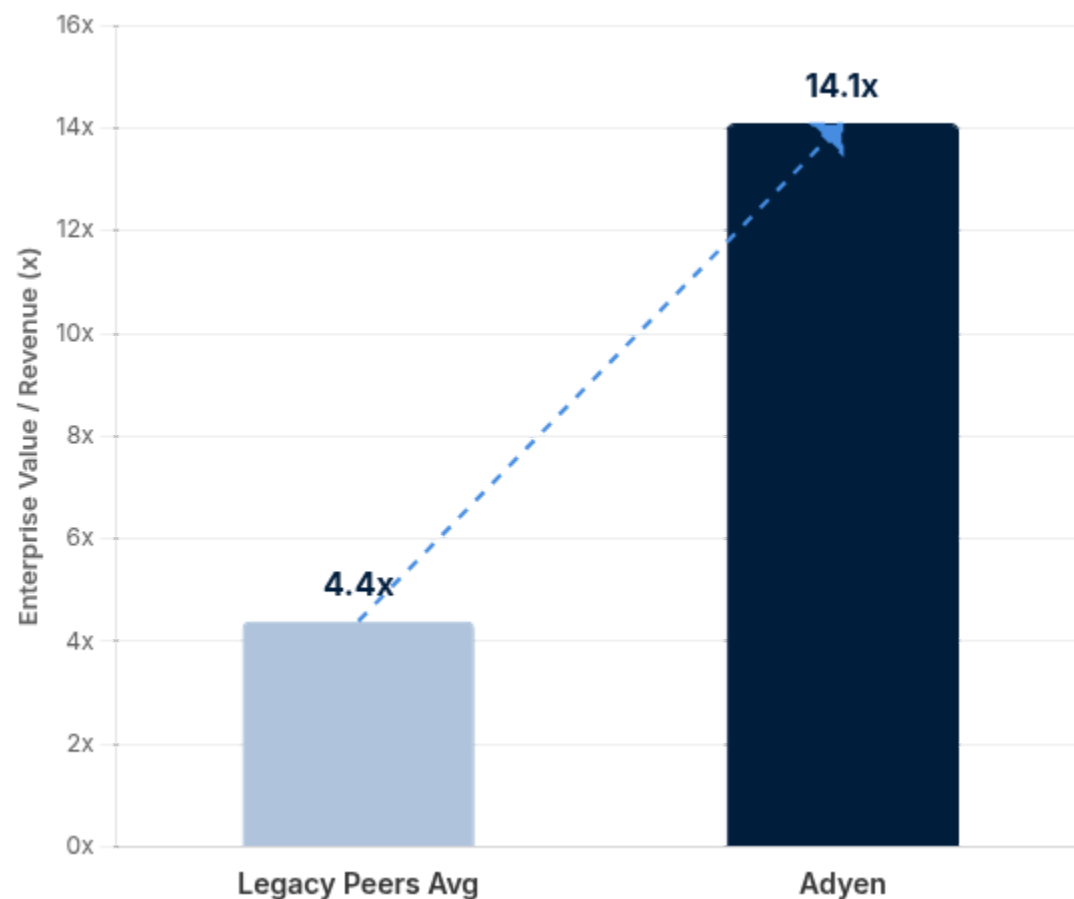
Metric	Target / Benchmark	Strategic Rationale	Premium Multiple Impact
Net Revenue Retention	>110%	Proves product stickiness and ability to upsell value-added services without acquisition cost.	Very High (++++)
Gross Margin	>70%	Differentiates software orchestration from commodity processing; indicates lower COGS.	Very High (++++)
Take Rate Durability	Stable / Increasing	Demonstrates pricing power and defense against interchange compression.	High (+++)
Customer Churn	<5% Annually	Critical for LTV stability; lower churn justifies higher forward revenue multiples.	High (+++)
Cohort Profitability	Positive by Month 12	Validates unit economics and efficiency of sales and marketing spend (CAC payback).	Moderate (++)
Customer Concentration	<30% (Top 10)	Reduces binary risk; acquirers discount heavily for single-client dependency.	Moderate (++)

Strategic Imperative: In 2025–2026 valuation discussions, **Revenue Quality > Absolute TPV**. Investors are prioritizing the predictability and margin profile of the revenue over top-line processing volume.

The "Adyen Premium" Analysis

EV/Revenue Multiple Comparison

The valuation gap reflects structural superiority



Why the Gap Exists:

Legacy platforms (Global Payments, FIS, Fiserv) trade at compressed multiples due to fragmented backends from M&A roll-ups ("spaghetti code"), creating technical debt that hampers innovation and increases CapEx.

14.1x

EV/REVENUE

vs. 4.4x Industry Avg

45%+

EBITDA MARGIN

Industry-leading efficiency

Single

CODE BASE

Zero technical debt

>220%

VALUATION PREMIUM

Over legacy peers

Key Valuation Drivers

- **Unified Architecture**

Built entirely in-house on a single platform (Gateway + Risk + Acquiring), creating massive operating leverage where incremental volume costs near zero.

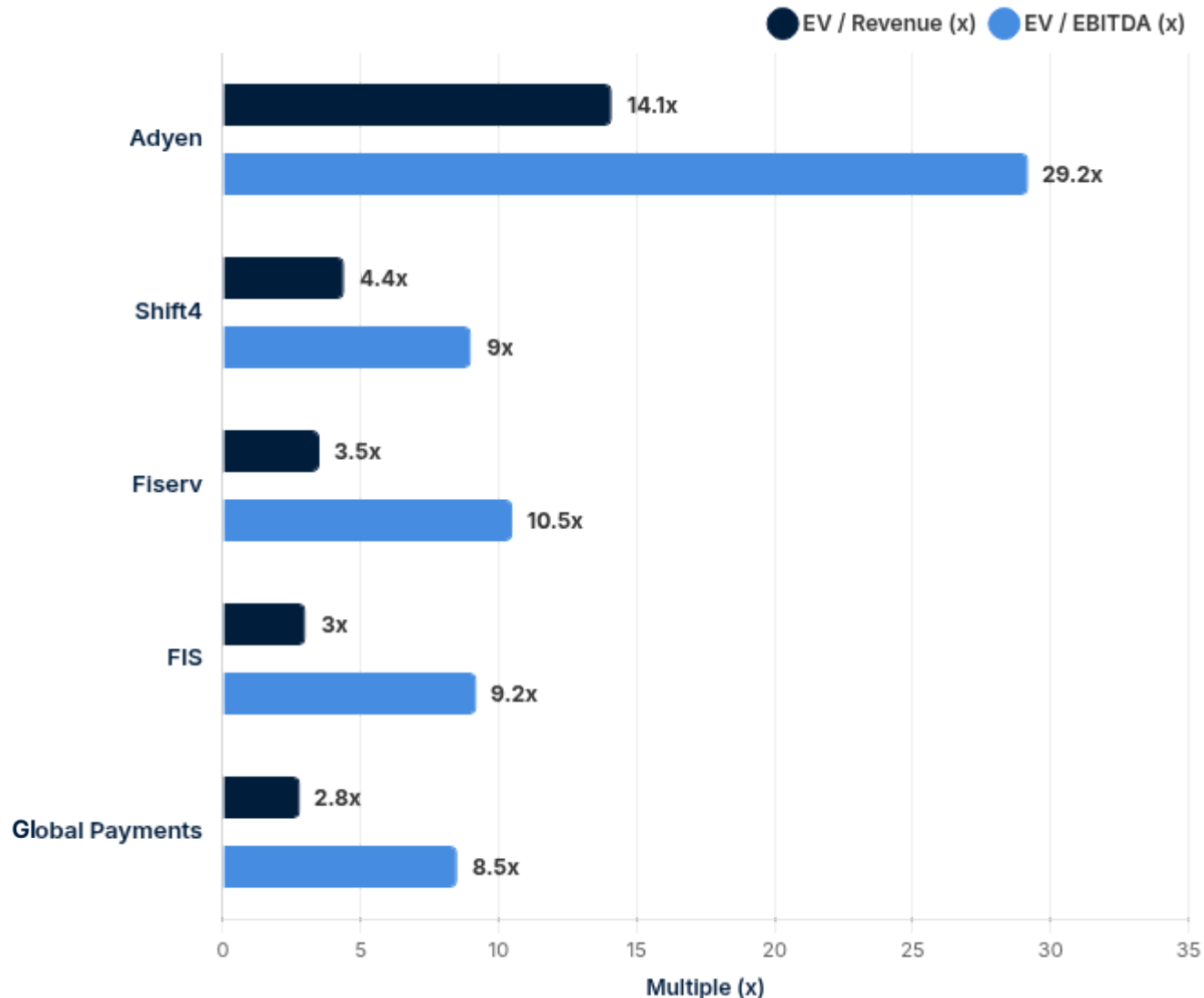
- **Orchestration-Native**

Acts as both processor and data control plane, offering enterprise merchants global visibility and optimization that fragmented legacy providers cannot match.

- **Organic Growth Profile**

Growth driven by product innovation and merchant expansion rather than M&A, resulting in cleaner financials and higher quality revenue.

Public Market Comparables — Trading Multiples



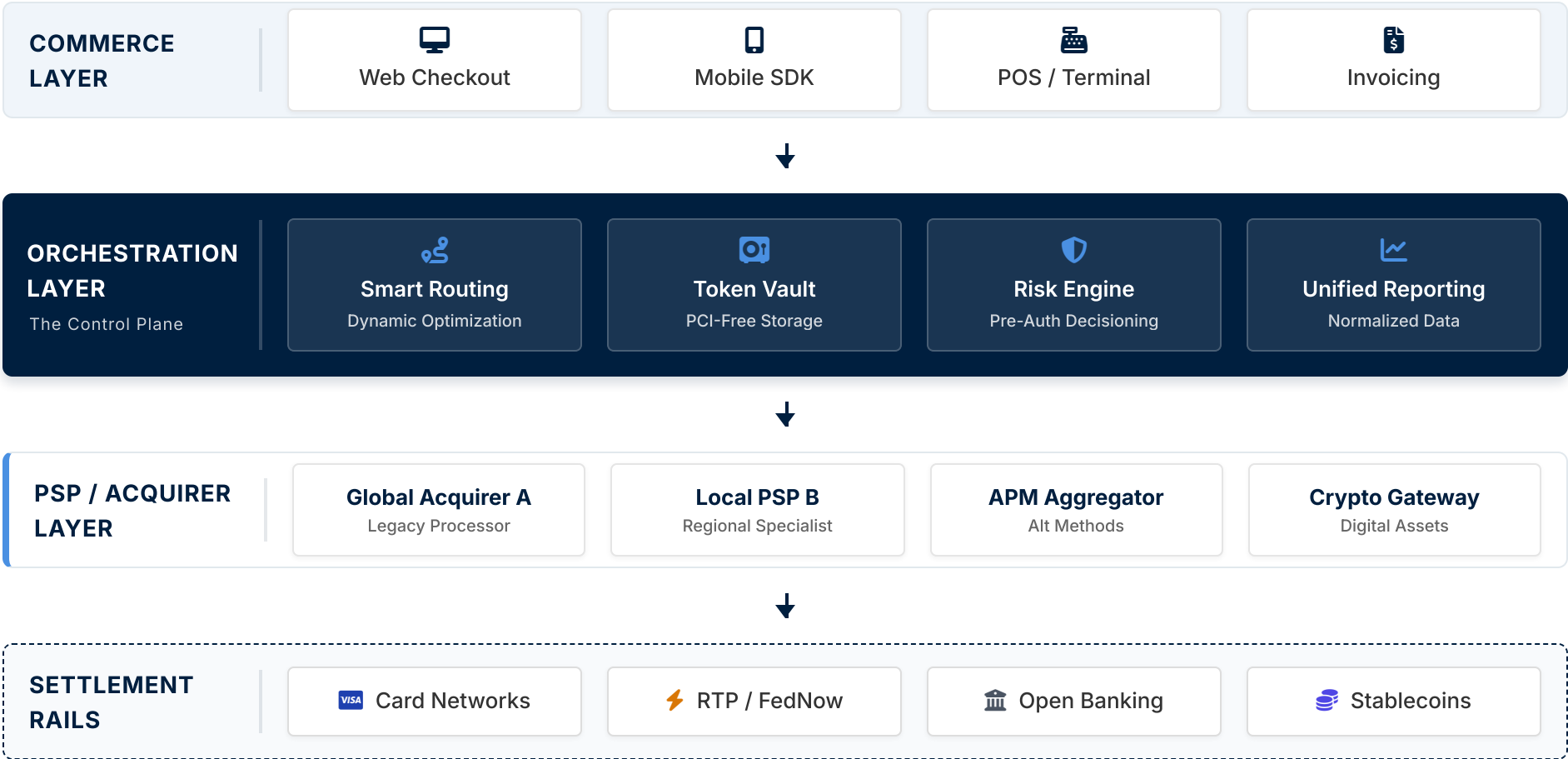
Valuation Drivers & Market Sentiment

- The Efficiency Premium:** Adyen's 14.1x revenue multiple reflects its single code base architecture and 45%+ EBITDA margins, creating immense operating leverage compared to peers.
- Vertical Focus Value:** Shift4 commands a respectable 4.4x revenue multiple driven by deep vertical integration (hospitality/stadiums) despite lower scale than legacy giants.
- Legacy Discount:** Global Payments, FIS, and Fiserv trade at compressed multiples (2.8x–3.5x revenue) as investors discount future cash flows due to technical debt and integration challenges.

Strategic Implication

Founders seeking premium exits must model their architecture after Adyen (unified stack) rather than the M&A roll-up strategies of legacy incumbents.

Technology Stack — Reference Architecture



CLOUD NATIVE
Containerized microservices architecture for infinite scalability and 99.999% uptime SLAs.

SECURITY
Zero-trust environment with field-level encryption. PCI-DSS Level 1 certified vault.

COMPLIANCE
GDPR/CCPA compliant data sovereignty. Localized instances for data residency.

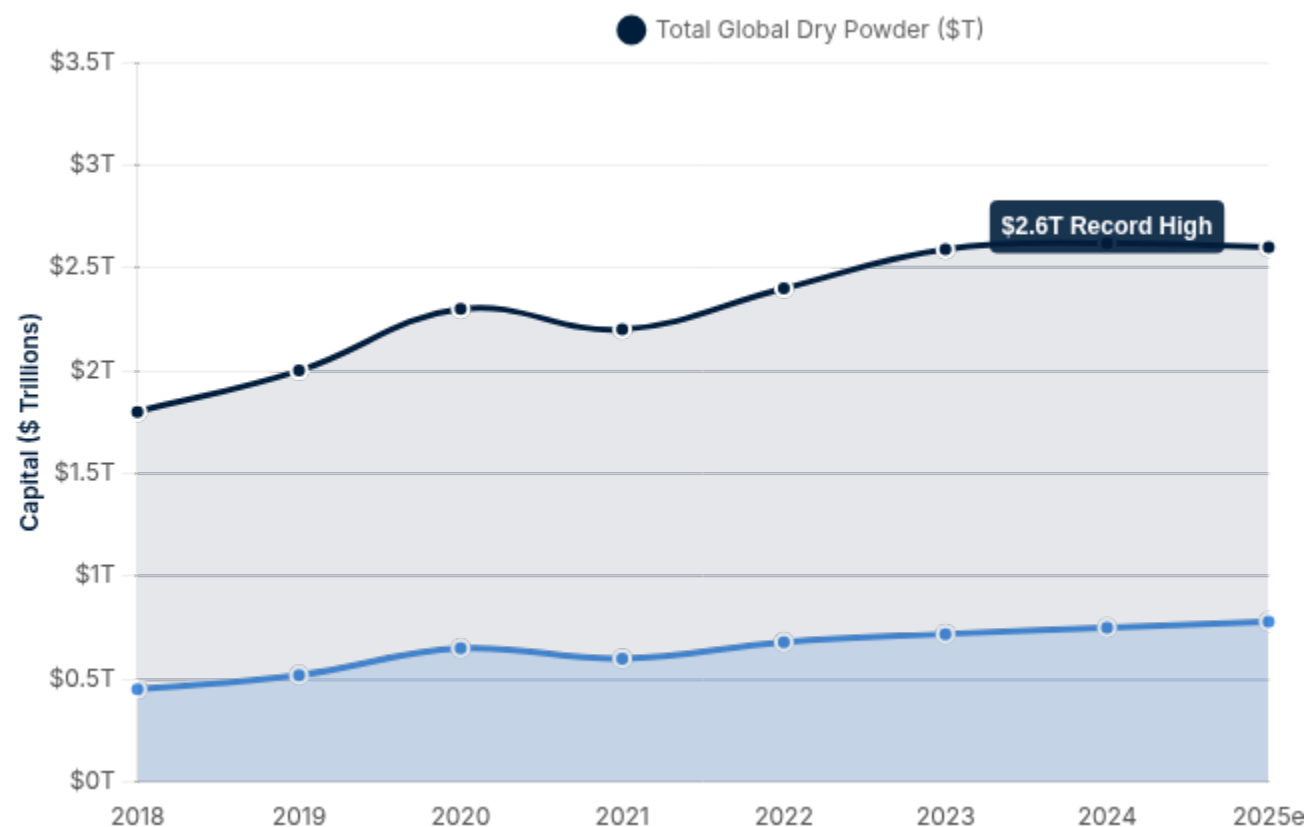
Key Players by Category — Ecosystem Landscape

Category	Representative Players	Strategic Positioning
Full-Stack Providers	Stripe, Adyen, PayPal, Square	End-to-end payment processing with simplicity focus; creating closed loops but higher vendor lock-in risk.
Payment Orchestrators	Spreadly, Gr4vy, IXOPAY/TokenEx, ACI Worldwide	Agnostic routing layer sitting above processors; maximizing authorization rates and minimizing cost via smart routing.
Infrastructure / Rails	Thunes, Volt, Form3	Direct connectivity to global networks (RTP, Open Banking); creating scarcity value through hard-to-replicate banking integrations.
Risk & Fraud	Sift, Forter, Riskified	Specialized decision engines leveraging vast data networks; critical for reducing chargeback liability in high-velocity models.
PayFac-as-a-Service	Tilled, Finix, Infincept	Modular infrastructure allowing vertical SaaS to monetize payments without full compliance burden or risk exposure.

Recent Transactions — Signals from the Tape

Acquirer → Target	Date	Value	Multiple	Strategic Rationale
Advent → Nuvei	Apr 2024	\$6.3B	~13x EBITDA (56% Premium)	Privatization of high-margin (37% EBITDA) asset pivoted from crypto/gaming to stable B2B enterprise commerce.
Stripe → Bridge	Oct 2024	\$1.1B	N/A	Largest crypto acquisition by a payments company; securing stablecoin infrastructure for cross-border settlement rails.
IXOPAY + TokenEx	Apr 2024	Undisclosed	Merger	Creates definitive "agnostic" orchestration leader combining smart routing (IXOPAY) with universal tokenization (TokenEx).
Thunes (Series D)	Jul 2025	\$150M Raise	\$1.4B+ Val (Scarcity Prem)	Valuation driven by proprietary "Direct Global Network" connecting 130+ countries, bypassing legacy correspondent banking.
Volt (Series B)	Jun 2023	\$60M Raise	\$350M+ Val	Bet on Open Banking/A2A payments cannibalizing card volume; infrastructure play to be the "Visa" of real-time payments.
Fiserv → Tilled	Est. 2025	Strategic	~8x Rev	Consolidation of PayFac-as-a-Service (PFaaS) to capture vertical SaaS volume distribution without building internal stack.

Private Equity Supercycle — Dry Powder to Work



Capital Deployment Dynamics

- **Record Dry Powder:** Global PE dry powder has reached **\$2.6T**, with fintech allocations surging as valuations stabilize and public markets reopen.
- **Deal Theses:** Activity driven by platform modernization plays, carve-outs from legacy processors (e.g., Worldpay), and aggressive buy-and-build roll-up strategies.
- **Value Creation:** Focus has shifted from multiple arbitrage to operational improvements, bolt-on acquisitions for vertical density, and margin expansion.
- **Extended Hold Periods:** Average hold periods trending toward 5-8 years, allowing time for deeper technological transformation and cloud migration.

ACTIVE FINTECH INVESTORS

Advent International

Thoma Bravo

GTCR

Vista Equity Partners

Silver Lake

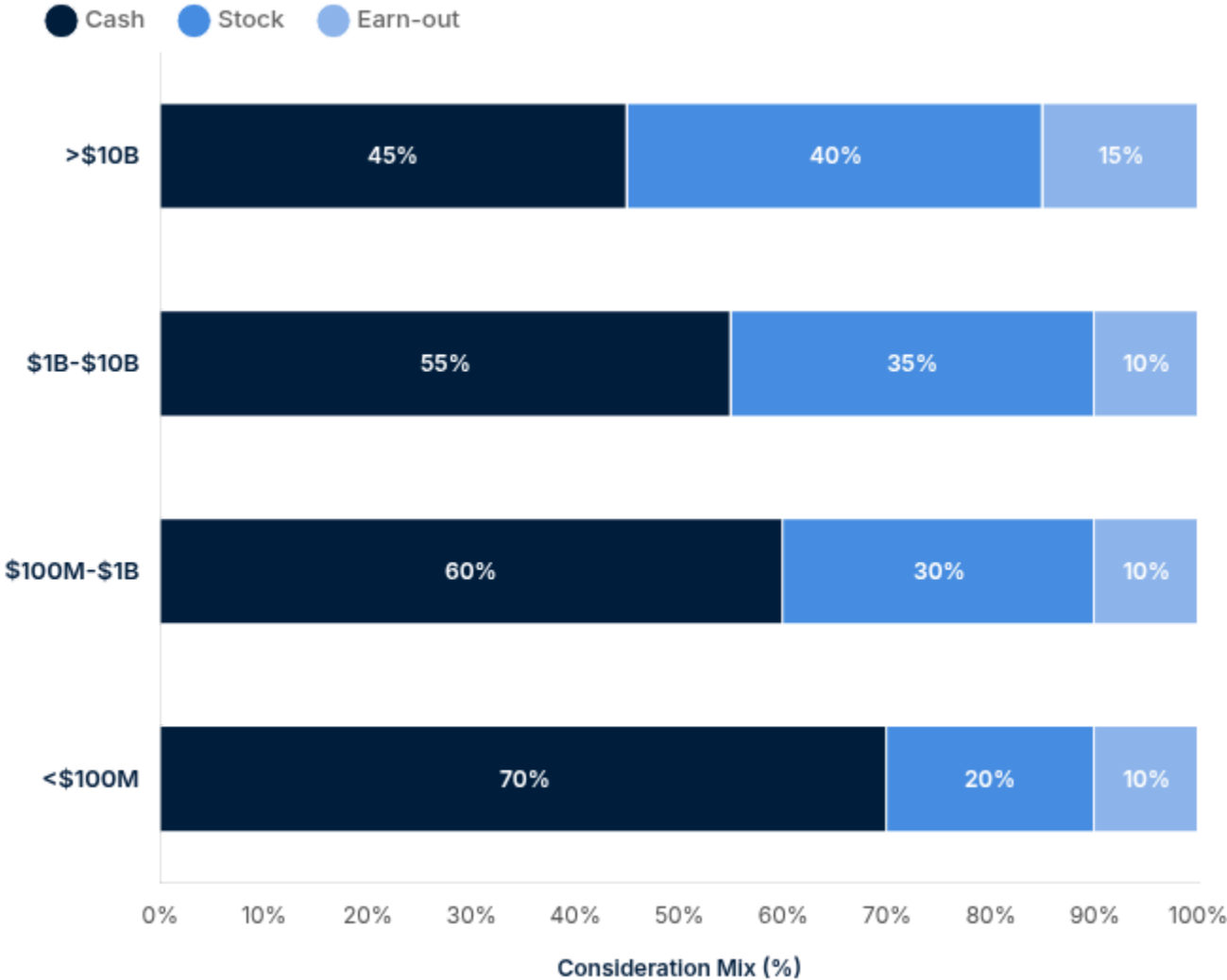
Strategic Acquirer Landscape — Who's Buying & Why

Acquirer	Focus Areas	Recent Activity / Signal	Geographic Strategy	Typical Deal Size
Global Payments	Vertical SaaS, B2B, Orchestration	Acquired multiple ISVs; seeking orchestration to modernize stack	North America / Europe	\$500M - \$5B+
FIS / Worldpay	Cross-Border, E-comm, Capital Markets	Post-spin restructuring; focus on high-growth e-commerce assets	Global (Cross-Border focus)	\$1B - \$10B
Fiserv	Merchant Acceptance, POS, Banking	Clover ecosystem expansion; banking-as-a-service capabilities	North America / LatAm	\$200M - \$2B
Visa	Value-Added Services, Open Banking, Risk	Acquiring "network agnostic" rails (e.g., Tink, Currencycloud)	Global (Emerging Markets)	\$100M - \$5B
Mastercard	Cybersecurity, Data Analytics, Identity	Heavy investment in digital identity and fraud prevention layers	Global (Africa / MEA focus)	\$50M - \$3B
PayPal	Orchestration, Checkout, Omni-channel	Modernizing Braintree stack; seeking B2B workflow tools	Europe / APAC	\$500M - \$4B
JPMorgan	Payments Platform, Vertical Integration	Building proprietary "Renovite" stack; buying vertical leaders	Global Expansion	\$200M - \$1B+
Bank of America	Merchant Services, Healthcare Payments	Re-insourcing merchant capabilities; healthcare vertical focus	North America Dominated	\$100M - \$500M

Strategic Rationale & Valuation Driver:

Legacy processors (Global, FIS, Fiserv) are aggressively acquiring orchestration and vertical SaaS to stop churn and modernize "spaghetti code" tech stacks. Networks (Visa, Mastercard) are paying premium multiples for infrastructure that protects against disintermediation by A2A/RTP rails.

Deal Structuring & Financing Options



Structure Evolution by Deal Size

- **Cash Dominance in Lower Market:** 70% of sub-\$100M transactions are all-cash, reflecting simpler financing and desire for speed/certainty in smaller acquisitions.
- **Stock as Currency at Scale:** Equity components double from 20% to 40% as deal size exceeds \$10B, used to bridge valuation gaps and align long-term interests.
- **Risk Mitigation Standards:** Representations & Warranty Insurance (RWI) is now standard for deals >\$500M. Working capital adjustments feature in 90% of transactions.
- **Leverage Dynamics:** Private credit markets are increasingly enabling higher leverage multiples for mid-market sponsor-backed deals.

Earnout Prevalence (Mid-Market)

~10-15%

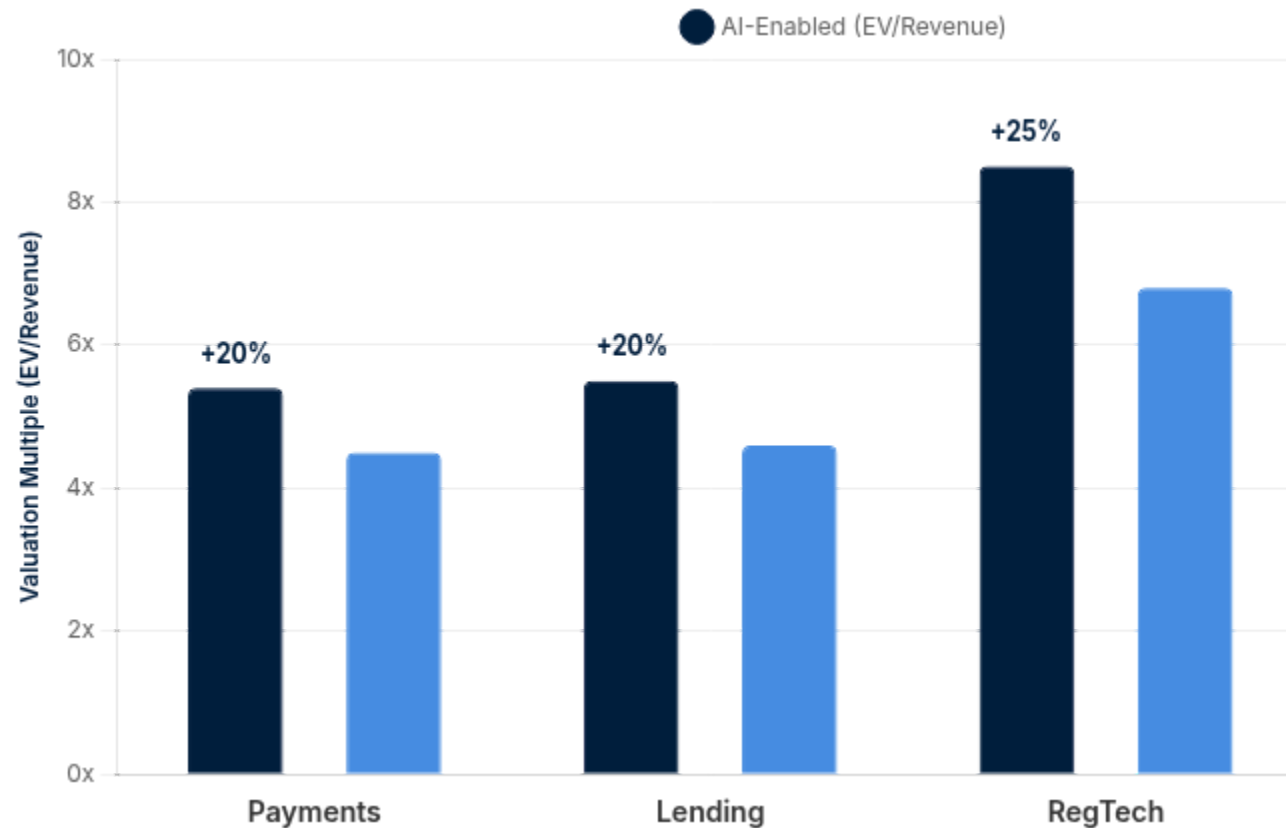
Used primarily to bridge valuation gaps in high-growth orchestration assets

Cross-Border M&A — What to Plan For

Consideration	NA ↔ EU	NA ↔ APAC	EU ↔ APAC
Regulatory Approval Timeline	6-12 months CFIUS, FTC, EU merger control	9-18 months Complex multi-jurisdiction review	8-14 months EU merger control + local approvals
Data Localization Requirements	GDPR compliance DPA review required for transfers	Varied by country China, India restrictive; Singapore flexible	GDPR + local Conflicting requirements common
FX/Repatriation	Moderate complexity Stable currency pairs, minimal controls	High complexity Capital controls in multiple markets	Moderate Euro simplifies but APAC controls apply
Tax Structuring	Treaty network Well-established avoidance structures	Complex withholding Local substance requirements	EU directives Beneficial parent-subsidiary treatment
Employment/IP Transfer	Straightforward TUPE applies but manageable	Complex labor laws IP protection challenges in some regions	Mixed EU protections with APAC enforcement gaps

Valuation Impact: Multi-region compliance capability adds a **15-20% valuation premium**. Acquirers pay up for assets that have already solved the "fragmentation problem" of operating across disparate regulatory regimes (GDPR, PSD3, local data laws), viewing this as a significant reduction in post-merger integration risk and time-to-value.

AI Premium — Quantified Uplift



+242%

Valuation premium for early-stage AI-enabled fintech startups vs. traditional counterparts (PitchBook Q3 2025)

Key Value Drivers

- **Auth Rate Optimization:** ML models dynamically route transactions and predict bank declines, directly increasing top-line revenue.
- **Agentic Workflows:** Autonomous payment execution agents reduce human intervention in B2B accounts payable/receivable.
- **Ops Automation:** AI-driven support and reconciliation significantly compress COGS, expanding gross margins.

Regulatory Environment — Key Developments & Impact

Q2-Q4 2025

Sept 2025

Q3 '25 - Q1 '26

Q4 2025

US Deregulation

Momentum shifts toward reducing compliance burdens for fintechs. Approval timelines for standard licenses compressed by 35%.

VALUATION IMPACT

Faster time-to-market increases NPV of new product launches.

GENIUS Act

Comprehensive stablecoin regulatory framework enacted. Provides legal clarity for non-bank issuers and payment rail operators.

VALUATION IMPACT

+25% uplift for stablecoin infrastructure assets due to legitimacy.

EU PSD3 Rollout

Third Payment Services Directive implementation. Stricter auth requirements and open banking standardization drive consolidation.

VALUATION IMPACT

Sub-scale players forced to merge; platform premiums rise.

Cross-Border Harmonization

Alignment between major jurisdictions (US, UK, EU, Singapore) on data localization and AML standards improves deal certainty.

VALUATION IMPACT

Cross-border M&A execution risk reduced; liquidity deepens.

Key Takeaways — Valuation & Strategy

01

Valuation Hierarchy

Capital markets clearly distinguish asset classes. Premium multiples accrue to **Orchestration (10–15x)** and **Infrastructure (12–20x)**. In contrast, PayFac models trade at a compressed **3–6x** due to fraud liability and lower margins.

02

Revenue Quality Over Volume

Total Payment Volume (TPV) is no longer the primary proxy for value. Investors prioritize **Net Revenue Retention (NRR)**, gross margin expansion, and control over payment data ("The Vault") as the new drivers of enterprise value.

03

Technology as Multiplier

Technical debt is a valuation drag. Platforms with **AI integration** (fraud, ops, auth) command a 20–30% premium. Unified, single code base architectures are valued significantly higher than fragmented roll-up stacks.

04

M&A Readiness Critical

Strategic acquirers and PE firms demand rigorous diligence. A premium exit requires a clean technical architecture, full **SOC 2 compliance**, and transparent unit economics that clearly separate SaaS revenue from transaction fees.

05

Strategic Growth Focus

The highest growth trajectories lie outside consumer payments. Focus on **B2B workflows** (AR/AP automation), complex cross-border corridors, and next-gen rails like **RTP and stablecoins** to maximize forward multiples.

Sources & Methodology (1/2)

Institution	Report / Publication	Date
Goldman Sachs	2026 M&A Outlook: Dealmakers Deliver	January 2026
Goldman Sachs	Global Dealmaking Trends: Driving Growth	Q4 2025
Morgan Stanley	Stablecoins – Modernizing Financial Infrastructure	2025
Morgan Stanley	Infrastructure Investment Thesis & Outlook	October 2025
J.P. Morgan	POWER+ Framework: Payments Are Eating the World	2025
J.P. Morgan	Cross-Border Payments Analysis & Trends	2025
McKinsey & Company	The 2025 Global Payments Report	September 2025
McKinsey & Company	Global Payments in 2024: Simpler Interfaces, Complex Reality	2024
BCG	Global Payments Report 2025: The Future Is Anything but Stable	September 2025
Bain & Company	The Fragmentation of Wholesale Payments	2025
Bain & Company	Global Technology Report 2025	September 2025

Sources & Methodology (2/2)

Source Institution	Report Title	Published / Reference Date
FT Partners	Fintech Almanac & Quarterly Insights	Q4 2025 / Annual 2025
PitchBook	AI Premium Analysis & Fintech M&A Data	Q3 2025 Analyst Note
Houlihan Lokey	FinTech Market Update	Q3 2025
Market Growth Reports	Payment Orchestration TAM 2035	September 2025 Forecast
Thunes / Volt	Series D / Series B Funding Announcements	2025 Press Releases
Nuvei / Advent	Acquisition Filings (SEC / SEDAR)	Q2 2025 Transaction Docs
IXOPAY / TokenEx	Merger Announcement	April 2024 / Integration Updates 2025
Stripe	Acquisition of Bridge	Q4 2024 / Q1 2025 Integration
Deloitte / PwC / EY / KPMG	Global Fintech & Payments Sector Updates	H1 & H2 2025 Reports