Is a fully integrated card value chain the future of payments?

2025 White paper

As the industry undergoes rapid transformation, we examine the pros and cons of a fully integrated payments value chain delivered by a single provider. Are such arrangements really the best choice for banks, their customers and partners?

Over the last decade, the payments industry has been engulfed by change. Like the media and retail sectors before it, the payments business is experiencing a digital revolution. The implications of this have affected every part of the sector, from payment methods through to acquiring, processing and even regulation.

A few statistics will suffice: over the next five years, the number of merchants accepting all kinds of electronic payment will grow by 30% globally as more SMEs and micro-businesses awaken to the power of digital[1]. Since 2015, business-to-consumer e-commerce has grown by more than 420% world-wide to reach $7.9 trillion dollars[2] – a figure larger than the combined economic output of the UK and Germany, and one that does not include the much larger business-to-business (B2B) market. At the same time, new payment methods, from digital wallets to account-to-account payments, Buy Now, Pay Later (BNPL) and more have disrupted the old "cash or card" model.

420% growth in consumer e-commerce over the last decade

CREDIT = Markin Research

As business has gone digital, fraud has followed – and new fraud types from Account Takeover (ATO) to synthetic ID and Authorised Push Payment (APP) fraud are threatening the future of digital business. It is estimated that APP Fraud alone will cost the payments industry nearly $6 billion dollars annually by the end of 2026[3]. To counter these trends, regulators are introducing increasingly stringent demands, from the European Union's new Digital Operations Resilience Act (DORA), and its upcoming third payment services directive (PSD3) through tough new data protection measures under the US's Dodd-Frank Act.

[1] *The Digital And Card Payment Yearbooks 2024-2025* at www.paymentyearbooks.com

[2] Markin, "e-commerce growth 2014-2025": https://www.markinblog.com/ecommerce-statistics/

[3] *Fintech Global*, 10 August 2023: "Is APP fraud the biggest threat to FinTechs?": https://fintech.global/2023/08/10/is-authorised-push-payment-fraud-the-biggest-threat-to-fintechs/

Retail banking: not an easy road

As if this were not enough, banks and fintechs find themselves under significant pressure – not just from Google Pay, Apple Pay and others, but also from non-bank financial institutions (NBFIs) like Klarna and Afterpay that are moving into payments from their base in BNPL and other sectors such as insurance.

After a long period of stagnant growth, retail banks remain under pressure to deliver higher margins and more revenues, while fintechs – long the darlings of the venture capital and private equity communities – are now finding funding harder to come by and are under pressure to prove their business models can scale and deliver profit.

Partnering across the entire value chain

Under such conditions, some analysts argue that banks and fintechs can achieve better revenue growth and higher margins – as well as unleashing innovation – by consolidating all their payments needs with a single provider under a "whole value chain" approach.

This argument contends that banks can offer enhanced security, improved efficiency, and create a much better customer experience by working with an external partner to deliver top-quality fraud prevention, payment processing, and card or digital payment production. A single-provider model, so the argument runs, presents significant advantages in terms of cost reduction, security, and operational efficiency.

> "Fragmented approaches are expensive, with McKinsey estimating banks spend 70% of IT budgets on updates and maintenance."

Traditionally, the payments value chain has been fragmented, with multiple vendors handling different parts of the chain. Proponents of a "full value chain" model argue that while this kind of arrangement has enabled rapid evolution through patching and upgrades to existing systems as providers are brought in to solve specific issues, it has not solved the problem of core technologies being outdated – nor has it helped banks gain a system-wide understanding of performance, efficiency or risk. Further spend around 70 cents in every dollar on updating and maintaining legacy systems.[4] Clearly, this leaves little room for investment in innovation, new product development – or profitability.

[4] McKinsey & Co, 2 December 2024: "AI for modernization: faster, cheaper, better" : https://www.mckinsey.com/capabilities/quantumblack/our-insights/ai-for-it-modernization-faster-cheaper-and-better

Chained together: what makes up the value chain?

Before assessing the benefits and risks of adopting a "full value chain" approach with an external provider, it is worth reviewing what this means. Put simply, the full value chain model sees a bank or fintech partnering with a single provider for all its card business needs, from fraud prevention through payment processing and card production and personalisation. Within these three areas, as shown below, there are a wide range of elements which, taken together, constitute a comprehensive, end-to-end service arrangement.

The Card Payments Value Chain: Key Components

A fully integrated card payments ecosystem comprises:

- Fraud Prevention: Real-time AI-driven fraud detection, risk scoring, and regulatory compliance.
- Card Processing & Solutions: Seamless transaction authorisation, settlement, and reconciliation. Reliable, cost-effective and flexible full spectrum card solutions.
- Personalization: Custom card issuance, digital wallet branding, and customer engagement tools.

Making the case for a whole-chain approach

The argument in favour of adopting a "full value chain" approach focuses on operational efficiency, simplification, integrated processes, and better customer experience. At the most basic level, proponents argue, card operations become more efficient as transaction processing becomes streamlined, settlement times are faster, and costs are reduced – all because there are fewer actors involved in the process.

For the same reason, the risk of fraud or system failure is arguably lower, as processing does not rely on several actors, any of whom might experience problems at any given moment. Sticking with fraud, it is also argued that system-wide security is improved as fraud detection and prevention systems can be centralized and can employ AI and machine learning to identify fraud as it is happening at any point in the transaction life cycle.

Other functions can also be simplified or streamlined. Because processing is handled by a single entity, reconciliation and reporting are made easier and faster, while error rates are lower thanks to increased automation and standardized data and software formats employed by a single provider. Likewise, working with a single provider makes it easier for both the provider and the client bank to maintain regulatory compliance with PCI DSS, GDPR, PSD2/3, the EU's Corporate Social Responsibility Directive (CSRD) and other legal requirements, rather than needing to maintain compliance with multiple partners, and at times employ different processes and programming languages to update systems.

Finally, in the all-important area of customer experience, those preferring the "whole value chain" approach say that it enables the more rapid adoption of new payment methods such as digital wallets, wearables and open banking payments to cater to the whole range of customer preferences – as well as integrating payments across a number of channels from POS and online through to mobile commerce. Based on rich transaction data drawn from across the value chain, banks and fintechs can also personalise customer offerings, including cards themselves, and create new products – not to mention using that data, delivered in real time, to improve operational management and fraud detection.

Possible drawbacks of a “full chain” approach

While there are numerous benefits to working with a single supplier across the full payments value chain, there are also potential downsides that banks and fintechs should consider, not least being dependent on a single supplier for all your payments needs. Relying on one supplier for all aspects of your card business can create a dependency that may be difficult to manage.

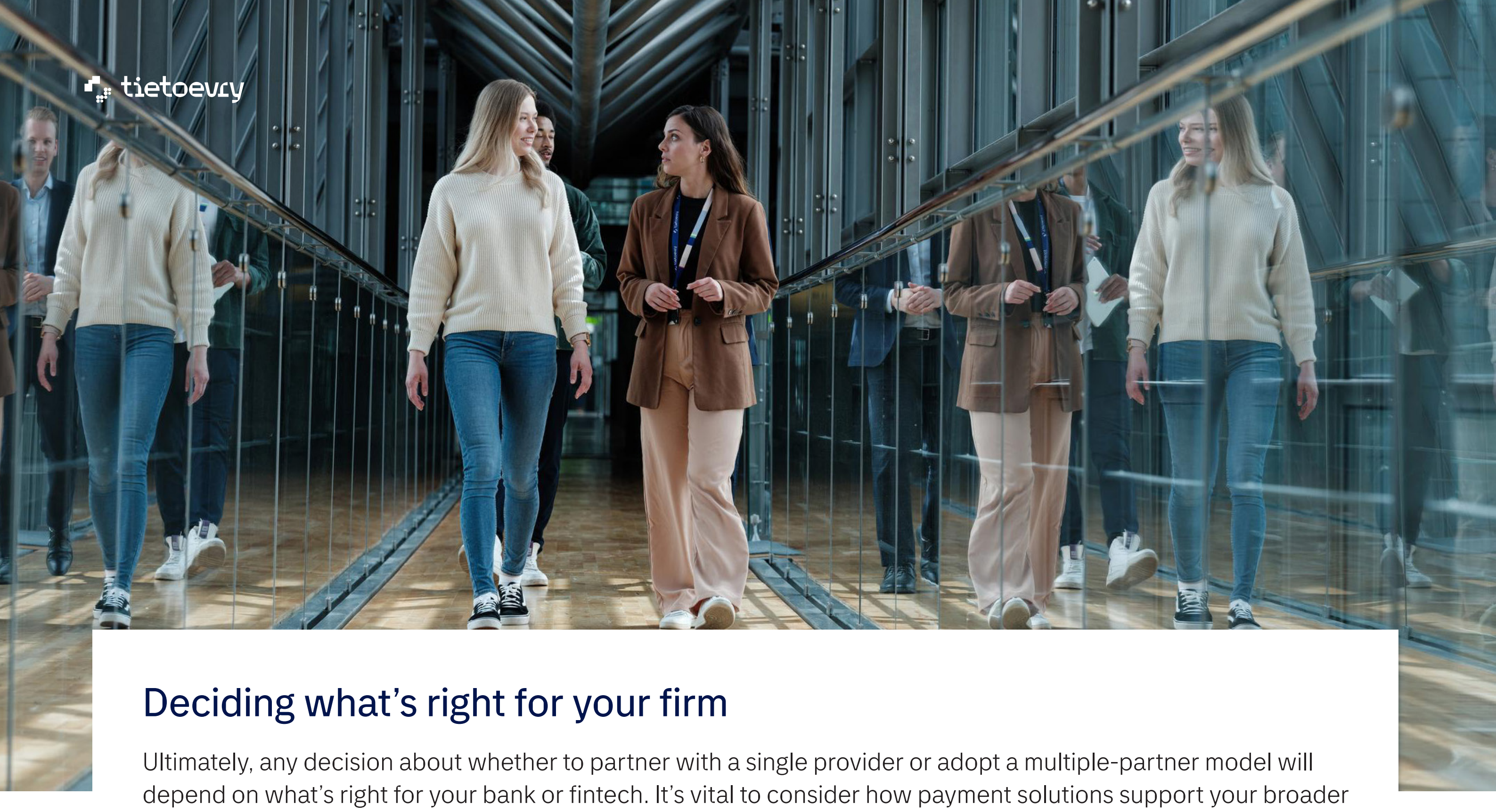
If the supplier faces operational issues or fails to meet expectations, the bank’s entire card issuing process could be disrupted. However, some argue that this risk can be mitigated by the supplier’s comprehensive understanding of the entire supply chain, which allows for quicker adaptation when issues arise. Furthermore, full value chain suppliers tend to have access to wide processing networks (as one example) and operate with considerable redundancies in their systems, meaning that any issues can be more quickly resolved.

There is also the argument that migrating existing systems to a single provider’s platform can be complex and resource-intensive in the short term, requiring significant planning and investment. Here, proponents of the full value-chain approach would argue that their teams of experienced integration, project management and software development professionals are more than capable of handling such complexity on their clients’ behalf.

Another downside is the limited flexibility that comes with a full value chain supplier. While these suppliers offer comprehensive solutions, they may also limit the bank’s flexibility to choose specific services or vendors for certain components of the value chain. This could restrict the bank’s ability to tailor solutions to their unique needs. On the other hand, the integrated approach of full value chain suppliers can lead to more streamlined and efficient operations, which can offset the lack of flexibility.

Then there’s the potential for higher costs. Although full value chain suppliers can deliver cost savings through economies of scale, there is also the potential for higher costs if the supplier’s pricing structure is not competitive. Banks need to carefully evaluate the cost-benefit ratio to ensure they are getting the best value for their investment. However, the comprehensive services provided by full value chain suppliers can often justify the higher costs through improved efficiency and quality.

Finally, engaging a full value chain supplier can lead to vendor lock-in, where the bank becomes dependent on the supplier’s technology and services. This can make it challenging to switch suppliers or adopt new technologies in the future. Countering this argument, the long-term partnerships and deep integration banks enjoy with a full value chain supplier can lead to more stable and reliable operations, which can be beneficial for the bank.



Deciding what's right for your firm

Ultimately, any decision about whether to partner with a single provider or adopt a multiple-partner model will depend on what's right for your bank or fintech. It's vital to consider how payment solutions support your broader digital transformation strategy and customer experience goals. For instance, is your bank comfortable with referring business to third parties by integrating their solutions into your platform, or would you prefer to maintain customer loyalty and enhance your brand by integrating a range of white-label products from a single provider into your platform? Given the increasingly competitive nature of the market, we discussed earlier in this paper, banks and fintechs need to make sure they're making the right choice for their business.

Another important factor is making sure that your offering is fit for the future. Cash use has declined over the last decade and now appears to be settling at a level of around 20% of all transactions in the UK and Ireland, having grown somewhat since the pandemic. Meanwhile, the success of Open Banking in the UK is introducing a second wave of the digital revolution, ushering in the possibility of instant services beyond payments – not to mention new payment types such as request to pay (R2P), custom instalment payments and more.

Looking to a longer-term horizon, the future of payments lies in end-to-end integration, with innovations in biometric authentication, blockchain-based settlements and real-time payment rails. Companies that partner with a fully integrated model will have the opportunity to lead the industry with enhanced security, customer satisfaction, and operational excellence.

We began this paper with some remarks about the need for banks to show better revenues and profitability – and for fintechs to start proving profit from day one to an increasingly demanding investor community. In addition to all of the operation advantages listed above, a major benefit of the "full value chain" approach over other models is that it allows for better control of costs from day one by working with one provider, and being able to pick and choose services according to need, rather than purchasing a wide range of services from various providers, some of which may have low levels of customization available.

What's more, because "full chain" services are usually delivered on a Software as a Service/multi-tenant approach, rather than more expensive, complicated and time-consuming on-premises installations, banks can realise return on investment much more rapidly. A 2025 study by Loadview[5] found that savings realised where systems are delivered by SaaS grew year-on-year over the first five years after contract commencement, and ROI was consistent from the start – whereas savings decreased for on-premises installations, and ROI declined over a five-year period.

[5] Loadview, 16 January 2025, "Cloud vs. On-Premise: An ROI Comparison."
https://www.loadview-testing.com/learn/roi-comparison-cloud-vs-premise-load-testing-tools/

SaaS/Multi-tenant approaches improve ROI year-on-year

CREDIT = Loadview

Over the next five years, the payments market will shift to a new paradigm of instant, frictionless, transparent, and more cost-effective transactions, while competition and investor pressure for better performance is only going to increase. In addition, banks and financial institutions will have to comply with a tsunami of financial regulations. On balance, we believe that banks committing to a comprehensive integrated solution from a trusted provider will be better positioned to meet market demand and investor expectations while maintaining their central role in the payments value chain in the face of threats from big tech players, telecom players and others.

While there are challenges associated with relying on a single provider for an integrated payments value chain, the benefits – especially in terms of operational efficiency, cost savings, enhanced customer experience, and access to innovation – are compelling. In competitive markets such as the UK or Ireland, where customer expectations are high and regulatory oversight is robust, banks should leverage integrated solutions to differentiate themselves from competitors, get their systems fit for the future, and deliver the kind of performance that customers, investors and shareholders are looking for.

A single-provider, end-to-end payments value chain represents a paradigm shift in the industry. By partnering with a company that offers a full end to end value chain, from fraud prevention through processing, card production and personalisation and more, banks and fintechs can deliver secure, cost-effective, and engaging payment experiences.

Banks embracing this model will prepare themselves for a more diverse, dynamic and competitive future in which the ability to deliver new services to market rapidly and securely will be vital. By choosing a single provider with an agnostic gateway approach, banks can achieve the benefits of integration while preserving flexibility to adapt to future innovations in the rapidly evolving payments landscape.

Tietoevry Banking is the Nordic leader in the provision of full value chain card services to banks and fintechs, now expanding across Europe with clients in 13 markets including both the UK and Ireland. Across the continent, we serve more than 200 institutions and over 50 fintechs with a team of over 3,500 professionals. We are the world's leading provider of sustainable card systems, and recognised experts in the provision of scaleable, tailored solutions from card issuing and personalization – including wearable payment products, premium cards and AI-enabled personal designs – through leading-edge fraud detection, transaction monitoring and processing systems.

We offer both flexible delivery models and systems architectures that enable clients to choose either a "full value chain" approach with us, or to use our services as part of a modular architecture. With uptime at more than 99% and full 365/24/7 availability, our clients can depend on us for reliable, cost-effective and flexible full-spectrum card solutions that fit their needs, while our Financial Crime Prevention solutions help clients to fight fraud in all its forms, from more traditional fraud to new digital-first fraud vectors such as Account Takeover and Authorised Push Payment fraud, as discussed above.

About Tietoevry Banking

Tietoevry Banking is the market-leading provider of financial SaaS solutions for the Nordics and beyond. With 3,400 dedicated experts and customers in 60 countries, we deliver solutions for payments and card value chains, financial fraud prevention, lending, and wealth management, as well as a banking-as-a-platform. By combining decades of experience with our modular, scalable, and secure solutions, we empower financial institutions to unlock significant value, and rapidly adapt to market changes, meet regulatory demands, and deliver exceptional customer experiences. Tietoevry Banking is a specialized business unit of Tietoevry; the group's annual turnover is approximately EUR 3 billion. Tietoevry's shares are listed on the NASDAQ exchange in Helsinki and Stockholm, as well as on Oslo Børs.

For more information, visit www.tietoevry.com/banking

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