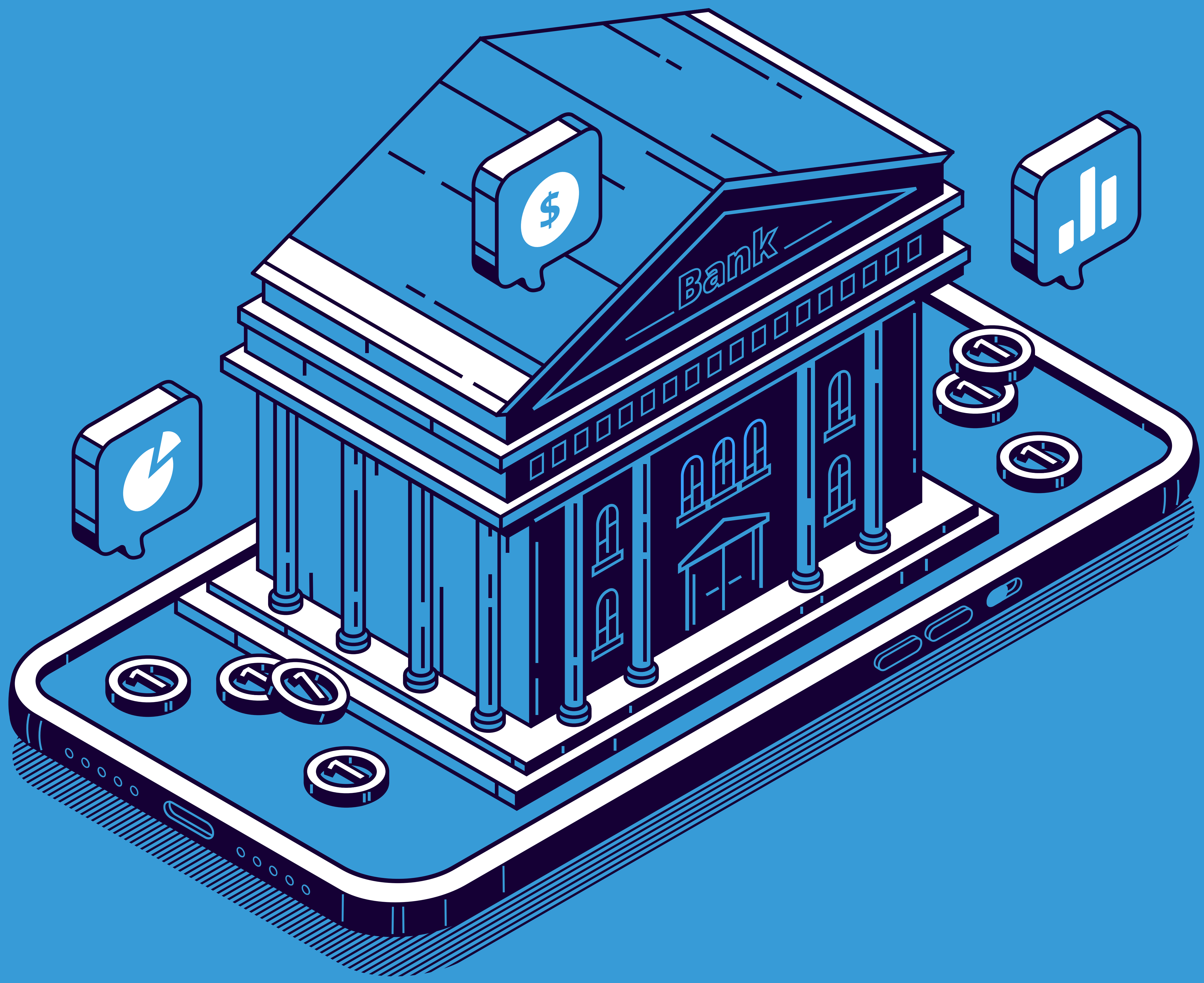
# Banks, payments and merchant services – resetting the status quo

## Targeting opportunities and overcoming challenges



# Contents

**Where traditional banks were once the dominant "go-to" force in merchant payments, emerging tech has changed the landscape. Whether driven by opportunity or defence, banks have refreshed their interest in offering new and modernised payment solutions. But with often fragmented and problematic technological integrations and loss of stickiness with customers, where is the optimal place for banks to sit? Is it time to reset the status quo?**

In this e-book we will discuss the challenges banks face, the threats and opportunities forcing change, and how, with Endava's help, banks can use technology to meet the challenges head-on.

# Introduction

The payments landscape is shifting and evolving rapidly. Payments is no longer a monopolistic banking activity, it's a lively fintech opportunity that opens up new business for all players. Against the backdrop of rising interest rates, rising business demands, and the need to reduce transaction costs, those who control payments have more cash flow and greater opportunity to diversify.

Merchants are moving away from outdated technology to bring them in line with market trends, better social media reach, and new innovative ways to pay. For many merchants, whether they're buying the latest accountancy system, online retail platform, or appointment management solution, payments is just part of the package. Competition will only increase as merchants look to further reduce costs, improve customer experience, and offer value-added services.

Valued at 7.36 trillion USD in 2021 and projected to be worth 15.27 trillion USD by 2027[1], it's no wonder digital payments is moving at pace. JP Morgan Chase claims to be the best-funded fintech in the world and will double its UK workforce to 2,000 in the next few years, with its sights set on payments in the UK and Europe.

In the Middle East, Magnati, a smart payment option developed by the First Abu Dhabi Bank, boasts a single Application Programming Interface (API), which makes integration easier, minimises cost and effort, and enables customers to meet their specific payment requirements.

Commonwealth Bank (CBA) is the first major Australian bank to enable PayTo digital payments authorisation, part of continued investment in its payment ecosystems and the New Payments Platform (NPP) Australia. Meanwhile, the global payment giant Stripe is forecasting to process in excess of $1T in 2023[2]. In Stripe's annual letter they shared that 1-10 people in the world transacted with a business powered by Stripe.

To stay competitive, traditional banks need to implement the right strategy now- not only to attract new customers but to retain existing ones. Banks have the opportunity to bring their experience to bear with embedded payments, lending, and wider Banking as a Service (BaaS) solutions to answer the scaling needs that retail, insurance, health, hospitality, and wider sectors are looking to address.

[1] Digital Payments Market Report – Growth, Trends, COVID-19 Impact, and Forecasts (2022-2027)

[2] PYMNTS 17 February 2023, Stripe Says It Expects to See $1T in Payments Volume in 2023

# What are the challenges banks face?

Although traditional banks have come a long way in the last decade, they are set up to be regulated, finance- and risk-focused. These processes throw up huge challenges in matching the experience offered by the new digital-first players. To succeed in payments there is a need to be more product focused, a significant change for many banks.

Banks’ merchant payment systems struggle to achieve the speed and dexterity of the digital-first fintech Payment Service Providers (PSPs) who can switch customer services on and off in minutes. Indirect via a fintech or direct from the bank, the typical onboarding flow for many traditional banks is not on par.

## Poor onboarding experience

Many banks have a complex combination of technologies, which are ageing, not always owned by the bank, or have been attained through acquisitions. This often leads to fragmented and problematic internal integrations and difficulties connecting externally with merchants and partners. And when banks outsource a solution, they often lose control and ownership of the merchant, causing a wider impact.

## Hurdles to creating new payments solutions

Due to outsourcing of solutions or older technology, banks often face a challenge with controlling their own roadmap, making it hard to adapt to market change without dependencies and the long and often expensive implementation they entail.

Integrating with banks is often not a simple process and lacks the easy-to-follow documentation and development environments of the fintech. This can require merchants to integrate with multiple systems which are not always connected. Put simply, it’s harder and more complicated for merchants to integrate and use banks’ services, creating friction from the get-go.

Those merchants that overcome integration friction often find the same challenges in the back office. Portals rarely offer a single view of all transactions, with multiple portals needed to see the full picture. Merchants simply want to see everything in a single place (integrated data, management, and reporting) and in an easy-to-read format, a requirement that many banks struggle to provide at the quality levels merchants have come to expect.

## Diversification hindered by siloed, ageing technology

While it is a major positive that banks can offer their own payments solution, their technology can limit which vendors see them as a viable partner and which merchants look to them to resolve complex payments problems.

Many lack a clean “on-ramp” to easily sell products between siloed banking and payments ecosystems, with no “single view” of the customer. This also hampers direct sales, as banks are competing in an environment where new business is signed in minutes—not days, or even weeks.

However, many large merchants do see banks as a safe pair of hands for high volumes of traffic.

Our banking clients want to be able to connect siloed services, to orchestrate and offer a more synergised approach to servicing their customers. It’s also what the customer expects: They don’t understand why banks’ services aren’t interconnected.

**Andy Davies, Global Head of Payments, Endava**

## Rich data goes underutilised

The shift toward data-driven services, real-time analytics, and personalised products makes data key. And the more data banks have on customers, the more informed decisions can be when calculating risk. Banks already have this wealth of data, but in many cases, it is unstructured and stored in legacy platforms. With siloed and disparate data, there is generally no one view across the organisation. Yet by bringing this data together, data augmentation can complete a picture without necessarily asking customers to submit the information themselves. And often, to their annoyance, for a second or third time.

## Restrictions on hygiene and value-add services

Data collection is often based on legacy payment architecture, and systems simply cannot store what’s now required to process payment. The new world of payments thinks much wider: What am I paying for, what is the currency, and where is the customer? Then there is the complexity of changing standards such as ISO20022 and the embedded security chips of Europay, Mastercard, and Visa (EMV).

Considering all of their touchpoints, banks are extremely well-positioned to offer a single view of a business or individual. This data can be highly beneficial to streamline and expedite on-ramps, and to support emerging opportunities in the embedded space. More consolidated and accessible data combined with some of the work already undertaken by many for Open Banking (AISP & PISP) also starts to help lending and other markets to improve everything from authentication to fraud to affordability to Know Your Customer (KYC) and Anti-Money Laundering (AML) services. Approached in the right way, Banks also have an opportunity to leverage their information and build Value Added Services (VAS).

> Clients are telling us that they are trying to develop a new product, but they don’t trust the data. It is in several different systems that don’t speak to each other, and they can’t get an accurate view across the business.
>
> **Annmarie Mahabir, Principal Industry Consultant, Endava**

# What are the opportunities and threats forcing change?

## Opportunities

For banks, there are two sides to the payments coin opportunity. There are the millions of medium-sized, small, and micro-merchants who through targeted Independent Software Vendors (ISVs), can now access payments easily and affordably and are rife for innovators to leverage their data. In many cases, banks are already providing services from accounts to lending to issuing.

Then there are the larger merchants looking to integrate or advance payments in their own businesses, which may include successful smaller merchants that cross into the larger merchant threshold. These corporations are no longer satisfied with the status quo and are using modernisation initiatives to increase efficiency[3] and grow their business. There's increasing usage of digital wallets, Real-Time Payments (RTP), cards, virtual cards, Bankers' Automated Clearing System (BACS), Single Euro Payments Area (SEPA), Automated Clearing Houses (ACH)[4], and more.

## Threats

With Payment Service Providers (PSPs) including ISVs and fintechs, many of whom are global entities, the payments sector is diverse and crowded. And as PSPs successfully bring payments and services together, they are beginning to encroach on other banking services. Think about Buy Now Pay Later (BNPL), online retailers beginning to offer business loans, or innovative pay-out and foreign exchange (FX) capabilities. Fintechs are even offering solutions that allow a platform to quickly and easily open a bank account and issue cards in a matter of minutes.

[3] Endava Global Payments Report 2022

[4] Ibid, see 1

## SWOT Analysis Summary

The simplified situational assessment below helps clarify common strengths and weaknesses that banks have some control over and can change. And also, what they can leverage to take advantage of opportunities and counter threats.

### Strengths

- Customer data and existing business customers
- Often trusted by merchants
- Financial resources
- Regulation and risk focus -well-placed to offer regulated value, such as BNPL

### Weaknesses

- Legacy/ageing technologies
- Fragmented integrations and dependencies
- Siloed data
- No single view
- No “on-ramp” -poor onboarding

### Opportunities

- Data optimisation
- A truly blended payments model
- More differentiation and revenue
- Upsell services to sizeable business back books
- Grow the existing customer base

### Threats

- Fintech and payment providers encroaching on bank business through vertical and horizontal integrations
- Erosion of existing payments customers that are serviced by banks’ existing systems

# How do banks address these challenges?

## Agree on target markets and business case

Banks serve a multitude of different subsectors. Some banks may have no payments solution at all but recognise a need for a payments proposition due to lagging behind the market or business being taken away. For others, the focus will be on refreshing existing solutions and services to stay relevant. The relevance and focus around payment services will also change if the bank is more retail- or commercial-focused.

Technology aside, the first imperative for banks is to determine which tier of the market they want to serve. Is it the larger enterprise end or the sizable and growing SMB segment? Both have differing levels of complexity and challenges to consider. Banks also need to be clear about why they are doing it. This includes defining a strategy and a set of baseline requirements that can be used to help justify future investment. We typically help banks with this ideating and planning.

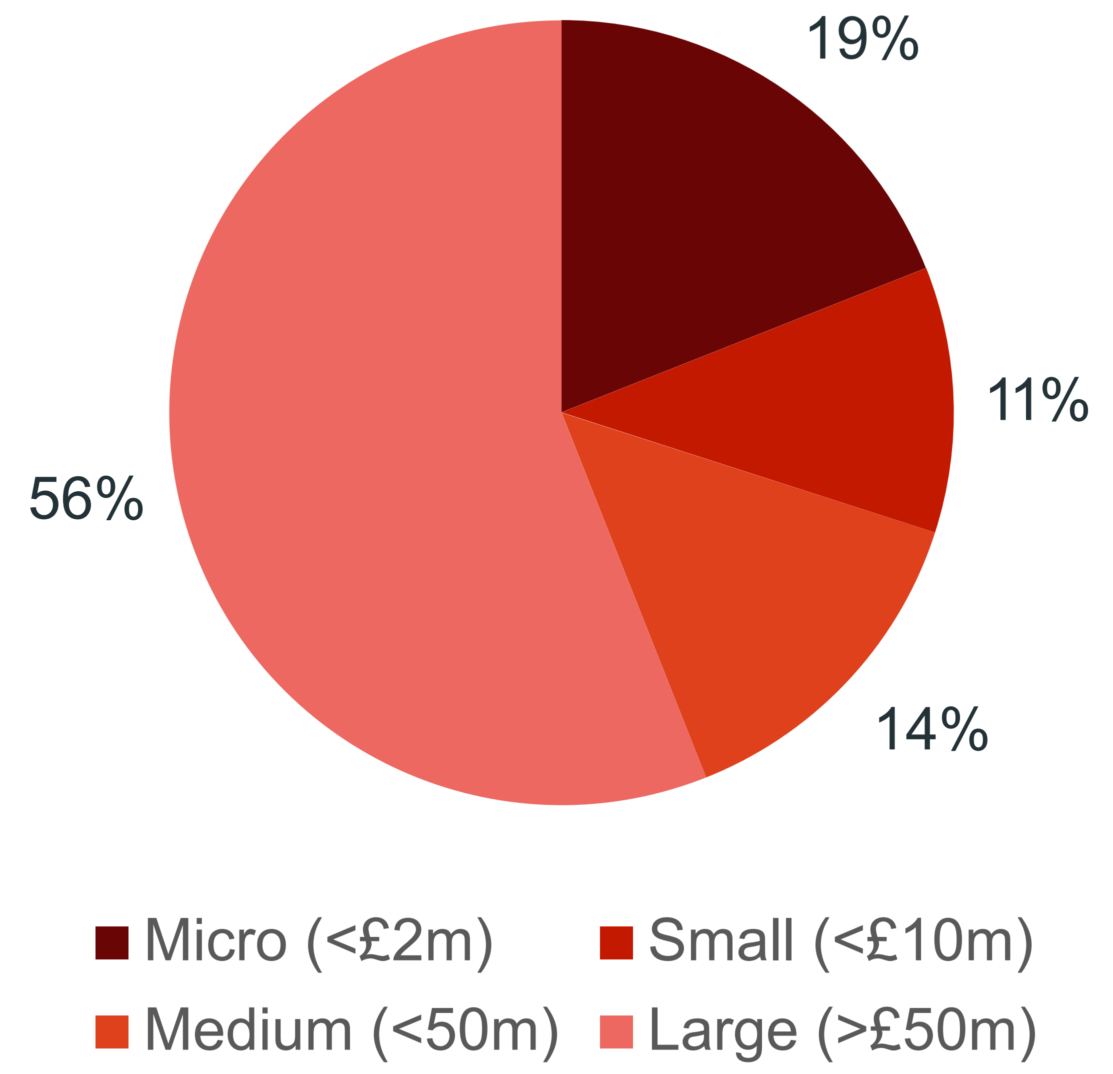
The payments landscape breaks into tiers -micro, small, medium, and large- each of which have unique requirements and adoption needs. The upper tiers are typically far more complex, and demand much lower margins as they provide access to far more volume.

## UK Market Overview

The UK market had total turnover of £2,320 bn in 2021. Of this, card turnover was £790 bn or 34%.

### UK Market by Turnover Band

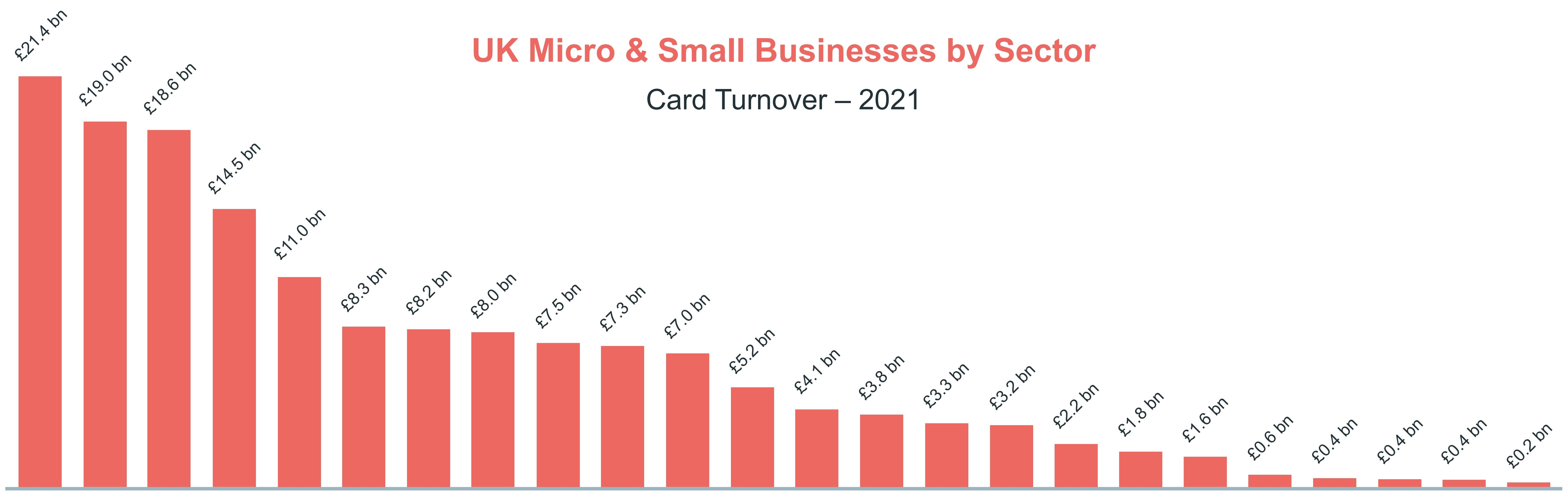
All Turnover – 2021




Source - PSE Consulting https://pseconsulting.com/

The lower tiers suffer churn but are equally more open to change. To gain an understanding of the potential, UK micro, and small- and medium-sized businesses (under £10m turnover) had an aggregate £158 bn card turnover in 2021. The largest sectors were Food & Drink Retail and Restaurants & Bars. However, there is also a consideration that a vast majority of business turnover is not generated from cards in some market segments.

## UK Micro Businesses – Card Turnover by Sector

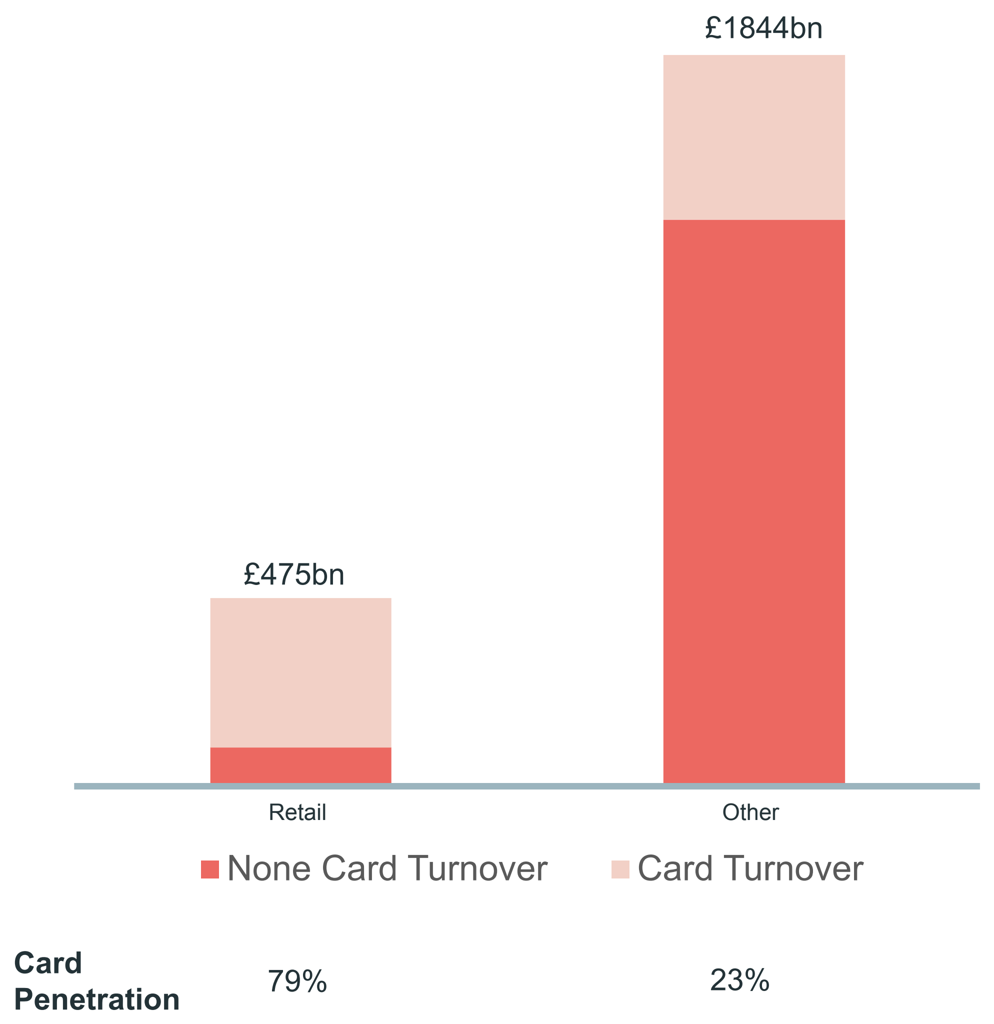



**Nearly 50% of the market is dominated food, drink and household electronics**
**The remaining 50% is represented by a diverse range of subsectors all have their own nuance & niche requirements**

Source - PSE Consulting https://pseconsulting.com/

## UK Market Size

All Turnover vs Card Turnover – 2021



Small and Micro present a volume opportunity. A bank might have hundreds of thousands of small business customers in their back book, with a percentage of these needing payment solutions. There are also millions of prospects—many have come to payments through ISVs and are used to seamless and simple user experiences with embedded reporting features instant onboarding and minimal contract lock in.

Large and Medium merchants could be key enterprise customers looking for support but are often highly complex or very cost conscious by nature. In reality, many banks with existing payment acquiring services will serve these larger merchants already and offer highly competitive commercial models paired with banking services. But the primary reason for banks' ability to serve these larger merchants is that these enterprise customers manage and run their own technology and don't require the turnkey digital first solutions that the smaller merchants do. But banks should not be complacent, as these businesses look for efficiency they are turning to the digital first vendors to help solve their challenges.

| | Enterprise (Large & Medium) | Enterprise (Small & Micro) |
|---|---|---|
| **Opportunity** | • Looking for opportunities to retain and gain customers as well as reduce costs using services like subscriptions, embedded services and RTP.<br>• Looking for vendors that can help them solve complex multi-region and multi-channel processing | • Volume opportunity for banks to provide payment services<br>• May often already be part of banks' back book<br>• Millions of merchants looking for turnkey services and work with their existing vendors |
| **Requirements** | • Highly reliable platforms<br>• Best-in-class support services<br>• End-to-end Payment Card Industry Data Security Standards (PCI DSS) compliance<br>• Much reduced costs | • Typically want an ISV provided solution and/or acquirer and are rapidly adopting Smart POS solutions<br>• Huge complex mix of market vertical needs to address, and merchants are often very happy with the ISV they're using |

Start by understanding what you already have today, carefully consider where you want to go and ensure you fully understand your customers' needs. Getting this part right is crucial for any bank or any payment provider. Payments is more complex than ever and is often underestimated.

**Andy Davies, Global Head of Payments, Endava**

**Define**

Target market

- Who are you serving?
- What is your right to win?
- What features make a real difference to your target customers?
- Do you understand your competition?

**Clarify**

- Current state
- Future state

- Take time to understand what you already have today.
- What should you re-use and evolve, what needs replacing?
- Have a target goal and strategic vision for the business.

**Roadmap**

- Short term
- Long term

- Don't try and solve everything at once.
- Consider 'No regrets' exercises and MVP – Minimal Viable Products.
- Define a long-term plan but learn from early customer feedback and adapt.

**Business Case**

- Opportunity
- Technology
- Roadmap
- Sizing/costing
- TAM

- Make sure the business has bought into the value of your goals.
- Create roadmaps visible and digestible by the wider business
- Understand the realistic costs
- Qualify build and buy options and clearly lay out the options.

## Building for your audience

There is no such thing as a generic payments solution anymore. If you're a restaurant, you want services like pay at table, a QR code to pay for remote billing, and the capability to split bills. If you're in the hospitality sector, you might consider dynamic currency conversion. Or some verticals might be more interested in point-of-sale and in-person payments, which, conversely, some markets are less interested in.

Meanwhile, the types of businesses and their business models continue to evolve at pace. Even the smallest merchants are coming to expect services such as electronic invoice payments, subscriptions, and alternative payment methods to enable them to sell internationally. Only a few years ago, this was just the realm of global merchants.

## Convergence and optionality

As the acceptance of digital payments continues to grow with RTP, open banking, BNPL, and an ever-expanding list of wallets, merchants expect more than ever. Banks have a strong opportunity to provide that point of convergence between incoming bank-based payments, increasing regulation on BNPL, and the traditional cards landscape.

## Direct or Indirect

To succeed with a direct strategy with SMBs, banks need to be able to compete with class-leading platforms that offer merchants a single portal for all of their reporting and merchant tools that work seamlessly with their preferred platforms. At the enterprise level, there is an expectation of using payment solutions directly and integrating them into their own environments. But they come with high service and performance expectations.

It is worth remembering that, on average, 65% of merchants require some form of integration or buy via ISVs[5]. ISVs typically offer a turnkey market-specific platform that is hosted, managed, and maintained, saving a merchant time and providing value-added services, with payments seamlessly embedded. The ISVs target specific verticals, such as retail, accounting, hospitality, and health, offering tailored solutions to fit market-specific needs.

Currently, banks with third-party platforms find it hard to integrate ISVs, slowing time to market and often leading ISVs to terminate and move to a better partner. Some ISVs are also moving further into the value chain and expect far more from their partners. This is pushing more need for gateways to have complete control over API layers and to accelerate embedded payments. Banks are currently not well placed for this.

[5] McKinsey 2022 Merchant Acquiring Survey

The way that platforms integrate and the way that ISVs engage with payment vendors is changing.

### Standard payments

Standard payment integration is now more sophisticated, needing wallets, APMs, cards, open banking, and much more.

### Reporting and other

Integrations need to consider more than just payments. This includes scheduling payments, running reports, billing, and much more.

### Reverse integrations

Platform providers are changing their approach due to the excessive platform overheads in managing vendors. More and more are expecting the gateway to integrate to them. This requires the gateway to have complete control over its API layer.

### Embedded payments

More and more vendors are looking to move into the payments value chain and are looking for marketplace capability and PayFac solutions. This trend is only expected to accelerate.

Onboarding

Pay-Out

Pay-In

### Payments APIs & Hosted Pages

Table stakes

Many vendors are not well-positioned for this option

The number of vendors that solve this use case is low today

It is critical that, if considering an indirect approach via an ISV, banks truly understand their target merchants. For instance, BNPL is much more relevant in retail-type environments. Those who currently depend on direct debit and ACH-type solutions may find cards too costly to even consider. And not all businesses are online -bars, restaurants, and others need physical devices.

It can be costly for ISVs to integrate with a bank, so they will only do so if they are confident that the service offered can meet the needs of their customers. ISVs are often providing a service to the most demanding merchants, from small to sophisticated larger operations, and need to accommodate all diversity in the sector. In many cases, ISVs change partners because they are looking to offer their customers more.

Getting this indirect strategy right can accelerate a bank's growth in payments. With the right, easy-to-integrate payments solution that offers value to the ISV and the merchant, banks can access thousands of merchants quickly -much more quickly than via direct. Conversely, not having such a solution can leave banks open to risk as ISVs grow and offer more services, potentially taking business off back books.

Today's hyperconnected world demands modern, scalable, and highly integrated payments solutions with a complex variety of features.

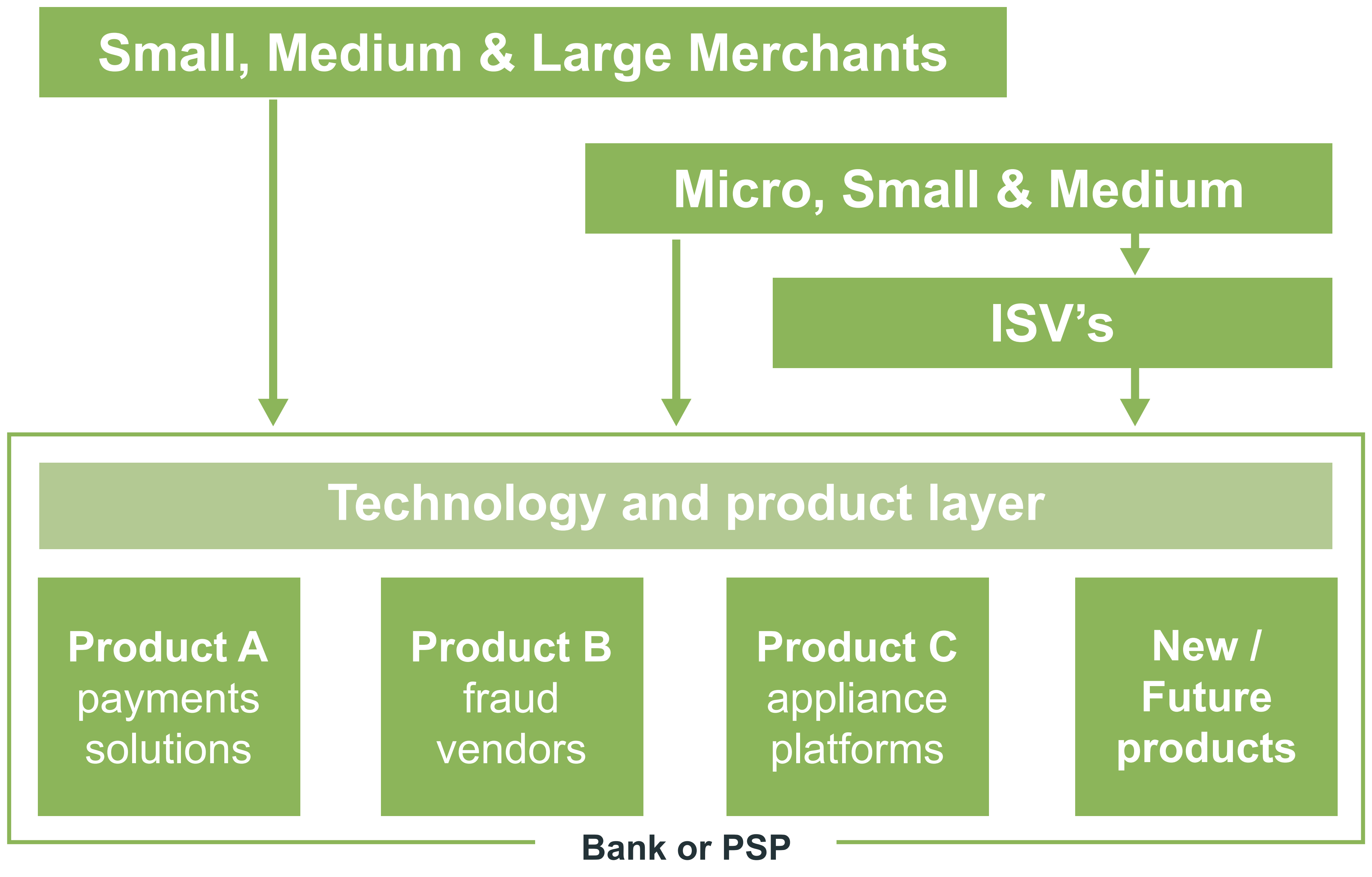
# How do banks navigate complexity and scale in such an evolving landscape?

In an ideal world, everyone would build solutions from the ground up and control and own everything. In reality, this is not achievable or practical. One approach is to modernise and leverage the existing technology and the partnerships beneath. This needs to be given careful consideration though, to avoid simply duplicating everything. Orchestration -the automated configuring, coordinating, and managing of computer systems and software- can help modernise whilst utilising existing technology and partnerships.

Orchestration provides a platform to automate and integrate technologies across the whole enterprise. It means control and easier and faster time-to-market of new services. Coupled with a modern API gateway for easy integration with other systems, orchestration provides security, performance, and administration. This will be increasingly essential as PSPs deploy more elaborate integrations.

Orchestration automates the process of gathering, preparing, and transforming data from the API gateway and routing it to the desired system. In the process, there are opportunities to streamline and store data in a new and up-to-date location, making it more readily available for real-time analytics and insights.

Put simply, banks are providing a modern technology interface and access to much clearer data insights while leveraging existing technology relationships and offering easy integration for new ones.



The benefits of orchestration, of course, extend to the merchant, as it allows banks to help merchants reduce their own costs, improve efficiencies, and optimise conversion rates. Once orchestration is implemented successfully banks can extend and diversify their offerings over time.

## Onboarding

The new orchestration layer provides streamlined onboarding, which can be used directly and indirectly via ISVs and partners. This modern API makes it extremely efficient to onboard new customers by orchestrating KYC and onboarding data to existing vendors or validating and providing instant access to existing customers.

This could be taken one step further by leveraging investments in open banking to provide new tools to merchants and ISVs to streamline onboarding of their own services further.

## New Payment Solutions

Getting the integration layer right will allow new payment methods to be offered to merchants so they can expand from cards to ACH or RTP payments without having to worry about creating a new integration or entering a new contract. The orchestration technology can take care of the complex routing to existing services and systems, removing friction on the merchant.

## Diversification

The same onboarding architecture for merchants can evolve to service virtual account creation, BNPL products, virtual issuing, and offering not just pay-in but pay-out capability. New service providers can be added to expand markets. New technology capabilities can be built behind the new integration layer.

## Data Consolidation

Orchestrating data in an optimal way makes it more readily available and meaningful. Aligning all data across the business provides a single source of truth for all data needs, making it easily accessible for business intelligence, reporting, data analytics, artificial intelligence (AI), machine learning (ML), and predictive decision-making. And as external pressures, including open banking and ISO 20022, will have a significant impact on data strategies in the next few years, orchestration offers banks the opportunity to better manage data to be in compliance.

## Evolve

The value of orchestration is significant and is the answer to a lot of challenges but in some areas it should only be considered a stepping- stone. Banks should carefully consider which areas need to evolve and be replaced overtime. These are considerations for longer term roadmaps and investment.

## High-Level Solutions

There is commonality across many banks around the areas they need to solve. The diagram below highlights the typical existing systems relationships and 3rd parties that already exist and the solutions that need to be built in order to resolve the go-to market challenges many face.

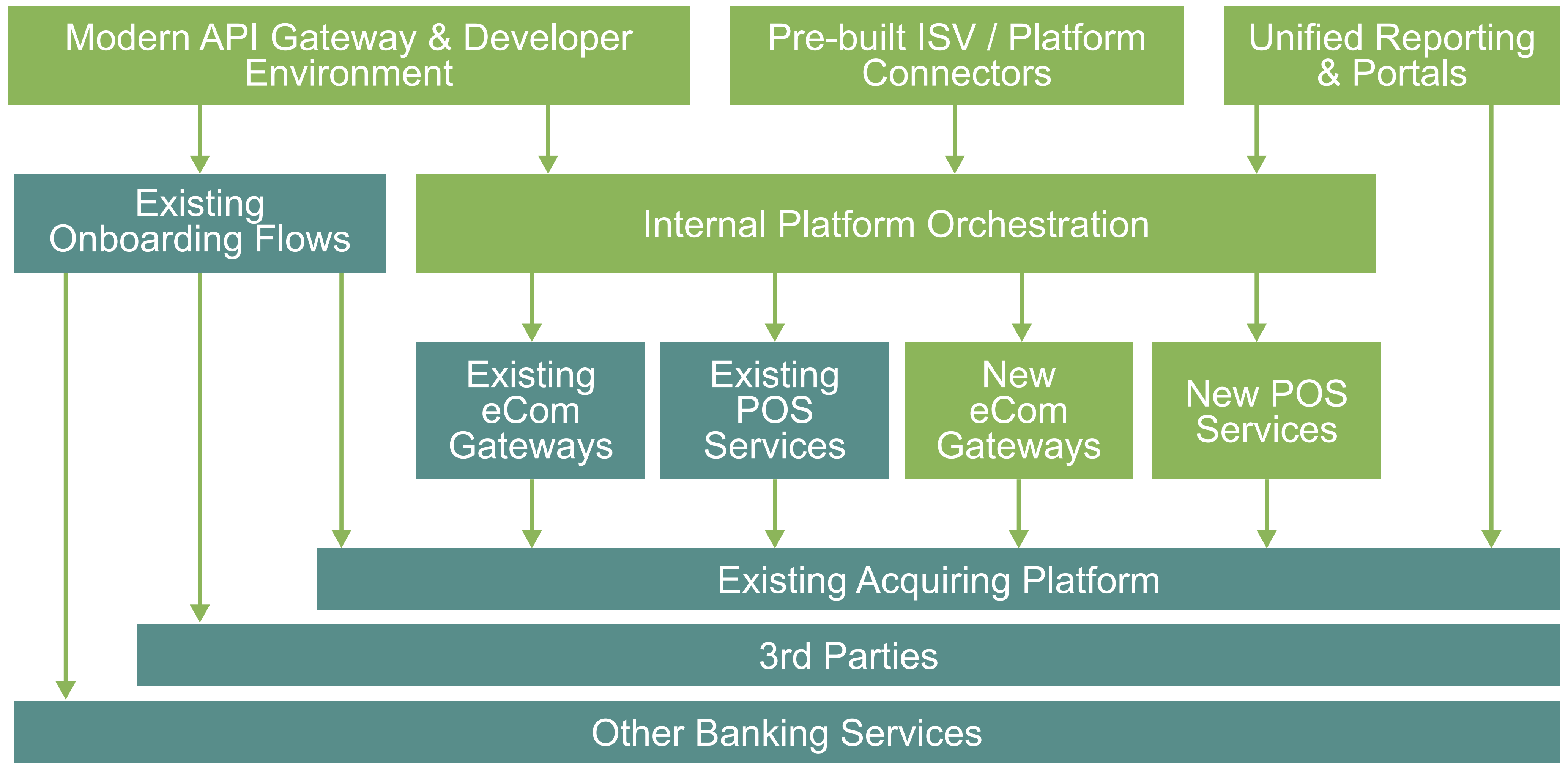
1. A modern API gateway that works with their existing and new technology and provides developers access to the tools they want. Crucially, banks want to own this experience.

2. Pre-integration to leading platforms is highly desirable as it speeds up time to market.

3. A single portal that provides access to data in existing & new solutions as well as acquiring data.

4. API's need to leverage the banks existing onboarding capabilities in order to make it seamless to cross-sell in both directions.

- Onboarding must work with the existing acquiring capabilities.
- Onboarding should consider new 3rd parties such as APMs
- Onboarding should consider how the bank facilitates cross-sell between environment.




5. Internally, the bank needs to be able to support both existing payment gateways & POS solutions against new initiatives, without the merchant needing to deal with point solutions.

- Existing solutions may be in house technology and/or 3rd parties with existing agreements.
- Expect all existing solutions to have merchants that may be hard to migrate.
- New solutions should work via the new API layer and not require merchant to integrate directly to 3rd party services and solutions.

The first important building blocks for orchestration include a portal that puts everything together in one place. This also ensures that customers can click a button and get a service easily, just like they can with the digital first PSPs. Importantly, the API gateway and the orchestration layer belong to the bank and enable more differentiation, and consequently more revenue.

# How Endava can help

Since 2001, we have honed our experience in payments with technological transformation, design, development, and support capabilities that offer banking the end-to-end services you need to achieve your goals.

From mobile wallets, real-time payments implementations, clearing and settlement engines, data insight portals, e-commerce gateways, tokenisation apps, and bespoke tablet terminals to acquiring and loyalty and authorisation platforms, we have experience delivering products and programs across the entire payments ecosystem, including design, build, test, support, and deployment.

By understanding your customers and their needs, we ensure a secure, consistent customer experience across environments, applications, and systems.

With flexibility in mind, we design, build, and operate the payments solutions that help your business remain competitive, improve speed to market, and build loyalty through an effective customer experience. Being technology-agnostic, we ensure the solutions we deliver are secure, robust, and easily scale at the same pace as your business grows.

**Endava has helped banks solve the following challenges and continues to work with clients to evolve and grow:**

- Built and unified APIs for global acquirers and PSPs
- Accelerated platform integrations
- Built new portal solutions for banks, acquirers, and PSPs
- Built full end-to-end enterprise onboarding solutions for acquirers, PSPs, and banks that fully support work-flowed KYC and AML, digital onboarding and document collections, and ongoing AML
- Built orchestration platforms for modern and legacy payment solutions, including:
    - Orchestrating over 20 different vendors for a global retailer
    - Orchestrating existing POS and eCOM technologies to provide a unified experience
    - APM accelerator programs that help payment providers expand reach
    - Orchestrating internal payment gateway routing alongside 3rd-party solutions, including platforms like Ayden, Stripe, and Checkout

# Endava's Payments Expertise

The payments ecosystem

| Card Payments | Banking Payments | Cross-Border Payments | Crypto Payments |
|---|---|---|---|
| Acquiring<br>Issuing<br>On-Boarding<br>Clearing and Settlement Disputes<br>Merchants Settlement<br>Value Added Services | Real-Time Payments<br>P2P Payments<br>Open Banking<br>Digital Banking<br>API-Driven Payouts | FX<br>International Payments (e.g., SWIFT)<br>Integration with Liquidity Providers<br>Digital Wallets<br>Disbursements<br>Mass Payouts | ICO – Initial Coin Offering<br>Crypto Wallets<br>Client Accounts Management<br>Crypto Deposits and Withdrawals<br>Transaction Ledger<br>Backoffice & Reporting |

Endava's payments experience

| | | | | | | |
|---|---|---|---|---|---|---|
| Clearing & Settlements | Ecommerce Gateway / Build | Open Banking | In-Store Innovation | SWIFT / Ripple | POS / MPOS / Smart POS | Merchant Portals |
| Biometric Payments | Disputes | PSD2 / SCA | E-Wallets / Mobile | Banks Integration | Loyalty / Rewards | P2P Payments |
| Authorisation | Tokenisation | APMs / LPMs | Mobile Payments | Mass Pay-Outs | Scheme Integration | Crypto Wallets |

**40%**
OF REVENUE

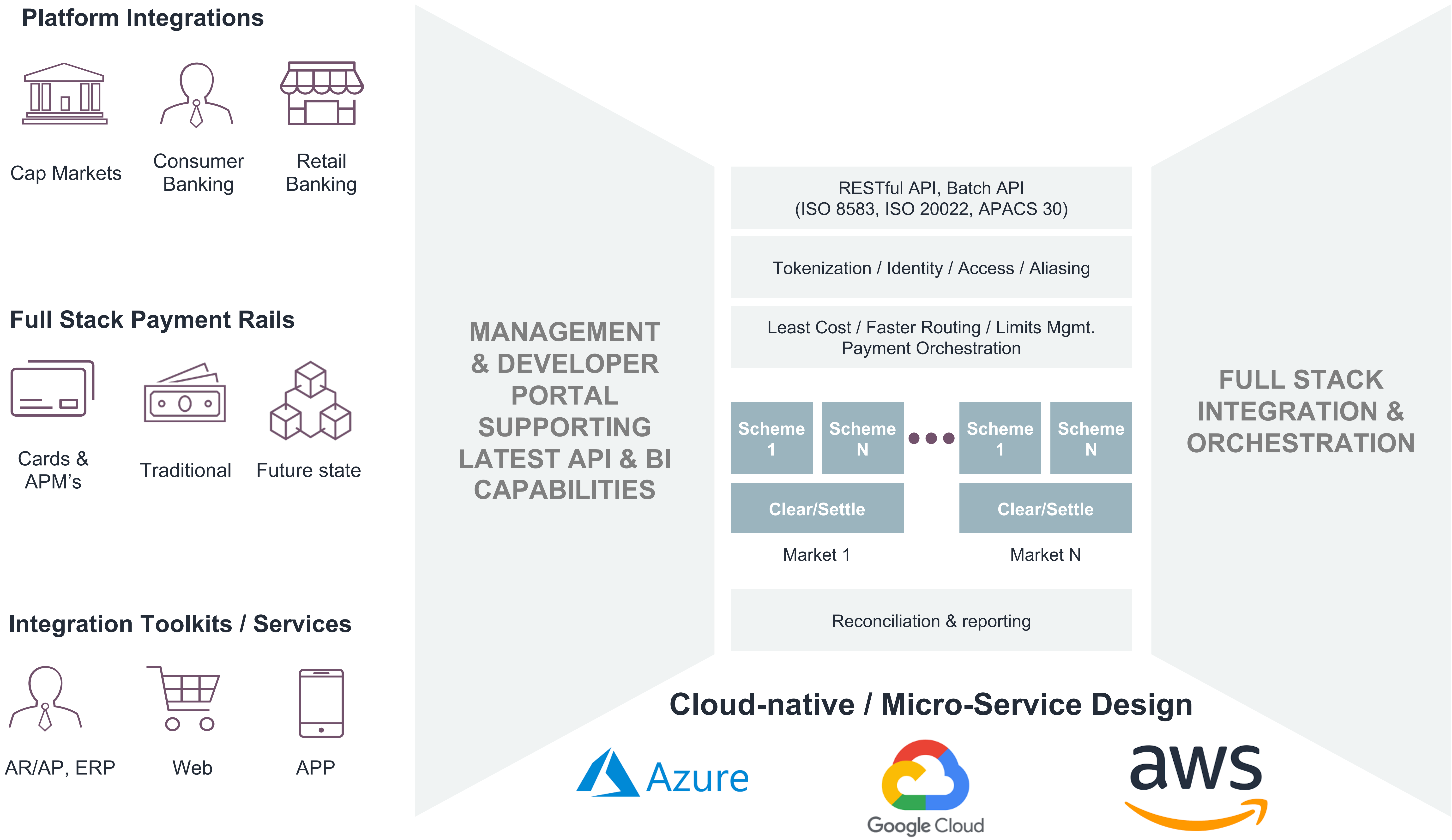
**4500+**
PEOPLE WORKING ON PAYMENTS PROJECTS

**250+**
ONGOING PAYMENTS PROJECTS

**75+**
PAYMENTS CLIENTS

# Future state payments

Many of our clients are looking to us to help them build and design platforms for the future. Increasingly the scope of these requirements continues to expand as the payments landscape continues to diversify.



# Contact us

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