



Digital payments and treasury: an enabler of long-term growth

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As e-commerce continues to grow, digital payments – the facilitator of these online sales – have become a top priority for merchants, with a focus on providing an intuitive, fast and seamless experience for customers. As businesses look to embrace digital payment strategies, there is an opportunity for treasury to take a more holistic approach and help to improve the end-to-end payment workflow, enterprise resource planning (ERP) integration and material and distribution management. This white paper reviews the opportunity for treasurers and outlines how treasury can become an important business enabler, helped by banks and technology providers.

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Foreword



Since early 2020, the Covid-19 pandemic and the ensuing work-from-home environment have acted as a catalyst for significant e-commerce growth. In an April 2022 survey, 12% of EU enterprises reported that the pandemic had motivated them to start or increase efforts to sell goods and services over the internet.¹ In line with this trend, digital payments – the facilitator of these online sales – have become a top priority for merchants, with a focus on providing an intuitive, fast and seamless experience for customers.

A better experience for the customer, however, does not necessarily mean a better experience for the merchant. For the end customer, payments are becoming increasingly invisible and contextualised, with the user experience improving in tandem. Yet to enable these developments merchants must face greater complexities when orchestrating the different parties and flows involved in digital payments.

This is where treasury comes in. While outgoing payments are a traditional issue for treasurers, the same cannot be said for collections, which are often handled by separate parts of the business. With digital payments an increasingly important part of a business's long-term growth, it makes sense for treasurers to become involved in shaping the digital payment strategy.

From a treasury perspective, digital payments can be used as an enabler to support other business functions and may have a lasting impact on the range of treasury tasks. The benefits are felt in the entire value chain: from introducing new payment methods that reach new client segments to meeting compliance, tax and regulation, analytics and risk and reporting obligations.

In a world where real-time treasury and instant payments are increasingly the norm, having control of all payments can also help treasury to improve its cashflow forecasts and liquidity, as well as strengthen its balance sheet by integrating pay-in and pay-out strategies. In addition, once cash is received onto the account, it can be automatically reconciled and posted to the target account, which helps businesses to deliver a better customer experience and increase loyalty across its client base.

For corporate treasurers looking to take the lead when it comes to digital payments, one of the first steps is to run a self-assessment to create a mutual understanding of how the treasury function can support business units. This will, of course, differ from corporate to corporate – and, even within the same industries, there is a wide range of different strategies for companies managing digital payments. That said, the fundamental principles that underlie this transition are often the same.

For this white paper, we have partnered with KPMG to provide a unique perspective on how real-world treasury clients are navigating their way through the changing and increasingly complex payment landscape. The following pages will help create a much clearer picture about these challenges and how best to tackle them. We will review the various payment processes front to back, before outlining how treasury can become an important business enabler, helped by banks and technology providers.

Foreword



In the dynamic landscape of today's digital economy, the realm of payments is undergoing a profound transformation. The rise of digital payment strategies has opened up new horizons for businesses and consumers alike by presenting both tremendous opportunities and complex challenges. As we stand at the forefront of an exciting revolution, this white paper sheds light on the captivating developments and critical considerations around digital payments.

Digital payments have emerged as a driving force behind the future of commerce, fundamentally reshaping how organisations operate and interact with customers. Against this backdrop, the ability to navigate and harness the power of digital payments has become an essential for success.

As businesses look to embrace digital payment strategies, the treasury function is assuming a newfound significance within organisations. Efficient cash management, optimised working capital, and the seamless integration of payment systems are important components that demand careful attention. To thrive in this digital era, companies must effectively measure and monitor key performance indicators (KPIs) that provide actionable insights into their financial performance and operational efficiency.

The digitisation of payments brings with it unprecedented opportunities to optimise working capital. Treasurers are asked to streamline cash collection processes, enhance cash flow management and ensure they have the right liquidity in place to meet their short-term financial obligations. By leveraging advanced technologies and strategic financial management practices, businesses can attain the goal of being both profitable and agile.

Cost control is another vital consideration for digital payment strategies. As companies expand their sales channels and offer various payment methods, understanding the transaction costs, channel performance and net sales becomes central. Organisations must continually analyse these metrics to identify areas of improvement, drive operational efficiency and enhance their bottom line.

In an increasingly interconnected digital world, security and fraud prevention are also of prime importance. Organisations should establish robust security frameworks to protect sensitive customer information and safeguard transactions from potential threats. Balancing the very different demands of stringent fraud detection measures and a seamless customer experience is a delicate endeavour that requires a nuanced approach.

Seamless integration between webshops, payment systems and cash management tools is another fundamental enabler of digital payment success. By breaking down their internal silos and integrating these elements seamlessly, businesses can enhance cash flow visibility, optimise working capital and provide customers with a frictionless payment experience. The ability to navigate and master this integration is a key differentiator in today's competitive landscape.

As organisations embark on their digital payment journeys, KPMG stands ready to support them in unlocking the full potential of this transformative shift. We strive to empower organisations to navigate the complexities of digital payments, seize emerging opportunities and drive sustainable growth.

We invite you to delve into the thought-provoking content presented in this paper, which offers valuable perspectives and case studies in the field. Together, let us embark on a digital payment revolution that transcends boundaries, fuels growth and creates unprecedented value for organisations and their stakeholders.

1

Digital payments as an enabler of long-term growth

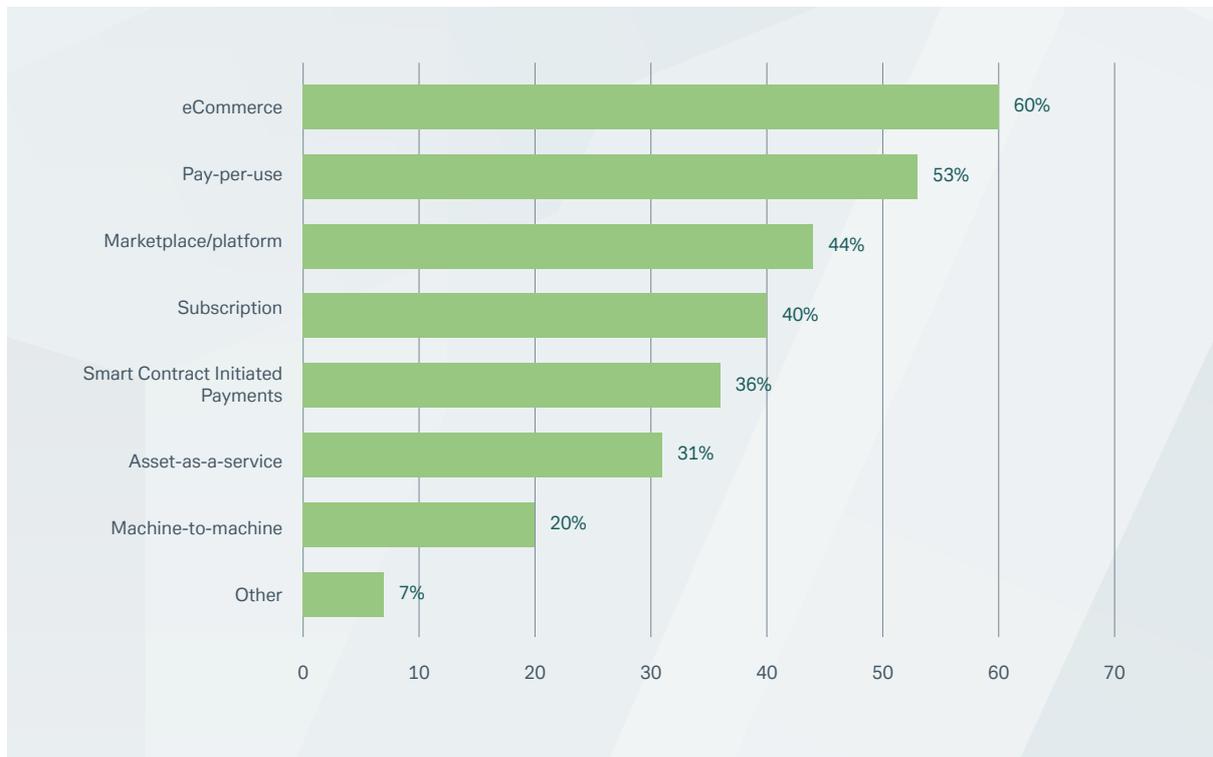
Digital payments have become increasingly popular in recent years, while efficient merchant solution services have become a key priority for businesses around the world. In a 2022 KPMG survey of treasurers, for example, 60% of respondents cited e-commerce as a business model they expect to gain significant traction over the next five years (see Figure 1).

This growth is, in part, being driven by rapid shifts in consumer preference towards digital payments, which requires corporations to find ways to manage the payment methods favoured by their customers if they are to maintain market share and enable long-term revenue growth.²

But what do we mean by digital payments? As the concept of digital payments has evolved, the term has been interpreted differently depending on the audience. For the purposes of this paper, digital payments should be understood to mean the transfer of value between bank accounts using a digital medium, such as a mobile phone, computer, or a credit, debit, or prepaid card.

The following chapter explores the impact of these payment trends on businesses – and how treasury departments can play a larger role as the new, digital payment landscape emerges.

Figure 1: The growing importance of digital business models



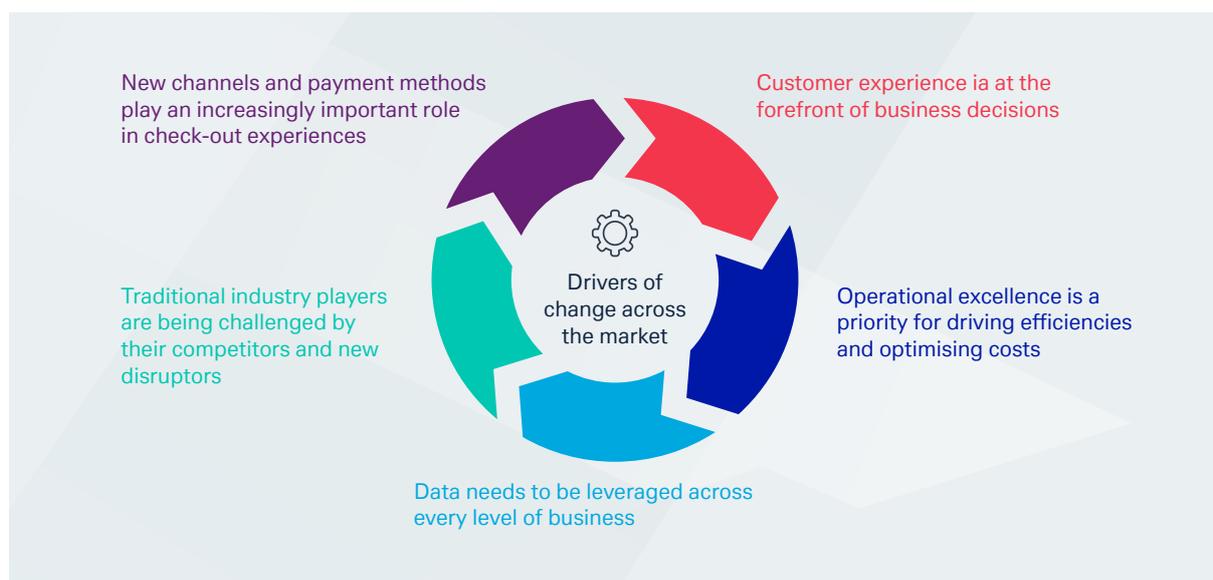
Source: KPMG



1.1 The digital payment landscape

Businesses are having to react to the increasing demand for faster, more convenient and secure payment methods to avoid losing market share to new disruptors. As this dynamic shifts, the need for a seamless and effective customer experience has moved to the forefront of decision making – with front-to-back-end operational excellence fast becoming a key facilitator to drive efficiencies and reduce costs. Greater integration across the entire business is also helping to unlock data, which is being leveraged and analysed to further improve the customer experience and create new channels and payment methods suited to today's real-time needs. On the following pages, we outline each of these drivers of change and explore how they are bringing about disruption in the payment space (see Figure 2).

Figure 2: Payment disruption: the drivers of change



Source: KPMG

1.1.1 New payment methods

Digital payments have undergone a significant transformation in recent years, with advancements in technology enabling faster, more secure and convenient payment options.

One major development in this space has been the rise of real-time payments, which allow users to transfer funds instantly and with 24/7 availability. This has been made possible by the development of instant payment systems around the world, including the UK's Faster Payments³ and the US's Real-Time Payments Network.⁴

Another key trend in digital payments is the emergence of open banking; the practice of sharing financial data between banks and third-party providers with the aim of creating new, innovative products and services. In Europe, progress has been facilitated by the introduction in September 2019 of the second Payment Services Directive (PSD2),⁵ which requires banks to provide open application programming interfaces (APIs) that enable third-party providers to access customer account data and initiate payments on their behalf.

Drawing on both instant payments and PSD2's provision for licensed third parties to access and service accounts held by other banks, request to pay (RTP or R2P) models have also emerged that enable merchants to empower a payments service provider (PSP) to instantly and irrevocably make and receive payments directly between their accounts and those of their customers. This is particularly useful for businesses that need to collect regular payments – such as to utilities or subscription services – as it enables them to request payment from customers in a more streamlined and automated way.

From PSD2 to PSD3

Payment regulation in Europe is by no means straightforward, requiring complex and multi-layered supervision. As the European Commission looks to evolve its regulation beyond PSD2 – with consultations towards PSD3 now underway – several institutions, including the European Central Bank (ECB), the European Banking Authority (EBA) and the UK Financial Conduct Authority (FCA), as well as national payment systems regulators, will each play a role in shaping the next iterations of European payment policies.

PSD3 is being designed to further harmonise and standardise European payment regulation and ensure that the same rules are applied across the board. Key developments include:

- Secure customer authentication (SCA). A review of the current SCA processes – a method of verifying the identity of a customer during an online transaction – and whether these measures should be strengthened.
- From open banking to open finance. Open finance expands the concept of open banking to include other financial services beyond banking, such as insurance, investments, and pensions. PSD3 aims to explore the potential of open finance and determine the appropriate regulatory framework for it (see *flow* article 'From Open Banking to Open Finance' for more).⁶
- Currency conversion costs. PSD3 aims to reduce the costs associated with currency conversion and make the process more transparent and fairer for consumers.
- Interchange fees. Interchange fees are those paid by merchants to banks for processing card payments, and PSD3 aims to ensure that these fees are fair and transparent.

1.1.2 Customer experience

Customer experience is at the forefront of business decisions. This means that the digital payments story does not start with the needs of the merchant, but rather the changing needs of their customers. Choice and convenience have become significant drivers for consumers and, by extension, merchants. Access to a range of convenient payment methods has become a key part of the customer journey – and can be the decider of whether a sale is made or not.

Picture the scene: you are planning to buy a product either online or instore. You do not mind where you buy it, provided that the experience is fast, convenient and secure. You find a merchant that offers the product you want, but on reaching the checkout you discover they do not offer a payment option that you either use or trust. Your likely reaction will be to find another seller that does.

These changing customer demands – and the need for merchants to meet them – have driven a series of technological changes within the payment space, with many new payment channels and methods emerging. Corporates and customers have new payment options that bring added benefits, including increased transaction speed and additional remittance data accompanying the payment. Merchants need to respond to these innovations, tend to consumer needs and be part of the customer journey.

1.1.3 The importance of data

Data is leveraged across every level of a business, including payments. Payment data can enable treasurers, in collaboration with their banking partners, to unlock additional value, by using advanced analytics (including transaction data, demographic data, behavioural data and geo-data) to generate new revenue streams.

This is a key opportunity for bank issuers. Unlike most PSPs or acquirers, which have a one-sided relationship with merchants, banks service both parties in a transaction and gain unique insights into consumers and merchants alike. This is a very powerful position as banks, operating within the confines of strict data privacy laws, such as General Data Protection Regulation (GDPR), can leverage this data to influence a consumer's choice of merchant. The best providers are typically those that deal with numerous transactions for both issuing and acquiring.

Open banking through PSD2 in Europe and via similar initiatives worldwide are enabling third-party actors, that lack primary client relationships, to access payments data. Banks can also partner with these firms and offer a better customer experience to their merchant clients. This opens up further opportunities to monetise traditional banking products; for example, by offering loyalty programmes and providing access to partner ecosystems (see [2.2: As-a-service models and new client ecosystems](#)).





1.1.4 Competition

The digital payments industry is undergoing a period of rapid transformation, with traditional industry players facing increasing competition from a range of disruptors. One of the main sources of competition comes from financial technology firms, aka fintechs, which are leveraging technology to offer innovative payment services and acquire market share. With their nimble business models and ability to quickly respond to changing consumer needs, fintechs are posing a serious challenge to the industry's established players.

However, the competition does not come exclusively from the fintech space. Technology and social media giants such as Google, Amazon and Facebook owner Meta Platforms are also eyeing the payments market, using their vast resources and expertise to create innovative payment solutions and offer customers a seamless payment experience.

Despite the rivalry, there are also opportunities for collaboration and partnerships between traditional players and disruptors. Established players bring with them decades of experience, trusted brands and regulatory expertise, while fintechs and other disruptors offer agility, innovation and technological know-how. By working together, they can create new payment solutions that combine the best of both worlds and offer merchants and their customers greater choice and convenience.

1.1.5 Operational excellence

With the rise of digital payments and increasing competition from new entrants, traditional payment players are under pressure to find more efficient ways of operating. This involves evaluating the organisation's payment infrastructure and identifying opportunities for optimisation and improvement at both the front and back end. By streamlining these internal processes and implementing best practices, treasurers can reduce costs, improve efficiency and enhance the customer experience.

1.2 Why are digital payments important for treasury?

A top priority for treasurers is to ensure the company has sufficient liquidity, optimised working capital and a manageable risk profile at all times.⁷ Given that digital payments are a critical part of liquidity planning, it would make sense that their management – including transaction partners, communication channels and payment methods – would be dealt with by treasury. However, this is not always the case.

For outgoing payments, it is typical for treasury departments to work with vendors (often banks) that provide a full range of payment and cash management services. For collections, however, different vendors are often used and this results in the link and relationship with treasury being lost. Instead, responsibility often falls to the IT or digital marketing teams, which play an instrumental role in integrating these payment services into the company's front end. Some businesses have also carved out new teams – reporting to finance or treasury – that are dedicated to advancing the digital payment cause. So, from a vendor, application and structural perspective the treasurer is often not responsible for these payment services.

As digital payments become an increasingly important part of doing business, the opportunity arises for treasury to take a more strategic and expansive approach to “owning” the full suite of enterprise liquidity, with digital payments being brought into their remit.

On learning of this opportunity, an obvious question that a treasurer may ask themselves is: “Why should I confront myself with an entirely new challenge that is not yet a core skill in my team?”

The answer is simple. It is a case of taking ownership of the changing dynamics in order to stay relevant. Digital payments have the ability to fundamentally change treasury's key performance indicators (KPIs) and processes, so a pro-active approach is best suited to avoid disruption or missing out on being part of the broader transformation.

The corporate treasury perspective

“We have carved out a dedicated payment team under treasury responsibility to cope with the growing complexity of payment methods to ensure the highest possible convenience during the customer's journey and efficiency in the collection process”

Global jewellery and fashion corporate with B2B and D2C channels

“Due to the evolution of the business models across our global divisions towards more innovative, digital and machine-to-machine commercialisation strategies, we have had to revamp our digital payment strategy and setup driven by treasury. This includes a fully functional middleware and payment gateway, seamless integration with the back end and customer relationship management (CRM) tools and guidance on which payment methods and payment providers can be used in which region”

Global conglomerate with a mixed business model

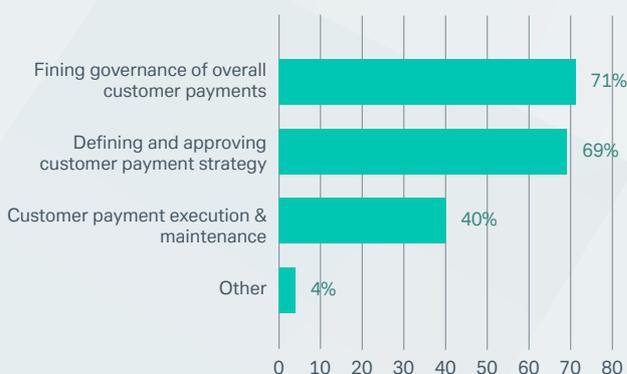
“In order to accommodate the complex requirements of our payment infrastructure setup, treasury has taken the lead role to build and operate a payment gateway that harmonises interfaces to external payment service providers and back-end processes in the enterprise resource planning (ERP) system with the intention to automate and streamline collection processes on our vessels and outgoing payments via virtual credit cards”

Global travel and cruise line corporate

Key treasury responsibilities

KPMG conducted research into what the responsibilities of treasury – as a partner to the business – should be when it comes to the integration of PSPs and digital payment methods. Results show 71% of treasury respondents believed that governance of overall customer payments should be the key responsibility, followed by defining and approving the customer payment strategy (69%) and customer payment execution and maintenance (40%).

What should be the responsibilities of Finance/Treasury as partner to the business in regard to the integration of payment service providers and digital payment methods?



Is Finance/Treasury involved in selecting and integrating PSPs?



Source: KPMG

1.2.1 Towards a holistic view

As digital payment volumes grow, it is clear that treasury has a significant role to play. By having full visibility of outgoing and incoming payments, treasury can take a more holistic approach and help to improve the end-to-end payment workflow, enterprise resource planning (ERP) integration and material and distribution management. According to research by KPMG, automated internal front-to-back processes related to the identification, authorisation and reconciliation of incoming as well as outgoing payments are typically able to reduce payment processing time by 75% and manual input by up to 50%.⁸

With these improvements come several strategic aspects. For example:

- Should the company tailor its payment options depending on the market?
- How can payments be routed into the back end of the ERP system?
- How can reconciliation be optimised?
- How do we ensure that we can process all of this efficiently?
- How do we identify and select the best PSP?

By centralising the strategy elements treasury can, at the very least, foster robust governance.

Whatever a company does from a group perspective – regardless of the brand, the market, or the service they are selling – governance and guidance should be harmonised. This is where the majority of efficiencies are being realised. Once a company has a payment strategy that is adopted by all the divisions, it can start improving efficiencies in its backends. Treasury is able to become a key part of this evolution; both as a business partner to the entities and subsidiaries, and as a real co-pilot to the CFO.

2

Payment trends

The latest payment trends shape the way businesses interact with their customers and operate within their industries. The dynamics are changing within businesses, as the new “digital native” generation moves into the driving seat. At the same time new models for doing business are being introduced and becoming more contextual, integrated and directly responsible for revenue growth. The following section reviews the most significant developments and how these are driving tangible change to create growth opportunities for corporate clients.

2.1 Rise of the digital natives

As the largest demographic group in history, millennials – otherwise known as “digital natives” – are expected to comprise up to 75% of the workforce by 2025.⁹ This generation, born between 1981 and 1996, have grown up in what has been dubbed the information age; an era marked by the proliferation of the internet, mobile phones and social media. As a result, these digital natives typically have a strong affinity with the emerging technologies that are shaping tomorrow’s world.

As this generation enters the workforce, its members are bringing a high level of creativity, originality, and knowledge to their respective fields; not least, the payments space. Here, they are using this inbuilt digital expertise to help drive new business models, as well as shape the rise of innovative fintechs. Contributing to this is an emerging trial-and-error culture to drive innovation, which should be embraced by treasury and the wider business.

2.2 As-a-service models and new client ecosystems

As the world becomes increasingly digital, many providers are developing new business models that can capitalise on emerging technologies and changing customer needs. One model that has gained significant traction is unregulated software-as-a-service (SaaS) and platform-as-a-service (PaaS) offerings. By leveraging cloud-based technologies, financial service providers (FSPs) are also able to offer customers scalable, flexible and cost-effective solutions that can be customised to meet their specific needs. Perhaps most importantly, FSPs understand that the data generated through these platforms could be game-changing in terms of fostering an improved customer experience. For example, by leveraging and analysing customer data (transactional, contextual, behavioural and motivational), financial services firms can better understand both their customers and their customers’ customers to provide solutions that not only meet today’s consumer demands but can anticipate and prepare for future changes.¹⁰

According to KPMG, “as-a-service” models of banking capabilities will be one of the greatest sources of future growth for financial services, with the leading financial institutions now providing such solutions to corporate clients across various service layers.¹¹ This is acting as a catalyst for entering partnerships across the entire payment value chain by allowing banks and their clients to offer cutting edge technology and to roll out services faster, but without the typical commitment to development budgets and technology resources internally.

Definitions

- **As-a-service model (AAS)** refers to the wider umbrella of cloud-based service delivery models in which services are offered to customers over the internet, rather than being hosted locally on the customer’s own servers or devices.
- **Software-as-a-service (SaaS)** is a cloud-based software delivery model in which software applications are hosted by a third-party provider and made available to customers over the internet.
- **Banking-as-a-service (BaaS)** is a business model that allows non-bank entities to offer banking services to their customers, without having to become licensed banks themselves.
- **Payments-as-a-service (PaaS)** is a business model in which companies outsource their payment processing operations to a third-party provider, who then manages the entire process for them.
- **Issuing-as-a-service (IaaS)** is a financial service that enables companies to issue and manage their own physical or virtual payment cards, such as debit cards or credit cards, without having to build the infrastructure to do so themselves.

2.2.1 Case study: Issuing-as-a-service with Eintracht Frankfurt

In collaboration with German football team Eintracht Frankfurt, Deutsche Bank has developed a mobile payment solution for the club’s fans. Picture the scene: an Eintracht fan leaves for a home game and forgets to take any cash or payment card. Until now they might then have been out of luck had they wanted a beer before the game, a frankfurter at half-time or to pick up some snacks for the way home. Now, provided the fan has a smartphone and “mainaqla” – Eintracht Frankfurt’s new mobile application – to hand, they can easily use them to make contactless payments. Known as “mainpay”, the solution can be used both at the stadium and more widely, at a total of around 70 million acceptance points worldwide.¹²



2.2.2 Subscription payments

In this new world subscription payments are becoming an increasingly popular business model for companies looking to build deeper relationships with their customers while ensuring a predictable and stable revenue stream. This model also allows customers to pay for products and services on an ongoing basis, rather than making a large upfront investment – providing them with more flexible access and the ability to manage their cash flow more effectively.

Integrating payments into this end-to-end flow can be complex and requires the management of recurring payments and the multiple parties involved in the transaction. As this model often requires card details to be stored, data security considerations also need to be adeptly handled.

Where subscription models are in place, the amount due for the first period is often covered by an advance payment. For individuals this can come in the form of a card payment or a request to pay, and for businesses it can be in the form of a credit transfer. For the subsequent, recurring payments for the same subscription, individuals can pay using SEPA Direct Debit, Request to Pay (RTP/R2P) or Card payments, while businesses can pay using a SEPA Direct Debit or Credit Transfer.

On the collection side, a bank can manage all collections and pay-outs of subscription payments to the relevant parties. For example, Deutsche Bank has a single contract with its direct clients and then facilitates the splitting of the payments between the various actors involved, including the original supplier and any third-party entities.

2.2.3 Pay-by-link: enabling real-time cashflow visibility

Technology enables treasurers to allocate more of their time to problem solving. Ensuring visibility of cashflows has always been one of their biggest problems.

Most companies, whether they deal with business or personal clients, are familiar with the challenges posed by outstanding invoices and uncertainty as to when, or even if they will be paid. For B2B clients, ongoing relationships guarantee some level of trust and predictability. But individual clients, for whom paying invoices is an unwelcome chore, are less likely to prioritise prompt payment of bills – maybe leaving it until the weekend or even forgetting them altogether until a chaser is sent.

This provides a challenge for treasurers, but also an opportunity: the chance to increase visibility with technology and minimise payment barriers along the way.

2.2.4 Case study: Lowell case study using Serrala vendor solution

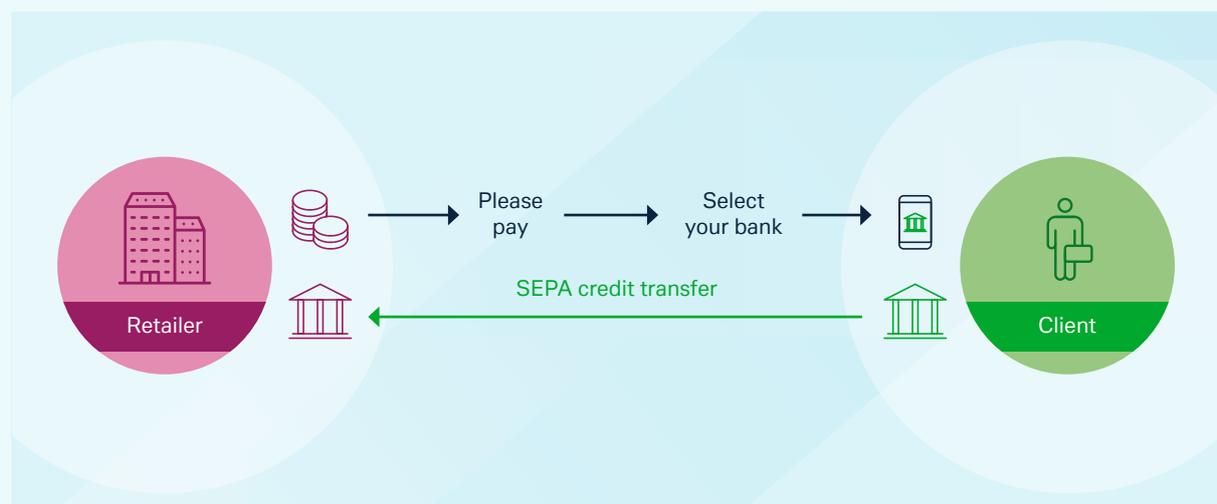
Deutsche Bank partners with technology providers like Serrala to leverage their existing technical integration capabilities e.g. ERP SAP. Both Deutsche Bank and their corporate clients benefit from an end-to-end, user-grade digital experience and standardised electronic messaging as well as a faster go to market approach, reduced implementation time and resources. With the advent of digital payments, 'pay-by-link' services have gone some way to address this issue. Deutsche Bank and Serrala's Request To Pay (RTP) solution, for example, enables real-time communication between the company and the payee. The corporate sends out an invoice via email, to which Serrala adds a payment link that supports a variety of payment methods.

Lowell, a leading European debt collector, is using the solution to help improve internal processes and deliver a better customer experience to their clients.

The RTP solution simplifies the management of outstanding payments by providing customers with a notification via email or text message with a payment link. The customer opens the email, selects their bank and, with the click of a button, the payment is initiated. Assured by the information that the payment is on its way, Lowell's treasurer can move to streamline the costly, time-consuming processes related to non-paid invoices. Payment collection and processing can therefore be digitised and automated further, allowing treasury to divert crucial resources to more value-added tasks.

In addition, the solution can be integrated into the treasurer's ERP through application programming interface (API) technology that makes use of the EU's PSD2 regulation. Provided the ERP has an API, it can communicate with pay-by-link solutions.

Figure 3: Serrala's Request to Pay solution



Source: Serrala



2.3 Payments in the end-to-end value chain

Using the latest technologies, payments are being further embedded into customers' daily lives. Known as contextual payments, these serve a wide variety of user cases. Imagine, for example, a customer is chatting with their friend on a messaging app when they remember they owe money for their share of the dinner bill from the previous night. Rather than switching to a separate payment app, what if they could initiate the payment within the messaging app itself?

Later, that same customer might be driving home through an unfamiliar area. He/she is unaware that it has a toll road that might require cash, which the customer does not have, or take a pre-payment by card. The driver must either pull over and pre-pay the toll fee or continue driving and incur the inevitable fine. What if a virtual version of the customer's credit card were available to be used through the car's dashboard, which could automatically pay the toll as the car passed through? It would certainly be more convenient.

Later in the journey, the driver stops for fuel at a service station. Rather than leave the car, go to the checkout, wait in line, insert the payment card, type in the pin, and wait for the payment confirmation, before returning to the car, what if that same virtual card on the car's dashboard could be used to pay? Having refueled, the customer could seamlessly make payment as they drive away.

By integrating payments into areas such as cars, e-commerce platforms, or messaging apps, businesses can create a more seamless user experience, reducing friction in the payment process and potentially increasing customer loyalty and repeat usage. They can also provide valuable data insights for treasury teams, enabling them to gain a better understanding of customer behaviour and preferences, which can inform pricing and product strategies.

2.4 Payments as a revenue driver

Large technology firms have recognised the potential of integrating payments into their value chain or setting up marketplaces as a way to complement their customer journey and offer value-added services. In doing so, they can create new revenue streams – such as multi-currency pricing, cash advances or lending – and offer customers a more seamless and convenient experience.

2.4.1 Case study: Smart payments for smart cameras

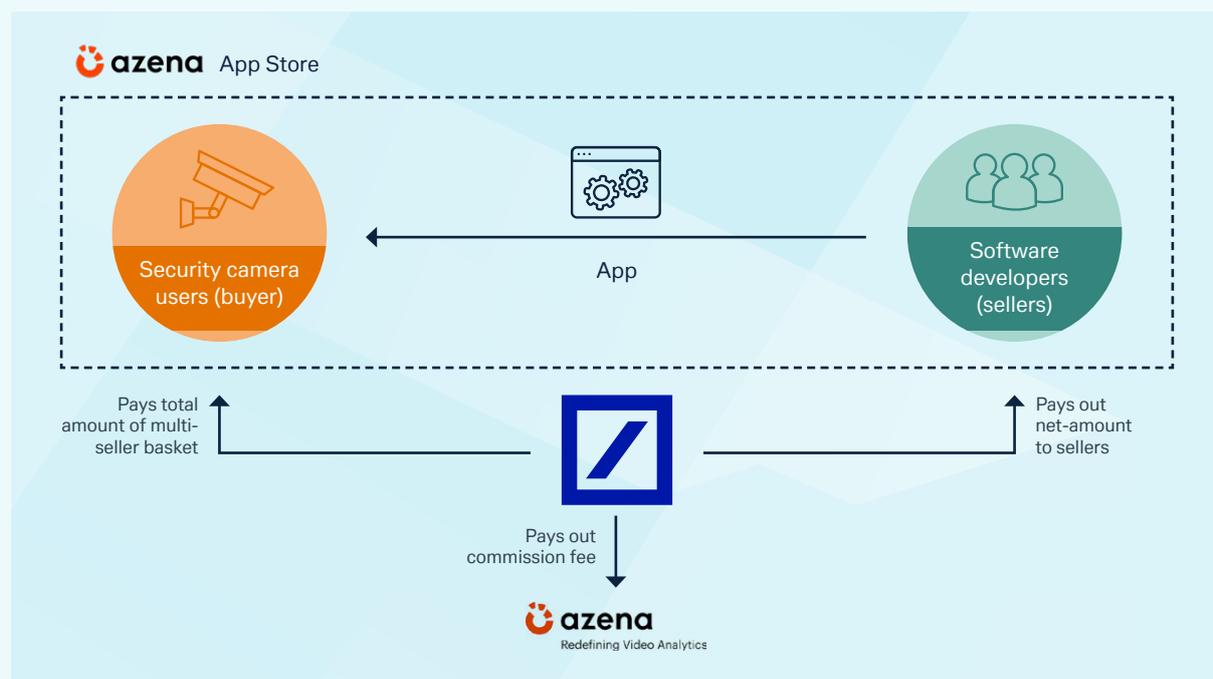
Originally launched as a growth project within the Bosch Group before developing as an external company, Azena is a leading global supplier of technology and services that has launched an e-commerce marketplace to connect suppliers of software applications with customers all over the world.

The launch of the marketplace is a key objective of Bosch's digital payment strategy, which aims to offer a convenient, safe and cost-efficient online platform that combines and accepts a range of different payment channels (including both modern and traditional ones) for different digital business models, and drive revenue growth.

Bosch turned to Deutsche Bank to support and enhance the journey along its digital payments strategy. Together they co-innovated the digital customer experience and met the needs of Azena's fast-growing B2B marketplace. The bank built a tailor-made payment platform specifically for the digital marketplace, which allows Azena to automate and integrate the entire payment process end to end (see Figure 4). The payment solution enables buyers to purchase software from multiple sellers in one transaction by automatically dividing the total payment and distributing the correct amount to each seller, while allocating the appropriate commission fee to Azena.

While the priority initially was to drive up transaction volume by getting more software developers to join the new payment platform, further steps are planned. They include the offering of FX conversion services as well as financing solutions, such as factoring within the marketplace. When it comes to payments, the next step could be to introduce the feature of recurring payments, which would allow for subscription-based software purchases.

Figure 4: How the new camera payment process works



Source: Deutsche Bank

3

Digital payments for treasury

Treasurers are among the first within the organisation to sense and be impacted by external market conditions or changes to the organisation's business model. For digital payments, this includes the rapid shift in sales from traditional channels to more modern, digital channels, the new requirements for backend operations to provide efficient reconciliation and changing cash in-take patterns. Each of these areas either directly or indirectly impacts daily treasury activities, so treasurers should keep an open mind on developments in digital payments and take ownership of change. The following section explores the various ways in which digital payments are impacting treasury – and maps out the reasons why this should be a topic high on the agenda for the strategic treasurer.

3.1 Personal growth role

Employees are keen to ensure that their role stays relevant, and they contribute to the overall growth of their company. Responding to that need offers not just an opportunity to take the treasury department to the next level – by incorporating new core competencies that add value – but also to advance the treasury role itself to the next stage of evolution. Companies that neglect career advancement risk losing their strategic relevance and being left behind.

3.2 Bottom line impact

A key aim of any department should be to add value to the company's bottom line, whether directly or indirectly. This is an area of particular importance to treasury and adding digital payments to its scope is a significant opportunity to boost revenues. Driving customer payment methods – and being part of the orchestration process for the customer journey – translates into direct sales.

One of the key challenges here is enabling digital payment methods and maintaining legacy rails. Take a telecommunications company for example, whose clientele is split across several generations. Older customers are accustomed to making cash and cheque payments, while the younger generation expects more convenient, electronic methods. The former is expensive to maintain, which presents a conundrum for the treasurer: shutting off cash and cheque facilities would risk losing clientele, but at the same time they cannot support the cost of these methods long term. Companies like this should therefore focus on the emerging payment methods; both to ensure the company stays relevant in the future and also to appeal to the new target audience. Treasury is well placed to drive these changes.



3.3 Centralised payment strategy

A centralised payment strategy gives treasurers greater visibility and control over an organisation's cash flow, which in turn enables it to be more effectively managed and optimised. Consolidating payment processes and systems can also streamline operations, reduce costs, and improve efficiency while freeing up resources for more strategic initiatives.

To create relevance and benefit, the strategy should be a global, coordinated effort that avoids prioritising one division or one brand within an organisation. Many major corporates will maintain and operate hundreds of different payment methods across various jurisdictions, with a variety of ways for customers to get a refund or connect to a specific payment service provider. For these corporates, the required level of centralisation is not easily achieved and must be developed over time. It starts with a long fact-finding exercise to gain the base-level transparency needed to be able to respond with an appropriate strategy.

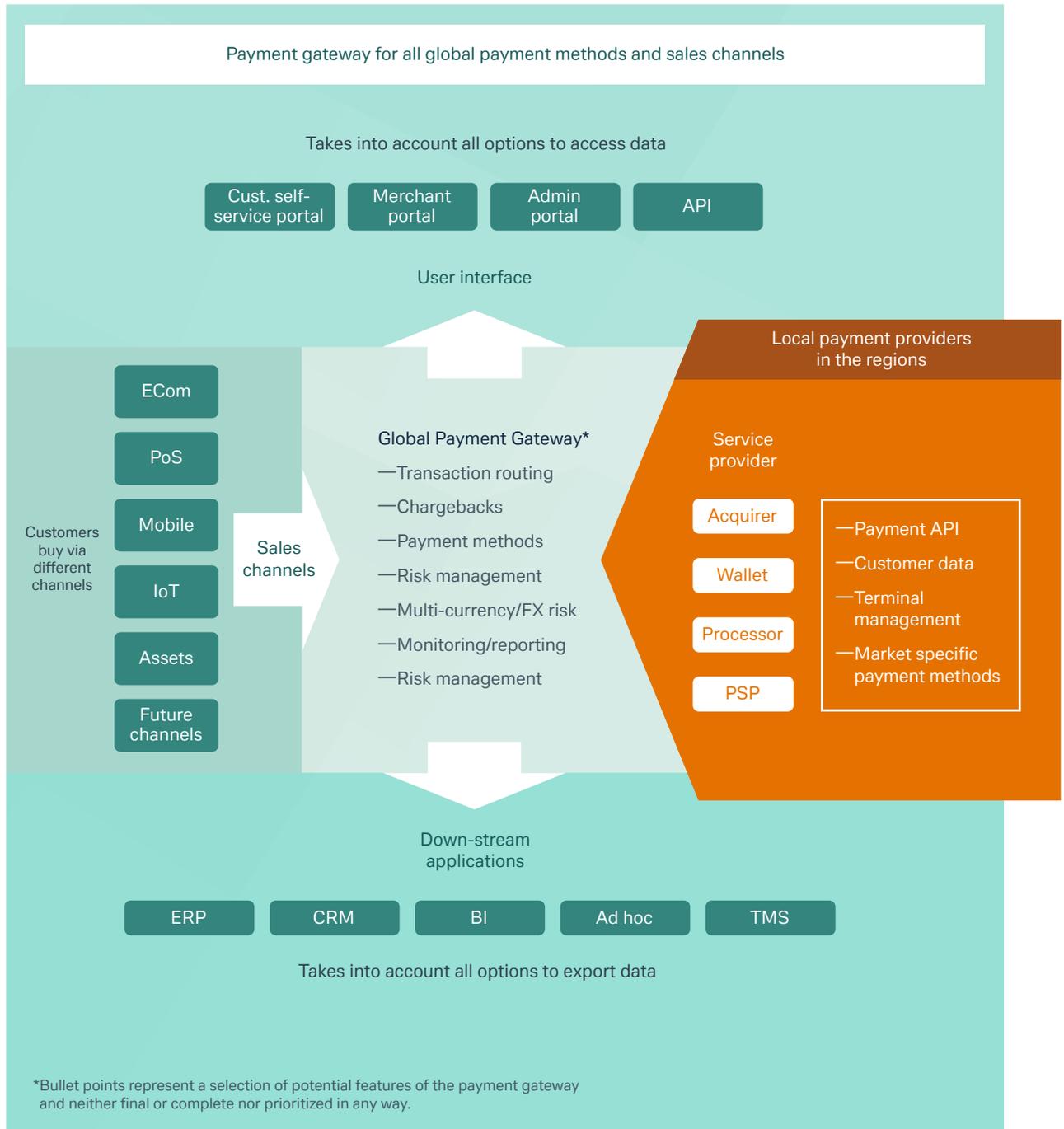
3.3.1 Global payment gateway

A global payment gateway forms one potential core for centralising and managing all payment and finance flow of a marketplace, while enabling businesses to process and manage electronic payments from customers around the world.

A global payment gateway typically supports multiple payment methods such as credit and debit cards, bank transfers, e-wallets, and other alternative payment methods specific to certain countries or regions. It can also provide fraud detection and prevention tools, as well as currency conversion and settlement services to help businesses manage cross-border transactions (see Figure 5).



Figure 5: Payment gateway as a global hub for all transactions



Source: KPMG

3.4 Harmonised formats

Traditionally, the exchange of information between different parties involved in the payment process has often been hindered by the lack of standardised formats. Each participant may have their own preferred file message format or type – leading to inefficiencies, data discrepancies and reconciliation complexities. This fragmentation not only creates operational challenges but also hampers the ability to achieve end-to-end visibility and automation.

To address these challenges, the industry is recognising the need for harmonised file message formats and types that enable consistent and streamlined information exchange across the payment ecosystem. Harmonisation promotes interoperability and enhances data integrity, making it easier for systems and participants to communicate effectively.

One example of harmonisation in file message formats is the adoption of standardised XML meta formats, such as the CAMT.54 (predominantly used by banks to exchange messages with corporates or other banks via Swift). Non-bank third parties, such as payment service providers (PSPs) and processors rely primarily on API technology to exchange transaction information in near-time.

Harmonised file message formats facilitate integration between different systems, such as the corporate's ERP system and the back end with those of the payment processors. This integration enables seamless data flow, real-time visibility into transactions and accurate reconciliation between incoming payments and corresponding orders. By standardising the formats, organisations can simplify integration efforts, reduce implementation complexities and enhance the overall effectiveness of their digital payment infrastructure.

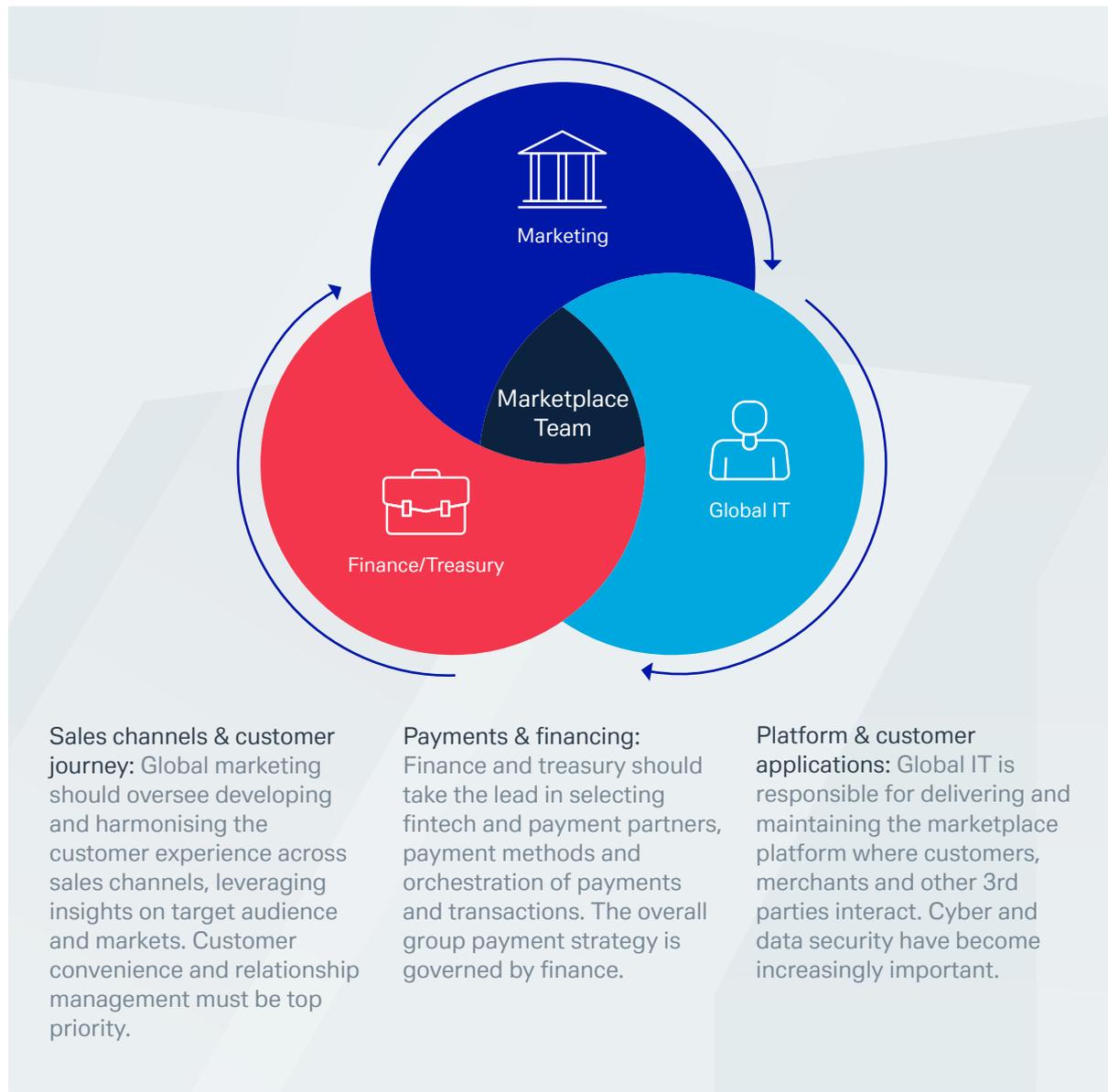
In addition, harmonised formats contribute to regulatory compliance, as they provide a common language for reporting and data exchange. Regulatory bodies and industry associations are increasingly advocating for standardised file message formats to ensure transparency, accuracy and consistency in financial transactions.

3.5 Business proximity

Business proximity is valuable for treasurers, who must collaborate with various departments including digital marketing, sales, IT, and finance, to create a seamless and secure customer experience (see Figure 6). This requires cross-functional collaboration, a diverse skill set and new ways of working:

- **Cross functional collaboration:** Treasury is tasked with learning to naturally interact with digital marketing, sales, IT and finance when creating the most convenient customer experience while maintaining efficiency and security.
- **Skills from various disciplines:** The aptitudes for building and operating a future-proof payment setup requires a skill set that extends beyond those of just one department; implying a blend of individual contributions from across the organisation.
- **Project-based and agile working:** Ways of working should move towards a much more agile and goal-oriented approach, to manage the rising complexity and variety of topics and stakeholders.
- **From service provider to enabler:** The treasurer will become the enabler for the business to satisfy customers' changing payment needs.

Figure 6: Marketplace – A new cross functional discipline



Source: KPMG

3.6 Value-added payment activity

Insourcing of value-added payment related activities involves bringing payment service activities in-house instead of outsourcing them to third-party service providers. The transfer offers businesses greater control over the payment process, increased efficiency, and lower costs associated with outsourcing.

For example, by insourcing payment service activities or commoditising payment methods, businesses can expand their value chain. It also enables them to offer a wider range of new services to their customers, which can increase their take rate (i.e., the percentage of revenue earned from each transaction) and improve customer retention rates.



3.7 Counterparty Risk

Over the past decade, businesses have increasingly relied on third-party technology as a means of entering new markets, lowering operating costs and keeping pace with the digital economy. This includes cloud outsourcing to provide the underlying infrastructure that can support a broader scope of solutions.

Despite the potential benefits, the complexity of third-party relationships gives regulators cause for concern in several areas.¹³ For example, outsourcing at this scale – and the added challenge of sub-outsourcing, whereby third parties outsource elements of their contracted services to other third parties – makes it difficult for both businesses and financial firms to manage and monitor the relevant risks. The concentration on a small number of dominant third parties could also give rise to anti-competition concerns.

3.8 Working capital optimisation

There is a clear trend among financial firms to offer the possibility for faster payouts to their corporate/merchant clients. It becomes a clear differentiator. This is especially the case within emerging markets where payment terms are still quite onerous and do not favour the corporate. Merchant cash advance is another emerging solution where payment service providers offer funding based on the processed volume and historic data of the merchant.

3.9 Cash forecasting

As more transactions are conducted digitally, a growing challenge for treasurers is to accurately forecast their cash flows. One characteristic of digital payments is that many are settled instantly or within a brief time frame. This makes it difficult for treasurers to quickly access and analyse data on digital payment transactions in order to make accurate cash flow projections. As digital payments are often initiated by customers or vendors, the timing and number of payments are also often less predictable than traditional treasury payments, adding further complications for treasurers.

Yet if treasurers can navigate these complexities, digital payments also offer an opportunity to improve cash forecasting. For example, digital payment platforms often provide real-time visibility into transactions, which can give treasurers better understanding of their cash position and assist more informed decisions.

3.10 Manage FX risk

Managing foreign exchange (FX) risk is a core treasury skill, but the era of e-commerce has amplified this risk. With more consumer brands opting to sell their products directly to customers via their own websites and bypassing retailers, treasurers are now often faced with the challenge of handling a larger quantity of smaller transactions. For multinational companies, this poses difficulties in terms of pricing their goods in the local currency and navigating FX fluctuations, especially in situations where online checkout processes are delayed, or items remain in carts for extended periods. This warrants a clear strategy that tackles how to deal with FX fluctuations and exposures in direct-to-consumer sales channels supported by system-based configuration and rules. For example, treasurers will have to decide whether to allow purchases only in their local currency or that of the applied consumer, as well as how to set prices, track and manage applied FX rates and mitigate the corresponding exposure.

3.10.1 Case study: Partnership with Salesforce

Deutsche Bank is planning to launch initiative to integrate foreign exchange (FX) solutions with Salesforce's B2B commerce and Revenue Cloud in 2023. This is a strategic move that offers several benefits for its customers and revenue potential for the bank. By introducing its FX solutions into Salesforce's ecosystem, Deutsche Bank can offer a seamless, integrated payment and FX experience for customers. Joint customers can manage their payments and FX needs directly within the Salesforce platform, improving efficiency and reducing the complexity associated with managing multiple systems. Additionally, the integration provides customers with greater transparency and control over their payment and FX data, helping more informed decisions about their business operations. For Deutsche Bank, the integration offers a significant potential by enabling it to offer FX services within a SaaS platform. With the increasing demand for digital payment solutions and the shift towards embedded finance, Deutsche Bank's integration positions it well to meet the evolving needs of its customers and capture new revenue streams.

3.11 Fraud prevention

Payment fraud is one of today's biggest challenges facing corporate treasurers, with criminals targeting corporations of all sizes, and across all industries. In the US the Association for Financial Professionals' (AFP) 2022 Payments Fraud and Control Survey found that 71% of participant organisations had been the victim of payments fraud in 2021. To understand the challenges that surround modern payment fraud means first understanding the dramatic changes that continue to shape the corporate payments space.

In order to limit fraud successfully, companies should work with Payment Service Providers who have insights across the value chain and use data analytical tools to prevent fraud. Deutsche Bank, for example, has joined forces with recognised providers such as Cybersource and TIS to bolster its own defences. The TIS software looks beyond the payment data of individual customers, leveraging the knowledge of all corporates in the network, while the shared data remains anonymised.¹⁴

4

New KPIs for treasury

An important objective of sales reporting is the continuous monitoring of strategic financial and business key performance indicators (KPIs) to measure turnover and market growth. A major part of the required underlying data (i.e., purchased item, geography, payment method, client group) originates at payment initiation, during checkout and payment processing. It turns the holistic end-to-end payment perspective, from in-take and outflow, into a valuable source of reporting.

As treasury looks to play a greater role in its company's digital payment strategy a new, or evolving set of treasury KPIs are emerging. Ultimately these new KPIs (i.e., net sales per sales channel, conversion rate, transaction costs per channel, write-offs) affect corporate cost efficiency in terms of margin and also factor into the traditional working capital KPIs such as days payable outstanding and days sales outstanding. They are also increasingly bottom line focused, creating a new perspective for treasury and certainly an opportunity to grow its significance.

4.1 Working capital

The working capital KPI measures the company's ability to meet its short-term financial obligations and fund its day-to-day operations. This supports the core objective of cash management operations and ensures that the organisation has the cash that it needs, at the right place, and at the right time.

From the perspective of working capital, there are not necessarily any new KPIs – the same processes are just being expanded. With digital payments, for example, treasury must decide pay-out times, settlement frequency etc; which will impact days sales outstanding and need to be closely managed.

4.2 Cost control

In measuring the effectiveness of a digital payment strategy, one key focus has become measuring how much it costs to maintain the various sales channels – and the payment methods each supports – that are used across the entire business, as well how much volume goes through each of these channels. Examples include:

- How much is being spent to maintain a specific sales channel?
- How much is being spent to provide a specific payment type?
- What are the transaction costs per collected currency unit?
- What are the net sales and/or channel share?
- What is the transaction volume per payment method?
- What is the distribution of customers per sales channel?
- What is the sales conversion rate for each channel?
- What are the time savings related to order/payment execution?
- What is the collection rate?
- What is the percentage of chargebacks?
- What would it cost for same day settlement?

These metrics should all be considered, with the ultimate question being: what works and what does not?

4.3 Risk acceptance

As more transactions are conducted online and through digital payment systems, the potential for fraud and security breaches has also increased. To mitigate these risks, treasurers must prioritise security and fraud prevention as key metrics for success. Setting the right balance between the level of payment fraud detection and the avoidance of false positives remains a challenge for all parties. For example, a standard rules-based security engine can decline up to 30% of non-fraudulent orders and, after being declined, more than 40% of customers will abandon their cart and will place an order with another company, rather than go through the security-tight merchant's procedure for a second time.¹⁵

4.4 ERP reconciliation

As digital payments and the number of methods offered grow it can cause significant challenges for the back end; particularly as it relates to ERP reconciliation. While this is not a new KPI – relating to traditional straight-through processing rates – it is becoming more important.

4.4.1 Case study: The importance of ERP reconciliation

A company operating with an expansive sales platform – from an online marketplace and point of sale, to call centres – might struggle to easily match its orders with incoming the payments in the back end. One way to achieve this would be to download all the information from each system and reconcile the data using a simple spreadsheet, although this is a time intensive and inefficient process. Going forward, if the company looked to open up new sales channels, the situation would deteriorate further – causing added complications in their back end, especially when it comes to reconciliation.

Often different formats of settlement reports are delivered, which creates additional workload. In trying to solve these issues, companies could explore the use of a middleware solution which allows the conversion into one standardised structured XML meta format, such as a Camt.54.

4.5 Webshop integration

An increasingly important KPI is the ability of a company's treasury operations to facilitate online sales transactions by seamlessly integrating its webshop with its payment systems and cash management tools.

Integration can bring significant benefits to a business. For instance, it can improve cash flow management by providing real-time visibility into cash flows. This can, in turn, enable treasurers to optimise their working capital, forecast cash flows more accurately, and make informed decisions on investing excess cash. By streamlining payment processing, webshop integration can also reduce transaction costs associated with online sales, while enhancing the customer experience.

5

Outlook

The future of digital payments presents both opportunities and challenges for corporate treasurers. As technology continues to advance and customer expectations evolve, they must adapt their strategies to stay ahead in the rapidly changing payment landscape.

One key area of focus for treasurers is the integration of digital payment methods that cater to a broader range of client segments. By offering diverse payment options, businesses can reach new customers and enhance their overall customer experience. This shift towards inclusivity requires treasurers to work closely with technology providers and banks to implement and support these new payment methods effectively.

Treasurers also have a key role to play in navigating the complex regulatory landscape that surrounds digital payments. Compliance, tax and regulatory obligations must be carefully managed to ensure seamless and secure transactions. Treasury departments must stay informed about emerging regulations and collaborate with regulatory bodies to maintain compliance and mitigate risks.

Real-time treasury and instant payments are becoming the norm, requiring treasurers to have full control over all payment processes. By leveraging digital payment systems, they can improve cash flow forecasting, enhance liquidity management and optimise their balance sheets. Automated reconciliation and posting of received funds enable businesses to provide a better customer experience and help to foster loyalty among their client base.

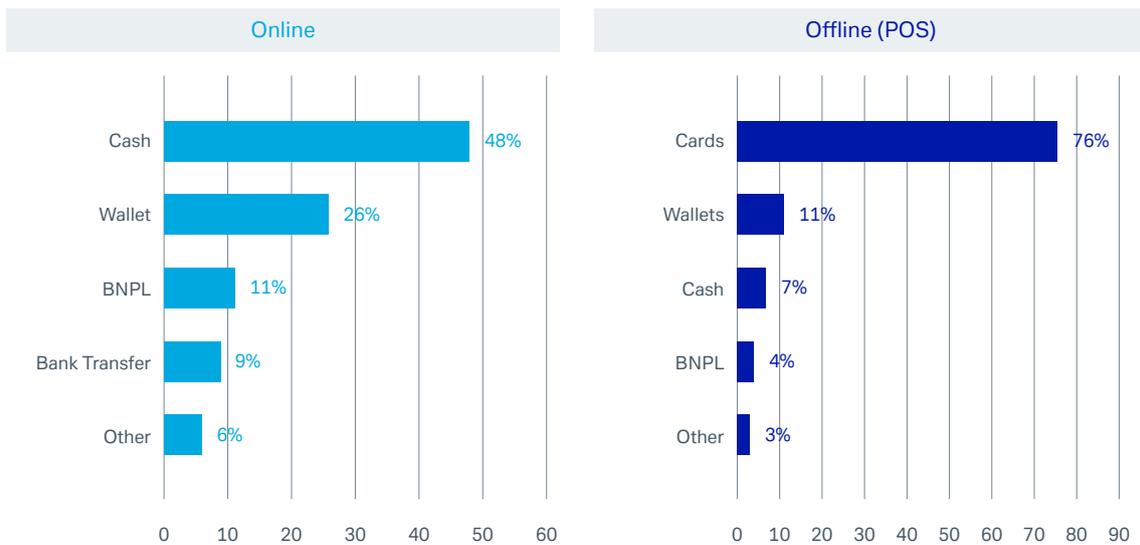
To become leaders in digital payments, corporate treasurers should evaluate the importance of this payment sector for their organisation to understand how the treasury function can best support the operational business. While strategies may vary across corporations and industries, the underlying principles of leveraging digital payments to enhance efficiency and drive business growth remain consistent with the focus on a central digital payment strategy that is locally executed.

By understanding the challenges, embracing the transformation and leveraging the expertise of banks and technology providers, treasurers have an opportunity to position themselves as vital business enablers in the new digital payment era.

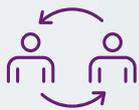


Country guide Australia

Business-to-consumer



B2B



- Business-to-business (B2B) payments are subject to specific regulations and requirements in Australia. For example, it is mandatory to include an ABN or GST registration number in invoices
- Common B2B payment methods include ACH payments, wire transfers, credit cards, and electronic funds transfers (EFTs)

Key facts about popular alternative payment methods

Wallets:

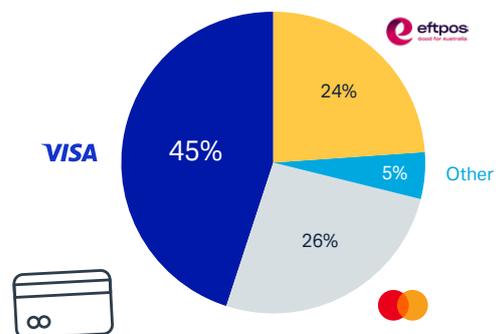
- Led by PayPal, digital wallets passed 25% of e-commerce spend in 2021 and will lead online by 2024



AfterPay, Klarna and Yip:

- Australia is full of buy-now-pay-later (BNPL) active players, which accounts for more than 10% of e-commerce payments

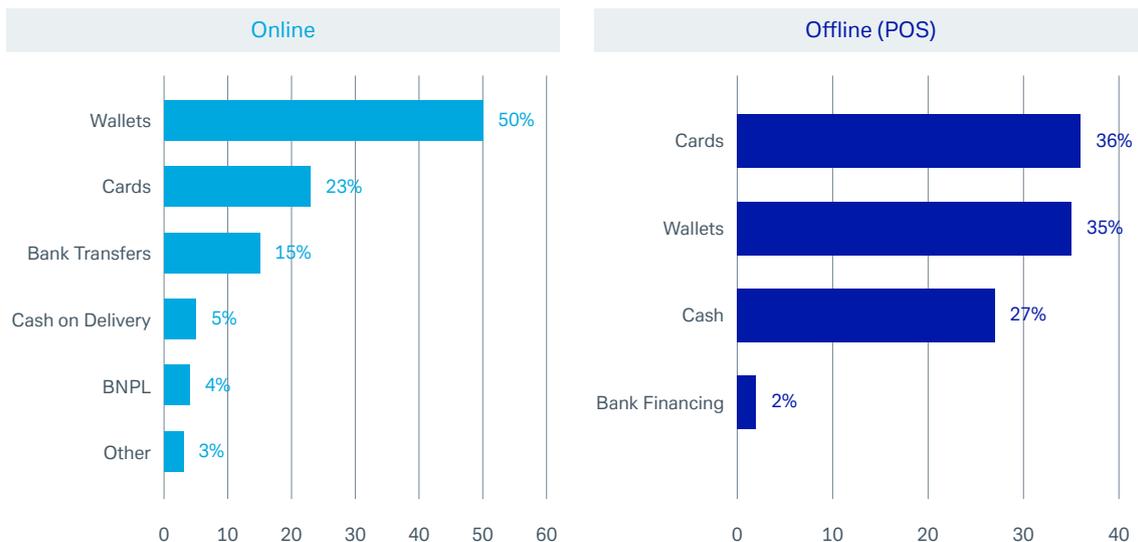
Card brand breakdown (2022)



Country guide

India

Business-to-consumer



B2B



- The Reserve Bank of India – India's central bank – has, over the past few years, encouraged electronic payments and almost all electronic payment modes are available 24/7/365
- Business payments are primarily executed through Electronic Fund Transfer Modes (NEFT/RTGS) or cheques (largely stagnant volumes)

— Recent central bank initiatives include TReDS (Trades Receivables & Bill Discounting), BBPS (Bill Payments & Invoice Payments). Tax (Indirect) still remains less seamless; however this is also expected to be digital in a few years

— Payment aggregator – all the payments are via two-factor authentication

— UPI: India's instant payment product- Unified Payment Interface (UPI) has seen one staggering growth of ~75% YoY, clocking 8+Bn transactions a month, is positioned to increase its share from 15% (bank transfers) to 25% by 2026

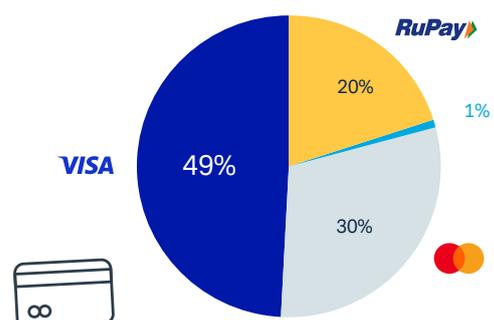
Key facts about popular alternative payment methods

Unified Payment Interface (UPI):

- India's instant payment product enables instant account-to-account payments
- According to an economic survey in India, UPI accounted for ~52% of all the digital transactions in FY 2022
- In value terms, over US\$150bn was transacted using UPI in FY 2022
- 50% of UPI transactions are person-to-merchant (QR, Payment Gateway, Collect) etc

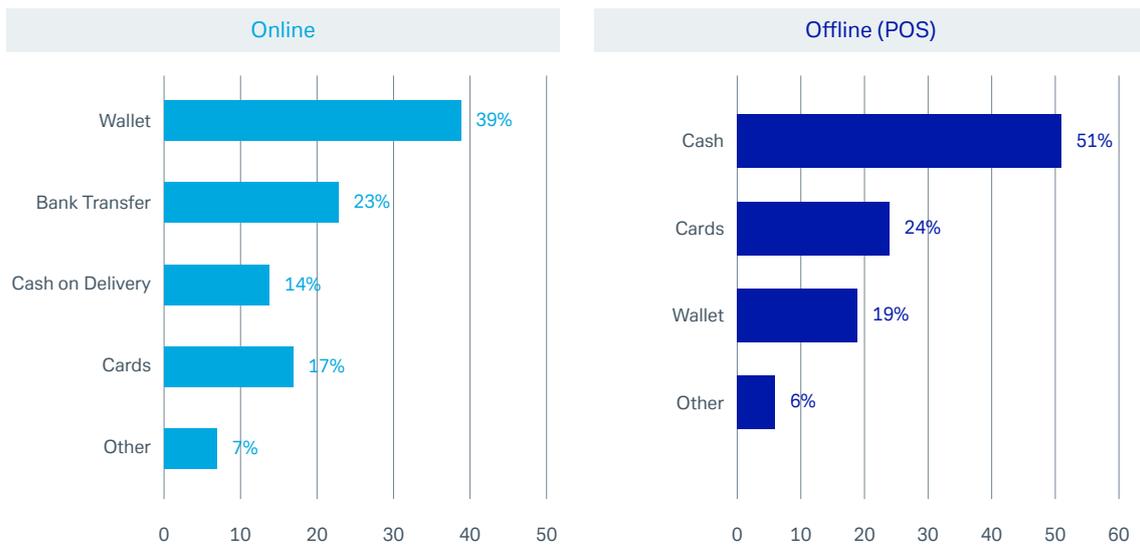


Card brand breakdown (2022)

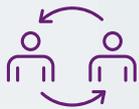


Country guide Indonesia

Business-to-consumer



B2B



- The most popular payment methods include cash on delivery, bank transfer, credit card payment and dedicated e-commerce payments
- Bank transfers are common and convenient as it includes high security standards, no processing fees and customers' ability to make changes to their orders prior to finalisation

Key facts about popular alternative payment methods

Wallets:

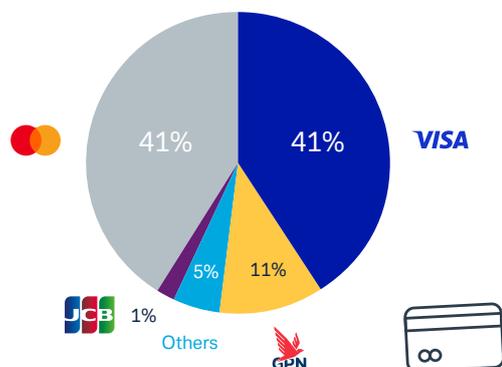
- Super apps thrust digital wallets such as OVO and GoPay to a leading e-commerce payment share of 38.8% in 2021

OVO:

- Leading e-wallet in Indonesia with around 2.5 million user and more than 100.000 participating merchants

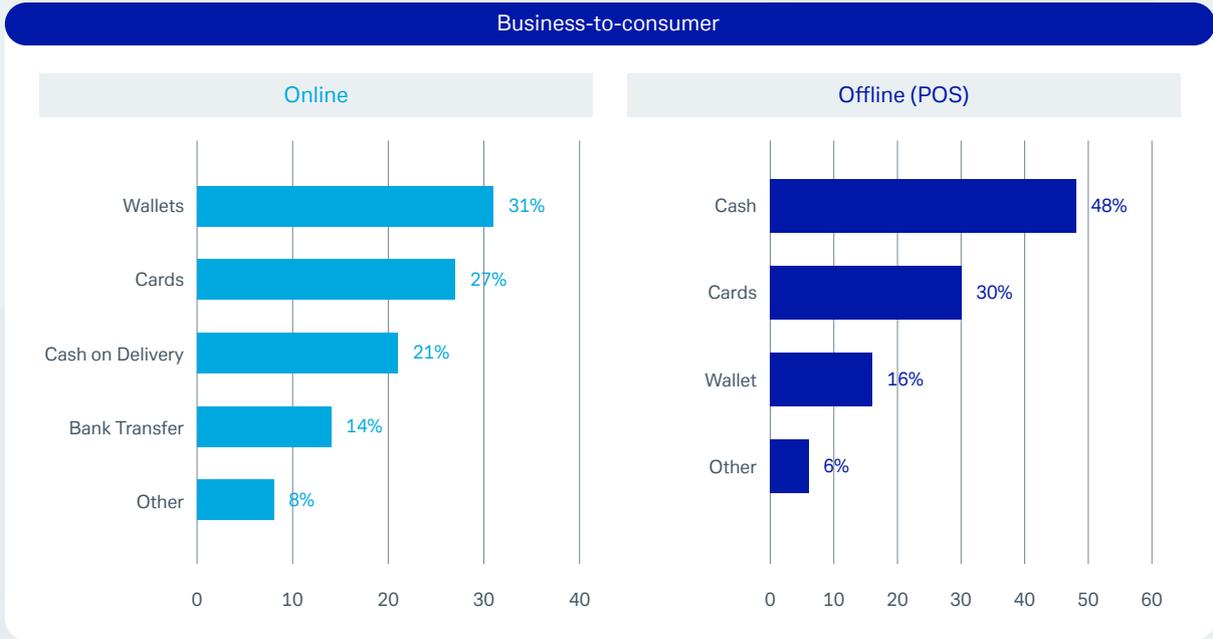


Card brand breakdown (2022)



Country guide Philippines

Business-to-consumer



B2B



The NRPS paved the way for better B2B payments in the Philippines and created two automated clearing houses (ACH), PESONet, and InstaPay

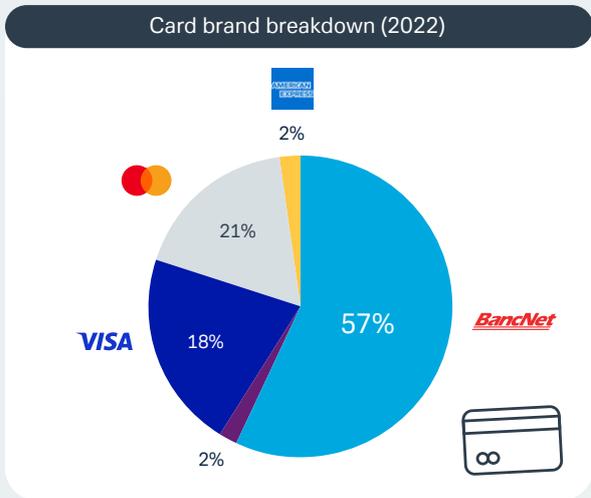
Key facts about popular alternative payment methods

Wallets:

- Led by Gcash and digital wallets are set to represent over 45% of e-com payments by 2025
- PayMaya has over 40 million users in the Philippines, nearly two-thirds of the country's adult population

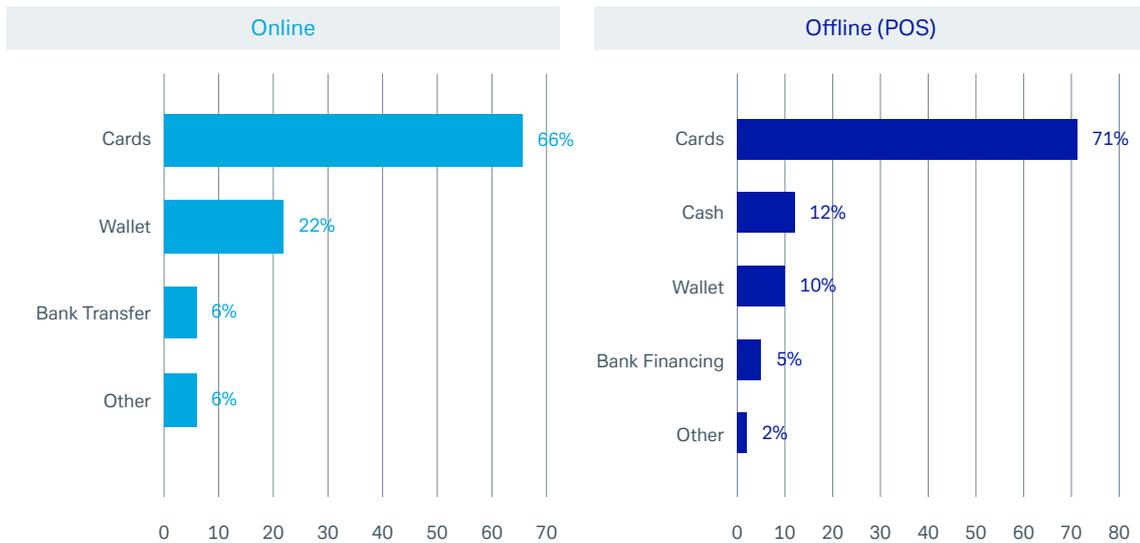


Card brand breakdown (2022)



Country guide South Korea

Business-to-consumer



B2B



Merchants that plan to operate in South Korea need to be plugged into the country's digital payment infrastructure, such as the B2C and B2B e-commerce payment systems. Most of the major retail payment systems are run by Korea Financial Telecommunications & Clearings Institute (KFTC)

Key facts about popular alternative payment methods

Kakao:

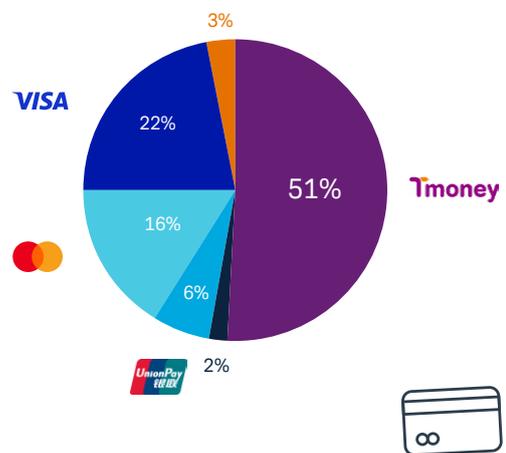
- As of October 2018, Kakaopay transactions made using the service exceeded 2.3 trillion won (US\$2.04bn) monthly
- More than 10 million user in South Korea
- Incorporated into Kakaotalk, the instant messenger from Kakao allows users to send and request funds between contacts



Toss Pay:

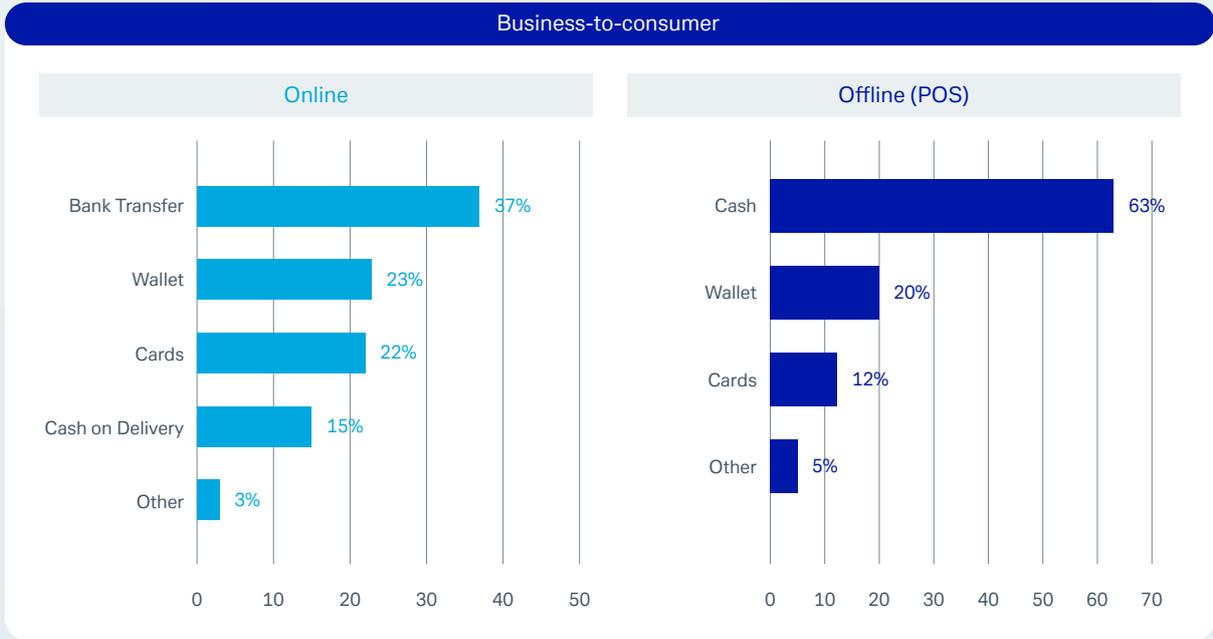
- Popular money transfer App which supports cards issued by nearly all major Korean banks
- Third most popular commerce payment method
- 30% payments market share in South Korea

Card brand breakdown (2022)



Country guide Thailand

Business-to-consumer



B2B



- Thailand is relatively banked, while offering broad access to debit and credit cards, e-wallets, only banking and PromptPay – the national real-time payment scheme
- To facilitate instant cross-border payments in South East Asia, Thailand and Singapore launched the world’s first linkage of real-time payment systems

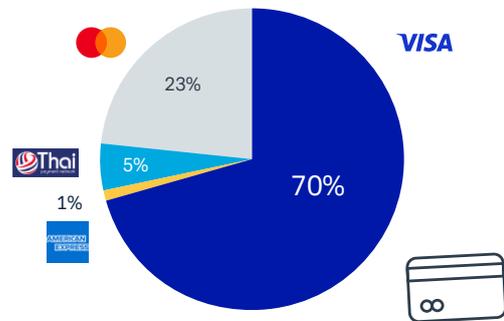
Key facts about popular alternative payment methods

TrueMoney, Prompt Pay:

- E-wallets and real-time payments are driving frictionless payment experiences
- TrueMoney accounts for 16.8% of payment methods used for online and offline transactions in 2022, while PromptPay has a 5.8% share



Card brand breakdown (2022)



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14. How to prevent payments fraud – Deutsche Bank ([db.com](https://www.db.com))
15. How to Reduce False Positives and Improve AML with Machine Learning (ML) – Intellias ([intellias.com](https://www.intellias.com))



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