

The New Payments Ecosystem

Payment trends series #3

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Introduction: Evolution of the Payments Ecosystem

Anytime, anywhere, all it takes is the push of a button or a tap of a card. Payment successful, value delivered. A seemingly simple exercise, but what does it take to make it happen?

In the first of our *Payment Trends Series: Convergence of Payments*, we observed how the payments industry is undergoing a paradigm shift and is converging towards digitalisation at astonishing speeds. This radical shift is underpinned by two parallel trends identified by PwC's *Payments 2025 & Beyond* where we observe an evolution of the front- and back-end parts of the payment system and a revolution involving huge structural changes to the payment mix and ecosystem. Growth in digital payments further accelerated out of necessity during the COVID-19 pandemic, particularly at an institutional level, perpetuating the growth of digital payments for years to come.

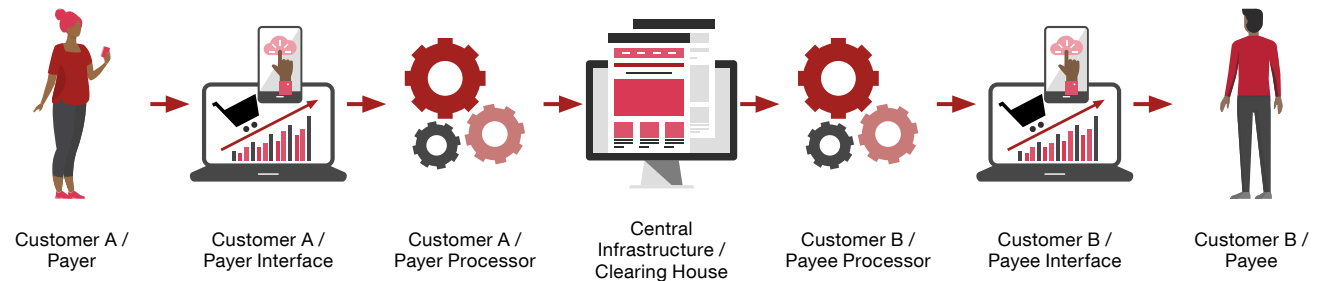
In the second part of the *Payment Trends Series: Value of a Payment*, we took a deeper dive and explored how the value of a payment has transformed from a traditional medium to complete an exchange of goods or services, into a cornerstone of the new digital economy.

The third instalment of the series, *The New Payments Ecosystem*, explores the transformation within the payments ecosystem that is powering the acceleration of payments convergence and the shift in value of a payment. We consider new entrants into the payments ecosystem and strategic pivots made by traditional incumbents, how these interactions are being reshaped, and which models are starting to emerge that may have a profound impact on the way value is being created in the new payments ecosystem.

The Payments Ecosystem

A payment is a simple exchange of value between two parties typically for goods or services rendered. Completing a payment may involve several actors, each fulfilling a specific role within a payments ecosystem.

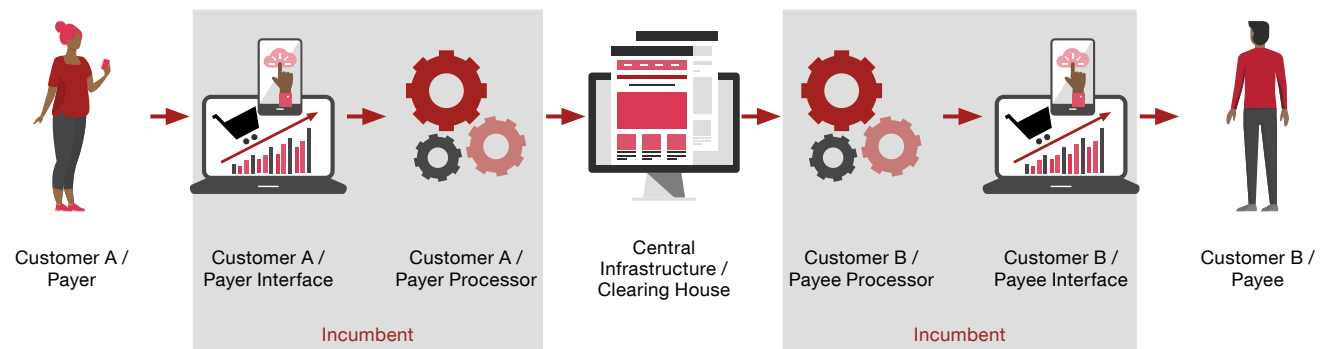
Illustration of possible actors in a single payment



For many years, traditional incumbents occupied the role of fulfilling the needs of the entire payments value chain which consists of owning the customer relationship, processing the payment, owning the infrastructure and storing the funds.

This has created the foundational value chain and usually has had fixed types of roles. Innovation and competition will spur change and the role players fulfilling these roles and the underlying interactions will likely change through deeper specialisation, an increase in the types of offerings and new ways of creating value for customers.

Illustration of traditional role players in a simple payment

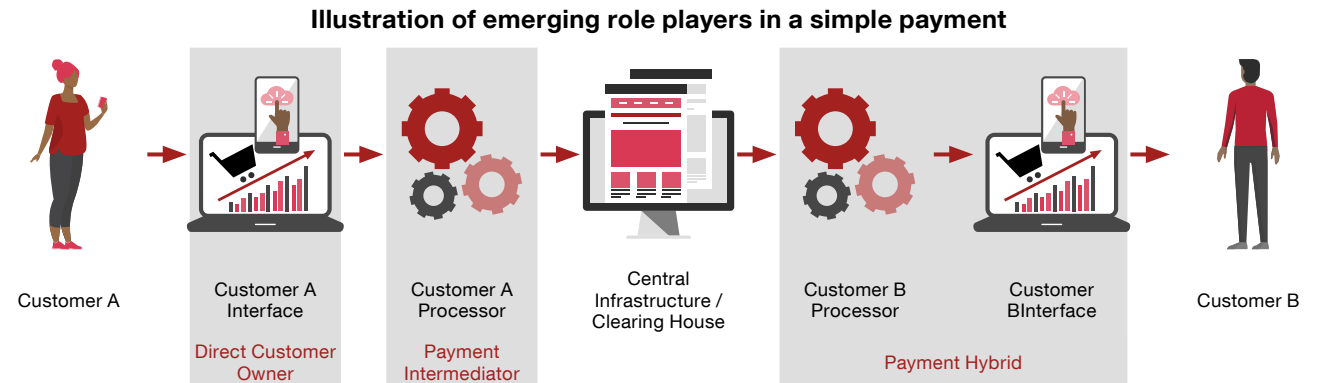


Payment players have largely focused on pursuing one of three roles in the new payments ecosystem:

1. Owning the direct customer relationship – providing the interface that customers interact with to make and receive payments.
2. Being intermediators – facilitating the interaction between the owner of the customer relationship and the central payment infrastructure.
3. Being hybrid and doing both – maintaining the customer relationship and interface, while providing underlying payment processing.



Technology advancements, ongoing innovation and changing customer behaviour are just some of the primary forces that are driving the emergence of these roles in the new payments ecosystem. More importantly, regulators have taken note of these market drivers and are moving towards policies that are aimed at promoting innovation, harmonising payments, and increasing customer protection while creating an inclusive environment for all payment system role players.



The segregation of roles across the payments value chain provides opportunity for collaboration and niche product offerings. For example, incumbents and infrastructure providers may consider transforming into a more platform-esque business. Compared to incumbents' traditional role in the payments ecosystem, platform businesses allow for greater scalability and improved efficiencies as they provide new entrants and their customers greater access to the payments ecosystem. New entrants looking to own customer relationships no longer require expensive infrastructure, strict assurance processes and large transaction volumes to participate in the payments ecosystem. Instead, they add their niche offerings and customers to those of incumbents to build a self-sustaining new payments ecosystem. Alternatively, intermediators can compete directly with incumbents to offer banking and payment solutions.

The subsequent sections aim to further explore the ways to play in the new payments ecosystem and the key drivers for organisations (prospects and incumbents) to consider to be better equipped to thrive in the new payments ecosystem.

The New Payments Ecosystem - Archetypical Plays



1. Direct customer owner (Relationship holder)

A direct customer owner provides a platform where customers are able to make and receive payments via an interface. Direct customer owners typically have their own digital wallet or e-wallet offerings which provide applications that enable users to make payments. These applications range from simple payment applications with limited functionalities to super applications offering a multitude of services. Oftentimes, these interfaces do not just serve to enable users and improve their experience, but also to channel users' attention to their broad functionalities.

WeChat Pay is a mobile payment and digital wallet service driven by WeChat that allows users to make mobile payments, conduct online transactions and pay their utility and phone bills. WeChat is a social media platform that has given WeChat Pay a direct customer relationship with a significant customer base that is frequently used by many people. WeChat Pay has experienced incredible growth since its inception with 430 million users in 2016, growing twofold to a current customer base of 900 million users in 2021.

Direct customer owners can be further categorised into Original Equipment Manufacturer (OEM) Pay applications. OEM-Pay refers to mobile payment applications which allow users to add cards from their bank to an application which is native to the devices. The most notable OEM-Pay applications are Apple Pay, Samsung Pay and Android Pay. Apple Pay, for one, allows users to send and receive money, make bank transfers, conduct web store and in-app transactions, as well as make in-store payments using their existing Apple Pay smart device application.

In-store purchases using OEM payments alone have experienced a rapid increase of 155% in 2020 following COVID-19 impacts. Due to the rapid adoption of the use of these platforms, we have seen a significant increase in the revenue of OEM Payments where it is expected to see annual transactions of \$686 billion by 2024. A publication by Juniper Research expects

Apple Pay to realise \$686 billion in transactions by 2024. This constitutes 52% of the OEM payment transaction market and is due to increased demand as well as an increase in the use of devices that facilitate Apple Pay payments. The research also states an anticipated growth in the global contactless market from the current \$2 trillion to \$6 trillion by 2024. Most of this growth will be through contactless cards; however, 22% of this growth will be from OEM-pay transactions thus making the OEM-Pay market approximately \$1.32 trillion.





2. Payment Intermediator

Payment intermediaries act as a bridge between the merchants and buying customers. They provide both trust and means for a purchaser to make a payment to the seller reliably. The growth in e-commerce has driven the adoption of electronic payments and prompted both incumbent and non-bank entrants to innovate their product offerings to penetrate this space.

Payment intermediaries can be broadly classified into two categories: aggregators and gateways.

Aggregators enable merchants to accept a range of electronic payments, by collecting online or offline payments on behalf of the merchants. Instead of requiring each merchant to set up and manage a merchant account for every method of payment acceptance they use, aggregators act as a middleman to offer the merchant various methods of payment acceptance in one place. Payment aggregators can be considered a one-stop shop for merchants to use and manage many kinds of payment acceptance methods.

On the other hand, payment gateways are intermediaries that provide the technology infrastructure to route and facilitate the processing of online payments. Payment gateways can be considered as highway or network providers to allow customers to transfer funds to merchants. Today we see a convergence between intermediaries and direct customer owners occurring such as the partnership between eBay and Adyen, a payment gateway providing e-commerce companies with a payment platform that includes a gateway, risk management, and front-end processing services. The e-commerce platform and payment processor signed an agreement that had Adyen become eBay's primary payments processor, enabling customers to shop, check out and process payments all on the same platform.

Due to the anticipated growth in digital payment volumes which has been accelerated by the COVID-19 pandemic, the payments processing industry continues to experience strong mergers and acquisitions (M&A)

activity with valuations at premium levels as some of its players go public. An example of such an intermediary is Stripe, a payment technology company and payment processor that enables merchants to process credit card transactions online. The tech start-up is currently considering going public through a direct listing and was recently valued at \$95 billion and raised \$600 million in funding – making it the most valuable start-up in the United States. Similar to Stripe, Adyen was recently valued at €63 billion, placing them in direct competition with some of Europe's biggest banks.

3. Payment hybrid – Direct customer owner and Intermediator

In recent years there has been a convergence between interface owners and intermediators, producing entities which act as a 'one-stop shop' for buyers and sellers. These hybrid entities operate on both sides of the two-sided market, servicing both businesses or third parties offering payments processing, as well as servicing consumers through the use of applications or online platforms which enable retail transactions. These entities have diversified their services to include business banking services and developing 'super apps' in the retail banking domain. The two global prominent players, PayPal and Block (formerly known as Square), are publicly traded and have demonstrated vast growth with PayPal recording over 403 million active accounts at the end of the second quarter of 2021, a growth of 16% from the previous year.

Interface and intermediary hybrids strategically position their payment processing capability on the seller side of the market to channel interest into a broader suite of offerings that contribute significantly to the bottom line. Block serves as a primary example of this, making more profit from their subscriptions and services than from their commissions on payments processed. In the first quarter of 2021, Block generated \$469 million in gross margin from subscriptions and services, while the gross margin from payment processing was 7% less. In addition to payments, interface and intermediary

hybrid entities have taken on other traditional banking services such as lending, with Block reporting loaned funds of over \$9 billion to 460 thousand small businesses since the launch of its lending service in 2014. M-PESA is another prime example of a telco payment hybrid providing financial services to 51 million customers across seven African countries via its smartphone application and telephone service. Since its launch in 2017, M-PESA has expanded its service offering beyond peer-to-peer money transfers and now includes cashless and utility bill payments, micro-loans and savings.

As the trend of hybrid entities becomes more pronounced, interface owners are diversifying their offerings and entering into the intermediary environment to become interface and intermediary hybrids themselves. Such a platform is the privately owned Revolut. Revolut provides its retail consumers with a digital banking solution offering currency exchange among other products. In 2020, Revolut introduced an acquiring solution which enables its business customers to accept online customer payments. Previously, business customers were able to send and receive international payments, exchange funds in multiple currencies and transact using Revolut debit cards. With this move, the company now has 15 million retail customers and 500 thousand business customers, processing over 100 million transactions monthly.

PayPal's 2013 acquisition of Venmo jump-started the entity's journey to developing its very own super app. This acquisition enabled person-to-person transactions for US-based customers using a bank account-linked mobile wallet. Venmo alone processed approximately \$58 billion worth of transactions for the second quarter of 2021, which translated to a growth of 58% compared to the previous year. Recently, PayPal announced that they were ready to launch their highly anticipated super app, which was said to provide a number of services similar to Venmo, including person-to-person direct deposit, bill payments, crypto capabilities and a new high-yield savings account made possible through partnership with Synchrony Bank. PayPal has indicated

future ambitions to include an investment capability that will enable mobile consumers to buy stocks, fractional stocks and exchange-traded funds (ETFs). PayPal is not the only one with their sights on developing a super app. Block's Cash App business acquired Afterpay to grow its active user base by including users interested in the 'buy now pay later' construct that Afterpay captured. Whether these hybrid entities aim to establish themselves as neo-banks or super apps, diversification is the name of the game.



Drivers of the New Payments Ecosystem

The segregation of roles across the payments value chain and the evolution of the payments ecosystem can be largely attributed to four key drivers:

1. Customer demand for greater personalisation
2. Increasing regulatory requirements
3. Technological advancements
4. Market infrastructure modernisation

Customer Demand for Greater Personalisation

From consumers to corporations, customers increasingly expect more convenience and greater personalisation of services across all industries. Personalisation-as-a-service entails the customer receiving a personalised experience with an integrated service offering that meets their personal needs. Further to personalisation, customers demand fast, simple, secure, cost-effective and transparent payment transactions. The payment providers able to unlock and anticipate the correct customer needs will thrive as the direct customer relationship holder in the future payments ecosystem. Similarly, intermediaries able to provide personalised niche services to their partners are also likely to prosper.

Increasing Regulatory Requirements

Regulators are increasingly playing a more active role in shaping the payments landscape. Initiatives around regulations are poised to enhance payments, increase customer protection, enable financial inclusion and increase innovation by payment providers. Regulators are demanding greater transparency with more data on payment transactions and involved parties.

The outbreak of COVID-19 has further showcased the global need for extending electronic payment services to the financially excluded and lower-income consumers. The regulatory requirement for these service enhancements and increased diverse participation is providing a turning point, encouraging new entrants to enter into the payments ecosystem.

Technological Advancements

As we see more and quicker technological advancements, previously sophisticated and niche infrastructure is becoming a commodity. Instead of highly specialised dinosaurs, the payments market needs flexibility and rich data.

The second chapter of this payment series described how Payments-as-a-Service (PaaS) provides an opportunity for incumbents and new players to outsource their core payments infrastructure, connecting with platform solutions via application programming interfaces (APIs). This provides the

outsourcing party with the flexibility to remain compliant and meet customer demand, whilst eliminating unnecessary capital expenditure. This technology has been a key enabler for relationships between customer relationship owners and their intermediaries.

On top of these advancements, the introduction of artificial intelligence (AI) and the internet of things (IoT) are further providing more opportunities in the payments market. AI and IoT, or in this case the internet of payments (IoP), provide opportunities to enhance the customer experience, utilise new market opportunities and gain cost efficiencies.

Market infrastructure modernisation

Modernising legacy payment infrastructure has been top of mind to realise consumer and regulatory demands. In particular, the shift towards real-time payments has necessitated payments markets globally to undergo payments infrastructure modernisation to facilitate real-time clearing and settlement.

Cloud technologies are providing payment providers with efficiency and flexibility to adapt to market changes, connect with other digital ecosystems and exchange data. Although modernisation may be a painful process, especially for the dinosaurs involved, it is necessary for especially incumbent payment providers to avoid extinction.

Impact of new models on value delivered in the New Payments Ecosystem



The archetypal plays impact the value delivered for each stakeholder across the payments value chain. Where incumbents traditionally focused efforts around all aspects of the payments value chain, segregated roles provide an opportunity for a more focused value proposition.

A player focusing on the direct customer relationship only is able to deliver more customer value in the form of greater personalisation, increased security and an improved customer experience. Transactions are furthermore cost effective for both the customer relationship owner and their customer, as the customer relationship owner no longer requires investment in expensive infrastructure or technical capabilities to provide payment services.

Intermediaries who own the expensive infrastructure and technical capabilities can focus on driving scale and leveraging opportunities for greater efficiency, reducing processing costs per transaction for themselves and their customers. Similarly, mega loops may also leverage their scale for greater efficiency and lower transaction costs. However, mega loops would not have the same focus on niche services as intermediaries do.

As each model offers a different value proposition for all stakeholders involved, payment players need to position themselves in strategic symbiotic relationships that will sustain them in the new payments ecosystem.



Conclusion

Archetypal and other emerging models are expected to keep evolving as the payments landscape continues to experience customer demand for personalisation, increasing regulatory demands, advancing technology and market infrastructure modernisation. To sustain themselves as value players, payment players will need to strategically position themselves in the payments value chain. New entrants will need to continue building trust with consumers and regulators, build partnerships with other industry players and evolve to meet the unique and ever-changing needs of their customers. Incumbents will need to adapt to the changing ecosystem by refocusing their position in the market and building platforms to facilitate scale.

In the new payments ecosystem, players need to dominate or collaborate to coexist in a sustainable and self-sufficient payments ecosystem.



Critical considerations for your organisation in the new payments ecosystem

In the payments ecosystem of the future:

- a. How does your current strategy measure against the new payments landscape?
- b. What role/s have you identified for your organisation in the future payments value chain?
- c. How do you see your organisation interacting with other role players in this future landscape?
- d. How will you perceive competition and emerging competitors in this new landscape?
- e. What capabilities will you need to acquire (or augment existing ones) to give you the right to win in this new payments ecosystem?
- f. Can your organisation thrive as a standalone or will you need to look for partnerships to sustain relevance in this new payments ecosystem?



Contacts



Chantal Maritz

*PwC Partner: Strategy &
South Africa
Payments Transformation Lead*

+27 (0) 66 229 1202
chantal.maritz@pwc.com



Wendell Tan

*Senior Manager: Strategy &
South Africa
Payments Transformation*

+60 176 301 337
wendell.vl.tan@pwc.com

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