Transforming payments for the digital era

Prepared by Payments Cards & Mobile for Legal and General Investment Management

Digital payments companies are increasingly attracting interest around the world. By employing new technologies to speed up the transfer of funds, reduce the cost of payments and secure payments channels in the digital era, such companies promise to completely transform the way we pay and receive money. *James Wood*, Managing Editor at payments news and information portal Payments Cards and Mobile (www.paymentscardsandmobile.com), reviews the latest trends in payments.

The digital payment sector is now one of the most dynamic and creative areas out there – and looks set to remain so for at least the next decade. Cash use has been declining for many years: whereas cash has been replaced by the use of credit or debit cards in the past, now a wide range of payment methods are emerging to challenge the dominance of cards in digital payments.[1] By 2026, for instance, it's predicted[2] the digital wallet market will be worth $74.5 billion, up from $27 billion this year, while new technologies are evolving that use iris scans, fingerprints and even facial recognition to make internet payments a safer proposition. In what follows, we outline some of the fastest-growing and dynamic elements of a sector that's reshaping itself for the digital era.

1. See *The Digital and Card Payments Yearbooks:* www.paymentyearbooks.com
2. See Mordor Intelligence, *Mobile Wallet Market – Growth, Trends and Forecasts (2021–2026)*: https://www.mordorintelligence.com/industry-reports/mobile-wallet-market

Mobile Wallets are Displacing Cash – and Cards

Credit: Mordor Intelligence

Securing payments online

As growth in digital and mobile payments outstrips that seen in physical point-of-sale transactions by a wide margin, there's a growing need to secure payments over the internet. With e-commerce in the US growing by a record 32.4% in 2020[3] and now accounting for one dollar in every five of US retail spending, the need to enhance consumer trust in digital devices and digital payments has never been greater.

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Currently, most online merchants use "rule-based" systems such as EMV's 3D Secure (3DS): these systems check hundreds of data points drawn from banks and other sources to confirm the identity of a consumer or request additional verification if fraud is suspected. While such systems are effective if consistently applied, merchants are now turning to Artificial Intelligence (AI) software that learns to spot the characteristics of a fraudulent transaction. Some of the most exciting work being done in transaction security at the moment involves the use of neural networks, a computing technique that can parse terabytes of transaction data in real time to identify anomalies and pick out fraud. Although it's still early days, there are reports of some organisations saving billions in revenue lost to fraud thanks to AI powered by neural networks delivered by outsourced providers such as Aerospike and Feedzai. Meanwhile, other companies such as US payment gateway GMO are creating their own security and fraud detection services.

3. See *US e-Commerce grows by 32.4% in 2020*: https://www.digitalcommerce360.com/article/us-ecommerce-sales/

From simple payment to super-wallet

In our *2022 Digital and Card Payment Yearbooks*, we predict that between 35% and 45% of all consumer transactions will involve a digital wallet by 2030. In China and other Asian markets, digital wallets such as Grab, AliPay and WeChat have expanded from simply acting as a store of value for point of sale payments into offering loyalty benefits, micro-lending, basic insurance and other financial products. As digital wallets grow in popularity in Europe via national and cross-border schemes such as Vipps (Norway) and SWISH (Sweden), the card industry is fighting back with multi-function payment cards that combine debit, credit and Buy-Now-Pay-Later (see below) functions on a single card, often with multiple loyalty schemes. With a recent Visa study[4] suggesting more than two-thirds of consumers in the United States prefer to pay with a card when paying in person or online, it's clearly too early as yet to write off payment cards. What's more, new biometric security features such as fingerprint ID on-card are bringing the humble payment card up to similar levels of security as the mobile phone.

4. See Visa and The Strawhecker Group cited: https://emerchantbroker.com/blog/how-consumers-are-replacing-cash-in-favor-of-cards/

Buy-now-pay-later BNPL

Buy Now, Pay Later (BNPL) players such as Sweden's Klarna and Australia's Afterpay have experienced stratospheric growth in recent years by presenting themselves as a cheaper alternative to credit cards from both a consumer and merchant perspective. Especially popular with the 18-34 demographic in Europe and North America, BNPL schemes typically work by offering consumers interest-free credit over a three-month instalment payment schedule, with merchants being charged much lower fees than those proposed by major card networks and banks. For all their colossal growth and popularity, concerns have been raised by politicians at growing consumer indebtedness, especially since BNPL schemes are not, at present, subject to the same credit regulations as consumer lending by banks or the credit card industry. Although it is likely that the sector will become more regulated, it remains an area of significant potential not least because – if responsibly managed – BNPL represents a viable alternative to credit card payment, and a convenient option for consumers to spread costs and increase their purchasing power.

Business-to-Business B2B payments

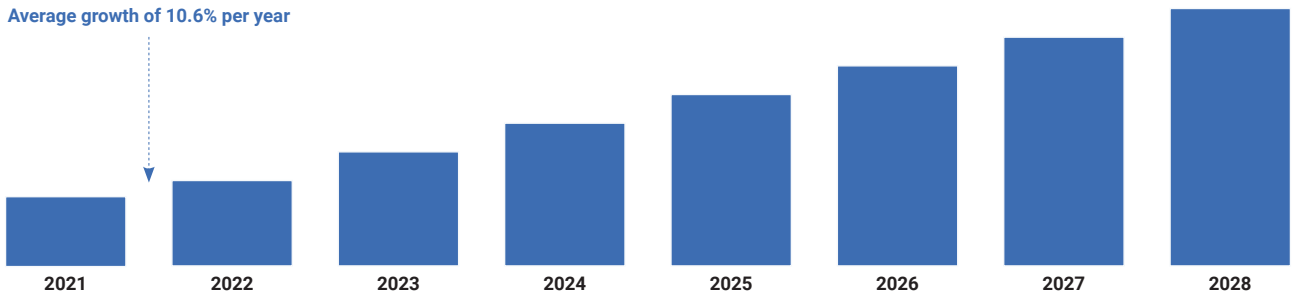
B2B payments may not be a phrase that fires the imagination – yet in terms of size and complexity, this market rivals consumer payments. According to a mid-2021 study from Allied Market Research[5], the global B2B payment market was worth $870.42 billion last year, and is expected to reach $1,918.03 billion by 2028, growing at an average of 10.6% each year. Meanwhile, McKinsey's *2020 Global Payments Report*[6] ranks growth in B2B payments around a third higher than consumer payments in all world regions except North America.

In the past, the B2B segment has been slow to take advantage of the benefits of digitization, with only ten percent of the world's small and medium enterprises (SMEs) using fully digital payment technologies according to Levvel Research[7]. As a result, huge opportunities exist to automate and streamline functions such as Accounts Receivable (AR), foreign exchange, invoicing and even corporate banking. Some specialist AR providers are claiming to reduce back-office costs by more than a third for those companies that employ even partially-digital invoicing and payments, while also claiming dramatic reductions in error rates alongside faster settlement times. A significant challenge facing this segment is the up-front investment cost and time required to integrate fully digital B2B payments, especially for small and medium enterprises. As these technologies develop, expect growing numbers of companies to move away from manual and partially digital invoicing and processing, and towards fully digital systems.

5. See Global Newswire, *AMR: Global B2B payments to reach $1.9tn by 2028*: https://www.globenewswire.com/en/news-release/2021/07/26/2268385/0/en/Global-B2B-Payments-Market-to-Reach-1-918-03-Billion-by-2028-Allied-Market-Research.html
6. See McKinsey & Company *Global Payments Report 2020*: https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/accelerating%20winds%20of%20change%20in%20global%20payments/2020-mckinsey-global-payments-report-vf.pdf
7. See Levvel Research and Beanworks, *Mature Accounts Payable for SMEs*: https://cdn.levvel.io/whitepapers/Beanworks+Whitepaper+2019/2019_Beanworks_Whitepaper_6.7.pdf

B2B payments to see strong growth through this decade

Credit: Allied Market Research



Blockchain technologies

Even though most informed observers will think of crypto-currencies when they think of blockchain, the potential applications of blockchain in payments go far beyond crypto. In particular, blockchain offers all parties in a payment transaction the potential to combine information about provenance, delivery, shipping and payment in a single, unalterable and time-stamped message. By itself, the creation of a unique and secure "block" of information in the transaction chain improves transaction security. More broadly, the creation of such packaged and secure transaction messaging – together with the speed of transaction and settlement – is exciting payments professionals around the world.

Companies such as Stellar and Cowrie Integrated Systems are developing blockchain "nodes" – in essence, hubs that transmit blockchain payments – to reduce the cost and time taken to transfer money and pay across borders. This application is particularly relevant in emerging markets, where the speed, safety and sheer cost of international payments have long been a huge brake on economic development. Meanwhile, the use of crypto-currencies for payment continues to surge ahead, with payments giants PayPal, Visa and Mastercard all announcing they will handle crypto transactions and the number of cash machines offering traditional currencies in exchange for crypto growing 72% between 2020 and 2021[8]. While it's likely crypto-currencies will remain marginal as a payment method for the foreseeable future, they nonetheless represent another step towards a fully digital payments environment.

Fully digital payments could be with us as soon as the early 2030s – and they will look completely different to traditional payment methods such as notes, coins, cards and chequebooks, which were so prevalent just ten or fifteen years ago. Looking ahead, watch out for embedded payments (combining payment with ordering and/or delivery) and biometric payments that merge user ID authentication with a transaction to start making waves, as well as technology companies that make it easier and cheaper for small merchants like street food vendors and convenience stores to accept electronic payments. From a staid, bank-dominated industry thirty years ago, payments has become a vibrant sector almost unrecognisable to those who knew it in times past.

8. See *Crypto ATM installations increased by 72% in 2021*: https://cryptoticker.io/en/global-crypto-atm-installations-increased-by-72-in-2021/

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