

❤️ #DoingSomethingGreat

Ubiquitous Payments



**THIS MONTH'S NEWS
AND UPDATES:**

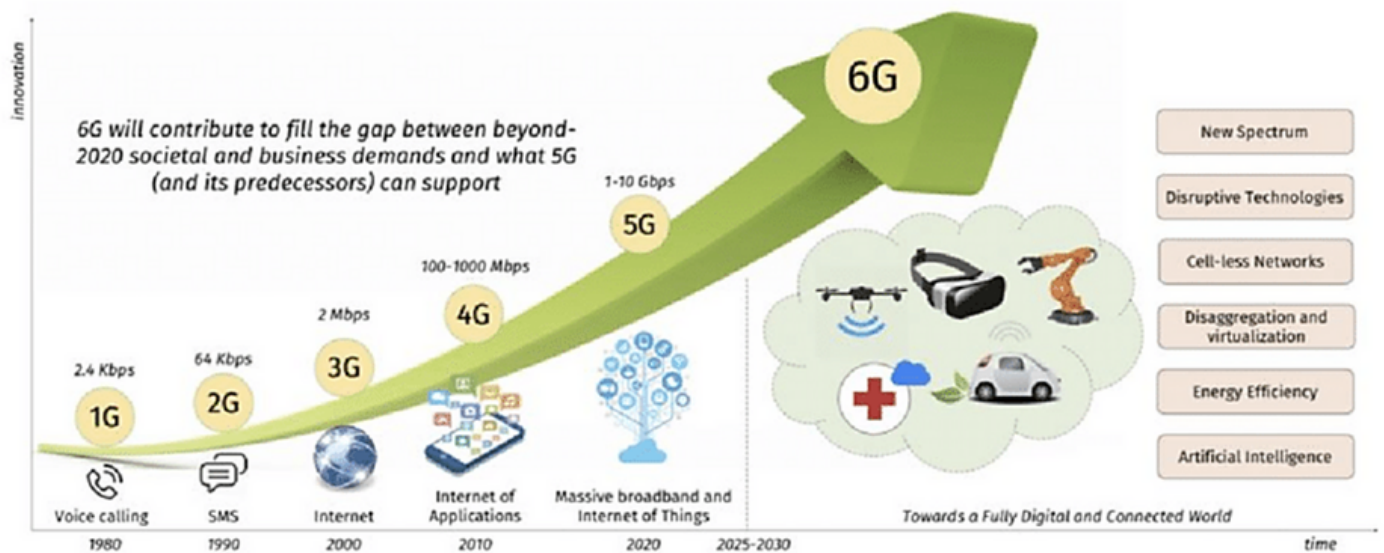
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integrated
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experiences**

DSG
DIGITAL SOLUTIONS GROUP

Ubiquitous Payments

The past two decades have seen enormous growth in payment systems.

We launched the first mobile commerce transaction in the world on WAP (9,6 Kpbs) in March 2000 on www.digitalmall.com when mobile phones were black and white only so the product catalog was limited with the display. It was really slow and the 'worldwide wait ' was even longer when Modems were 56kpbs and mobile internet was just starting. The first transaction was on Vodacom South Africa and then we replicated the solution with Vodafone in the UK, Australia, and New Zealand and rolled it out globally.



Twenty-plus years ago mobile payments, contactless cards, and digital wallets were in their infancy but we knew that with the evolution of faster mobile networks, the applications would evolve and mobile payments would become mainstream hence why we invested early despite the fact that the technology was clumsy and the customer experience was not ideal at the time.

Today, payments are ubiquitous. But as new payment systems continue to emerge, only a few are likely to survive in the long run.

What does it take to create a payment offering with stamina? It's a billion-dollar question with a fundamentally simple two-part answer: large-scale access to stores of value so that senders and receivers can exchange funds, plus a trusted operator that routes transactions between counterparties and enforces fair governance standards.



A host of structural changes over the past few years may lead to many barriers to entry including:

- Customers are congregating in ecosystems and marketplaces where they consume similar services and can be more easily accessed, like Amazon, Digitalmall.com, Alibaba, and Uber.
- Technological advances are enabling companies to quickly scale up new products across critical masses of senders and recipients, creating large seed populations in digital marketplaces, social networks, and other groups.
- Application programming interfaces (APIs) are enabling payments to be easily integrated with other products via underlying bank rails such as automated clearing house (ACH) payments and wire transfers.
- Higher digital spending is allowing new "plug and play" solutions to be adopted without the need to roll out physical POS devices.
- Blockchain technology can be used for payments by creating a decentralized, transparent, and secure ledger for recording transactions.

Ubiquitous payments refer to the ability to make and receive payments anytime, anywhere, and using any device. It is closely related to the idea of a cashless society, where traditional payment methods, such as cash and checks, are replaced by electronic payment systems that are more efficient, secure, and convenient.

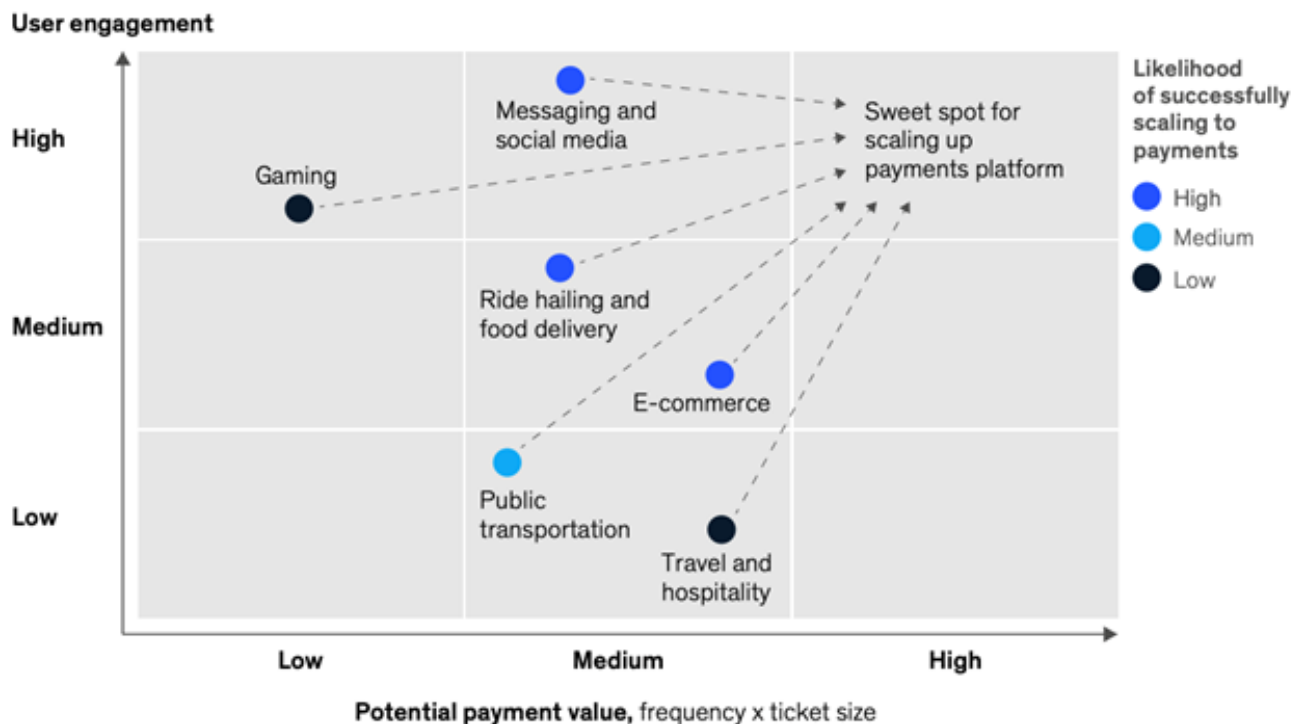
These technologies allow consumers to make payments using their smartphones, wearables, or other connected devices, without the need for physical cash or cards.

The adoption of ubiquitous payments has been driven by the increasing use of smartphones and other mobile devices, as well as the growing popularity of e-commerce and online shopping. The COVID-19 pandemic has accelerated the shift towards digital payments, as consumers have become more cautious about handling physical cash.

The benefits of ubiquitous payments include greater convenience, faster transactions, and improved security. However, there are also concerns about privacy and data protection, as well as the potential for fraud and cyberattacks. To address these issues, it is important to implement robust security measures and regulations to ensure that ubiquitous payments are safe and secure for consumers.

Social-media, e-commerce, and ride-hailing platforms are well placed to scale up into digital payments ecosystems.

User engagement vs potential payment value for different digital ecosystems

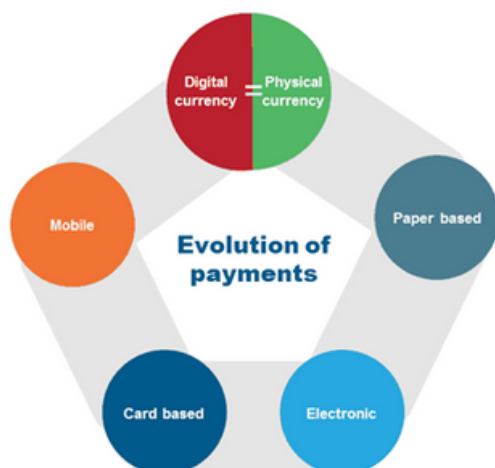
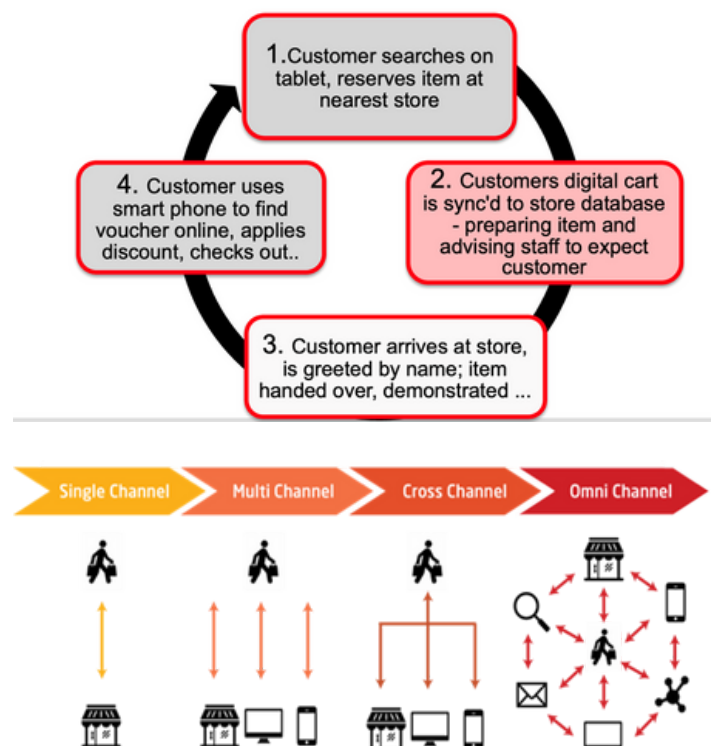


These changes have triggered a proliferation of new consumer-to-merchant payment networks and schemes. New aspirants in developing countries—such as Alipay and WeChat in China, Paytm in India, and MercadoPago in Argentina—are leapfrogging physical card infrastructure.

Tech companies are capitalizing on their consumer reach to establish intermediaries between card networks and consumers in the form of Apple Pay, Google Pay, and others.

Card networks are diversifying their offerings via M&A, with Visa acquiring Earthport and Plaid and MasterCard acquiring Vocalink and Nets. Meanwhile, countries are quickly establishing new domestic standards of usage via ventures such as MobilePay in Denmark and Swish in Sweden.

Consumers think of shopping as one experience, whether online, in-store, or on a mobile device, and so must business. Consumers move to the center of the shopping experience, and we are seeing omnichannel payments taking center stage.



Demand for embedded finance is already growing in deposits, payments, issuing, and lending.

Embedded-finance distributors

Traditional retailers	Offer attractive financial products to enrich the customer checkout experience and incentivize brand loyalty and spending
Software firms	Strengthen the platform value proposition to drive merchant adoption, retention, and revenues
Marketplaces and platforms	Offer tailored financial products to improve the customer experience and increase merchant adoption, retention, and revenues
Telecom companies	Increase customer engagement and enhance the value of smartphone software and hardware with money-movement capabilities
OEMs	Simplify ownership and financing through subscription and other financing services

Embedded-finance products

Deposits	Transaction and deposit accounts that merchants and consumers can open and use from within an app or software platform
Payments	Money movement from within nonbank apps or software
Issuing	Prepaid, debit, and credit cards for customers and employees, issued from within business management software or apps
Lending	Unsecured lending embedded in business management software (eg, merchant cash advance) Secured lending for large purchases with underwriting and origination at point of sale

Source: McKinsey analysis

Omni channel evolution resulted in embedded payments, whereby customers can complete transactions without being redirected to an external payment gateway or website.

It enables a seamless checkout experience for customers and helps businesses streamline their payment processes. They can be particularly useful for businesses that operate in the e-commerce or subscription-based industries, where multiple payments are made by customers on a regular basis. There are several types of embedded payment solutions available, including APIs (Application Programming Interfaces) and SDKs (Software Development Kits), which allow businesses to integrate payment processing functionality into their own applications.

Overall, embedded payments can be an effective way for businesses to simplify payment processing and improve the customer experience.

Artificial intelligence (AI) and machine learning (ML) are playing an increasingly important role in the payments industry, allowing for faster, more efficient, and more secure payment processing. Here are a few examples:

1. **Fraud detection:** AI and ML algorithms can analyse large amounts of data to identify patterns and anomalies that may indicate fraudulent activity. This allows payment providers to detect and prevent fraud in real time, minimizing losses and protecting their customers.
2. **Personalization:** AI and ML can be used to analyse customer data and preferences, allowing payment providers to offer personalized recommendations and promotions to their customers. This can improve the customer experience and increase engagement.
3. **Risk management:** AI and ML can be used to analyse transaction data and assess the risk of a particular transaction. This allows payment providers to better manage risk and prevent losses.
4. **AI-powered chatbots and virtual assistants** can provide customers with quick and convenient support for payment-related inquiries and issues.
5. **AI and ML** can be used to automate payment processing, reducing the need for manual intervention, and streamlining the payment process.

Overall, AI and ML are transforming the payments industry by enabling faster, more efficient, and more secure payment processing, while also improving the customer experience.



Using AI & ML and new payment architecture such as a blockchain allows multiple parties to access and update the same database without the need for intermediaries, such as banks or other financial institutions.

When a payment is made on a blockchain network, the transaction is verified and recorded on the ledger by a network of nodes or computers. This process ensures that the transaction is secure and tamper-proof, as it cannot be altered or deleted once it is recorded on the blockchain.

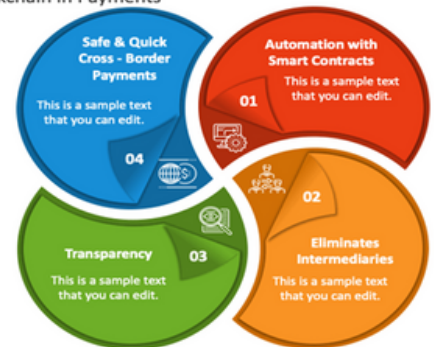
One of the main advantages of using blockchain for payments is that it eliminates the need for intermediaries, such as banks or payment processors, which can reduce transaction fees and processing times.

The benefit of low-cost, secure, and processed quickly, overall facilitating money transfer regardless of the distance between the sender and receiver.

access to money, allows people to make cross-border payments, and uses smart contracts to act as a means toward faster and safer payment processing. No money transfer waiting periods or unnecessary third-party processing fees. Blockchain-based cryptocurrencies can be transferred – and recorded for auditing purposes – instantaneously across the world, increasing liquidity and operation speed in the markets.

BLOCKCHAIN IN PAYMENT

Advantages of Blockchain in Payments



Smart Contract system can halt payments when agreed terms are violated, while its use of cryptocurrencies can alleviate the regulatory red tape that often is the case with international payment processing. Hurdles like day-long waiting periods and high fees for cross-border transactions become alleviated with many crypto payment systems.

American Express believes that blockchain can solve these problems, and “will support real-time domestic and cross-border payments at lower costs versus traditional services.”

#DoingSomethingGreat is providing ubiquitous payment solutions to create frictionless commerce.

by Yaron Assabi