

HOW WILL

WE PAY?

EVERYTHING

YOU DIDN'T

DARE ASK...

INNOVATION AS A CONSTANT

Once currencies were the preserve of governments; now companies are moving in and the digital revolution is leading to fundamental changes not only in payment technologies but in the very nature of payment itself.

Alternative currencies are being created, underpinned by tangible bank-based currencies or by commodities or, in the case of Bitcoin, without either. Meanwhile, coins, banknotes and cheques may soon become obsolete, and new payment methods may even replace cards at some point in the future.

Payment is becoming ubiquitous and invisible. In a world where transactions may soon be confirmed by just a nod of the head, payments present the financial services and retail sectors with unprecedented possibilities to engage with users and take their customer relationships to a whole new level.

In this update to How will we pay? we take a close look at how and why payment is changing so rapidly and we explore what these developments mean for banks, merchants and consumers.

A NEW ERA FOR PAYMENTS

Throughout human history, payment technologies have played a defining role in shaping societies and transforming economies. The development of coinage and cash consolidated the emergence of the world's first states, which to this day have exercised monopoly control over the creation of currencies. Over time, new players have entered the payments ecosystem, adding new layers between consumers, merchants and banks.

Today, the world of payments stands at a new turning point. The model of money and payments that has endured for thousands of years may soon be radically redefined, with dramatic implications for governments and banks that fail to embrace the changes as well as for the relationship between merchants and their customers.

Challenges to the status quo abound. Alternative "currencies" are beginning to appear. Rakuten's loyalty points program led to points being used as a second local currency in Japan, not backed by the state.

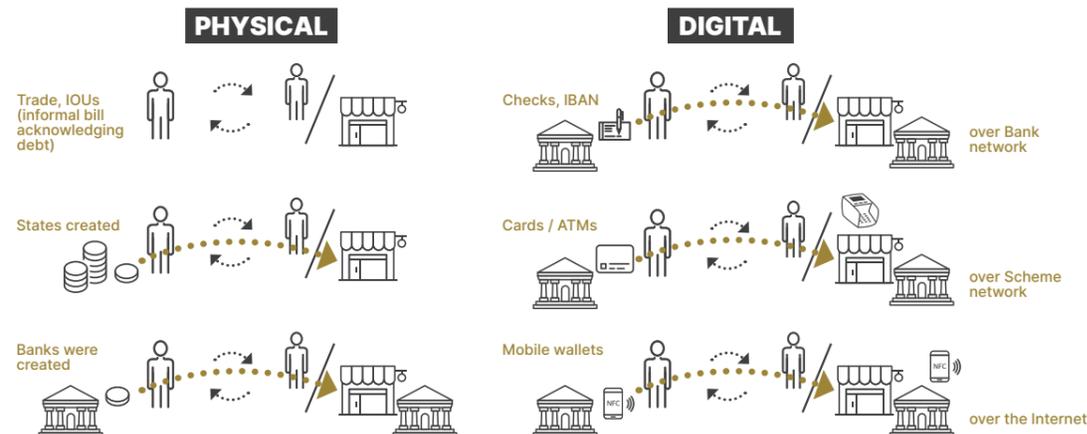
Bitcoin, the blockchain-based currency, has the clear aim to circumvent the central role of banks in the economy. Meanwhile, Stablecoins (also using blockchain) are pegged to tangible currencies or commodities, and aim to allow ordinary users to simplify the process and bypass traditional financial and regulatory institutions when making payments.

The benefits of blockchain – total trust, transparency and authentication when completing a transaction – are now attracting the tech behemoths. Stablecoins are appearing in many places, like Facebook's plan to launch its own crypto-currency, GlobalCoin. This will allow people to access payments regardless of whether they have a bank account.

The use of mobile money has grown exponentially over the last decade, with major impacts in many countries in Africa where the widespread availability of mobile phones has allowed millions to access mobile money services. Mobile money accounts now surpass by far bank accounts in the region.

The very concept of payment is changing rapidly. Once the solemn conclusion to a physical transaction and a change of ownership, payment has become an almost imperceptible and seamless step in the purchase process. The focus now is on customer service and creating an ongoing relationship through engagement and new service offerings. Subscription services like Netflix and Spotify keep payments regular and barely noticed. The rise of e-commerce, contactless cards, app-based purchases and other innovations have all made payments simpler, frictionless and even fun. The act of payment now melts into the purchase experience.

Around the world, the digital revolution has opened up major industry sectors, with new players breaking down barriers to entry and dismantling long-standing monopoly and oligopoly structures in verticals such as telecoms, publishing, transport and hospitality. Think Google, Uber and Airbnb as standout examples. The question for the payments industry is, what strategic steps should companies take to ride the inevitable wave of change that is approaching the sector?



THE DIGITAL REVOLUTION COMES TO PAYMENTS

10 QUESTIONS ON EVERYONE'S LIPS

1 WHY ARE MEANS OF PAYMENT CHANGING SO FAST?

Payments have always been closely linked to authentication. People used to bite coins and cashiers still feel banknotes to ensure their authenticity. Since the creation of banks, purchasers have had to prove their ownership of a bank account with sufficient funds. Whether paying in cash, by cheque, at an ATM, online or in a store, payments need a strong level of authentication and the buyer's consent to hand over the funds. Today, we have the technology to provide authentication and consent digitally, instantly and seamlessly.

2 WHAT ARE THE PROSPECTS FOR A CASHLESS SOCIETY?

It is only a matter of time until we move to a less-cash, if not a fully cashless society. New payment methods and in Europe regulations such as SEPA and PSD2 have accelerated this trend. In Sweden, digital payments via card or apps are so widely accepted that many Swedes do not carry cash and the country will no longer accept cash as a means of payment by 2023. China, which has the world's largest mobile payment market and is a leader in peer-to-peer payments, also seems on track to achieve its ambitions to become a cashless society. Cashless is coming!

3 CAN WE ENVISAGE A CARD-LESS SOCIETY IN EUROPE OR THE US?

Not before a long period of time as payment cards have the strong merit of being based on globally established standards and currently being the only electronic payment method fully accepted worldwide with a proven business model. While there are a growing number of viable alternative payment methods (for example, by smartphone), it will take time before any other method can equal payment by card thanks to its international acceptance reach. Nonetheless, competition is growing and to keep its edge, the card form-factor will have to continue to embrace innovation (such as contactless or tokenization) and find new growth spaces as nothing else has, at this point in time, its ubiquitous acceptance.

4 WHAT ABOUT A BANK-LESS SOCIETY?

Banks do more than just authenticate that a user has an account. Conventional currencies have value because of the trust that users place in the state that backs the currency, and in the banks that manage the currency flows. While digital pure players are able to authenticate users in the digital world, it is still the case that banks enjoy the unshakeable trust of their users and they are building on this advantage.

5 ARE TRANSACTIONS LIKELY TO INCREASE?

Certainly, and for a number of reasons. Firstly, the number of people with a bank account will continue to grow (along with population growth). Secondly, the digitalization of payments is leading to higher volumes of transactions. Finally, rising numbers of sales and loans, plus increasing levels of consumption per user, will result in more refunds and hence in higher numbers of transactions that the payment infrastructure will have to support.

6 IS THERE A FUTURE FOR HETEROGENEOUS PAYMENT SYSTEMS?

Probably not. We may see attempts to establish a completely separate system, as with any developing technology. But for reasons of interoperability and ease of use, we expect any variants to converge towards de facto standards or those specified by bodies such as W3C, the World Wide Web Consortium.

7 COULD THE CURRENT MEANS OF PAYMENT BECOME TOTALLY INSECURE IN A FORESEEABLE FUTURE?

Criminals will always try to circumvent controls and gain access to payment methods. The imminent arrival of quantum computing will pose major new threats to information security. Quantum computers are expected to easily crack the security keys that today protect the world's personal, professional and payment data. It is a question not of "if" but of "when" – which is why Worldline is leading the way in developing quantum resistant cryptography to address this challenge.

8 WILL WE SEE AN INCREASE IN FRAUD IN PAYMENT?

The digital world has not only increased the range of services on offer and the volume of transactions, but also the number of channels that hackers may be able to access. Yet, with the deployment of AI systems, there is more likelihood of fraud being detected and prevented. Rising volumes have created more historical payment data. Fully anonymized, this data feeds real-time AI systems which are continuously monitoring payment flows. So increased transactions are actually helping AI to better detect any suspicious or fraudulent payment attempts.

9 CAN PAYMENTS BECOME INVISIBLE IN THE PURCHASING JOURNEY?

Some specific in-app customer experiences are already quasi-seamless. And this means more business for merchants as the act of payment is becoming just one part of a seamless chain, fully transparent and ensuring a frictionless Uber-like experience. But, convenience must not be traded against security and in Europe, companies need to respect regulations like the EU's PSD2 which requires strong two-factor authentication. At Worldline, our challenge is to support our clients to reinvent the customer journey making sure it is simultaneously frictionless, safe... and compliant. And we believe combining AI and biometrics is the way forward as it will be possible to strongly - and seamlessly - authenticate customers in-store and online, using these two technologies to provide them with a fully personalized service.

10 CAN WE FINALLY GET RID OF OUR PINS?

This will soon be possible. Personal Identification Numbers represent authentication plus consent. With new biometric technologies leveraging AI we can now authenticate people by recognizing their face, eyes, retinas, fingerprints, voice, even veins and blood pressure, as well as by behavioral actions and gestures and by contextual analysis.

New generations of intelligent payment terminals with natural interfaces can help turn payment into a simple and seamless experience to form one of the services in the range offered by the merchant. Payment may soon be possible just with a simple "OK", a nod of the head or a simple touch of the hand.

WORLDLINE: AT THE HEART OF PAYMENTS INNOVATION



Payment existed long before states created currencies and it will continue regardless of the methods used to pay. Yet, fundamental changes are now transforming all aspects of the world of payment, from the very nature of currencies to new concepts of payment and the technologies that are used for authentication and consent.

Worldline is uniquely placed to make safe the digital playground where banks, merchants and digital innovators meet. The changes we anticipate in this paper will challenge the business models of merchants and banks, while presenting the agile with a unique opportunity to create value and build deeper and longer lasting relationships with their customers.

As the European payments leader for B2B2C industries Worldline supports and contributes to the success of its clients, deploying the most innovative portfolio in the market, covering every aspect of the payments value chain, online and in-store.

“ WORLDLINE’S EXPERTS IN CRYPTOGRAPHY AND SECURITY ARE DEVELOPING FOUR PROPOSALS ON QUANTUM RESISTANT CRYPTOGRAPHY THAT WERE SELECTED BY THE GLOBAL STANDARDIZATION ORGANIZATION NIST (NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY) – AND WE ARE ON THE WAY TO CREATING A NEW SECURED ENVIRONMENT FOR THE FUTURE OF PAYMENTS. ”

“ WORLDLINE’S YUMI IS A GAME-CHANGING PAYMENT DEVICE FOR OMNICOMMERCE RETAILERS AND THEIR CUSTOMERS. THE TOUCHSCREEN TERMINAL COMBINES PHYSICAL AND ONLINE COMMERCE AND IS CUSTOMIZABLE TO THE RETAILER’S BRAND. THANKS TO ITS ABILITY TO ROTATE 360°, IT ALWAYS FACES CUSTOMERS, PROVIDING AN INTUITIVELY DESIGNED POINT OF INTERACTION THAT DRAMATICALLY ENHANCES THE CUSTOMER EXPERIENCE. ”

ABOUT WORLDLINE

Worldline [Euronext: WLN] is the European leader in the payment and transactional services industry. With innovation at the core of its DNA, Worldline’s core offerings include pan-European and domestic Commercial Acquiring for physical or online businesses, secured payment transaction processing for banks and financial institutions, as well as transactional services in e-Ticketing and for local and central public agencies. Thanks to a presence in 30+ countries, Worldline is the payment partner of choice for merchants, banks, public transport operators, government agencies and industrial companies, delivering cutting-edge digital services. Worldline’s activities are organized around three axes: Merchant Services, Financial Services including equensWorldline and Mobility & e-Transactional Services. Worldline employs circa 12,000 people worldwide, 2019 revenue of circa 2.4 billion euros. worldline.com

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