

The Future of Money: Is your business preparing for crypto payments?

How cryptocurrency is changing the way we think about money – and why future-thinking businesses are embracing crypto payment solutions today



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Introduction

Whether you are an evangelist or a sceptic, cryptocurrency has become the unavoidable topic in global finance. But it has not always been viewed as relevant by those operating outside the world of highly speculative investment or Silicon Valley utopianism.



However, while 'crypto' continues to attract more than its fair share of detractors, and both its fans and its opponents kick up a lot of very public heat and noise, a quiet transformation has been taking place. Cryptocurrencies – and the world of decentralised finance (DeFi) for which they are leading the charge – are starting to show their worth as spendable assets.

The idea of cryptocurrency as a payment token has long been overshadowed by its reputation as a pure-play investment vehicle. Nonetheless, cryptocurrencies are steadily taking on the use cases that early inventors and investors always believed were possible. Crypto assets are already being used to pay for commodities, avoid unfavourable foreign exchange rates, and cut out middlemen from financial agreements.

This is the first step in a widespread financial transformation, with digital currency as integrated into the global economy as tightly as fiat currency is today. The weekly shop, the dream holiday, the kids' new shoes – all to be paid for with crypto. In the developing world the impact could be even greater as value leakage disappears from remittances, barriers to entry are lowered, and underbanked communities use digital assets to build financial security through cost-effective financial services.

This evolution is happening in part because the advantages of decentralised digital currencies are becoming clearer. Decentralised finance services are typically faster and safer than standard transactions, with exceptional transparency and scrutiny built in at every stage. At the same time, they provide better

control as users easily buy, sell, transfer and earn interest on their digital assets without institutional interventions, hurdles and fees.

In short they offer seamless transactions – person-to-person, business-to-business and all combinations in between – that are almost instantaneous and certainly cheaper to execute.

There are a number of drivers behind the advance of cryptocurrencies into consumer wallets, not least of which is the historic lack of innovation and a lacklustre response to digital transformation that has made the payments sector ripe for disruption. But whatever the cause, the result is the same: a fundamental reappraisal of the way we use and define money.

Cryptocurrencies have by no means achieved their full potential, but as we explain in this white paper, it is only a matter of time before this changes. Leading businesses are experimenting with cryptocurrency for B2B payments; financial institutions and innovative start-ups alike are engaging with crypto; and central banks and regulators are looking for ways to deliver digital currencies without the volatility that has defined them to date.

All the indications are there. Money is going digital. For proactive and ambitious companies this is the time to explore the potential that crypto offers and gain a commercial edge in this critical phase of its evolution.

From meme to mainstream: a brief history of cryptocurrency

When the world's richest man hosts Saturday Night Live with a skit about Bitcoin, it's a pretty sure sign that cryptocurrencies have established themselves in the cultural mainstream.

Elon Musk, the controversial CEO of Tesla and SpaceX, has had an interesting, on-off public relationship with Bitcoin – the first and most well-known cryptocurrency. But you can now buy a new Tesla car with Bitcoin, and the company has backed its boss's TV appearance with its own money: in 2021, it bought \$1.5 billion worth of Bitcoin.

Musk is not alone, around half of his fellow-millennial millionaires store at least 25% of their wealth in cryptocurrencies¹. Payment company, Square (owned by the similarly provocative Jack Dorsey) spent \$170 million on Bitcoin in 2021.

In the 12 years since Bitcoin was first launched, 'crypto' has been the subject of endless social media memes, celebrity endorsements, pop-culture references and even a chart-topping podcast. It has attracted a cult-like following of devoted investors. It has made fortunes for some and lost them for others.

Behind the hype

Arguably, 2021 was the year that crypto came of age as an investment vehicle. Investment app Robinhood announced that 9.5 million of its customers had traded cryptocurrency in the first three months of 2021 – a fivefold increase over the previous quarter. In the same period, Pitchbook pointed out that venture funding for crypto-related start-ups had reached \$3 billion – it's highest ever level.

April then saw the initial public listing of Coinbase, an exchange platform that allows individuals and companies to buy and sell various digital currencies, including Bitcoin. Its valuation rivalled that of Airbnb and Facebook when they launched their IPOs.

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Now valued at \$58 billion, Coinbase is also a source of useful data about the current status of crypto. In November 2021, more than 18.8 million Bitcoins, with a total market cap of around \$1.2 trillion, were in circulation². At the same time, the total value of all cryptocurrencies in existence was more than \$2.1 trillion – of which Bitcoin accounted for just over 40 percent³. By the end of the year, the 24-hour average trading volume of the top 10 most popular cryptocurrencies globally was £120 billion⁴.

Traditional finance is taking note. Morgan Stanley's clients have access to three Bitcoin funds. Goldman Sachs now offers similar access. Elsewhere the mayor of Miami has suggested that his city could invest funds in Bitcoin – and accept tax payments in the cryptocurrency.

But...what is crypto?

Crypto is impossible to ignore. But it is easy to misunderstand.

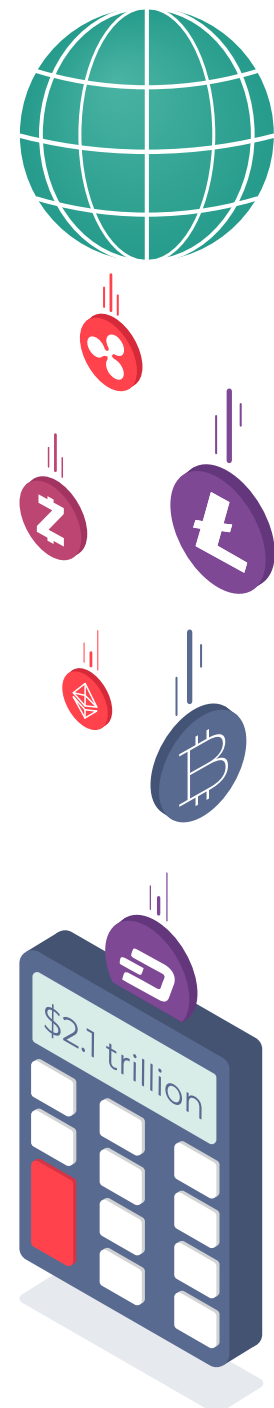
In essence, a crypto 'coin' is a digital token, without physical backing, which can be sent electronically between users located anywhere in the world. Since its first appearance, Bitcoin has spawned many imitators and rivals, such as Ether, Dogecoin and Tether – each of which has their own network for distribution.

Unlike traditional finance systems and payment networks, cryptocurrency networks are not run by a single company or central authority: instead they are operated by a global, decentralised network of computers.

Critical to the functioning of any cryptocurrency is blockchain – or distributed ledger technology (DLT). Its centrality to the cryptocurrency phenomenon cannot be overstated. As listeners to the BBC's popular podcast The Missing Crypto Queen learned, cryptocurrency without blockchain is at best a Ponzi scheme – and at worst outright fraud.

A blockchain is a database, distributed over that network of computers, which tracks and stores information on all transactions taking place, making it nearly impossible to counterfeit or double-spend digital coins. In effect, the constantly scrutinised computer code provides the 'trust' that would otherwise come from middlemen or central authorities. It can be public (like the Bitcoin network), or private (open only to invited and verified participants).

As for 'crypto'? That refers to the various encryption algorithms and cryptographic techniques that safeguard entries in the blockchain.



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1. CNBC, (2021) Millennial millionaires have a large share of their wealth in crypto
2. Coinbase. "Bitcoin Price." Accessed Dec. 20, 2021
3. CoinMarketCap. "Global Cryptocurrency Charts." Accessed Dec. 20, 2021.
4. Coinbase (2021) <https://coinmarketcap.com/>

How does DeFi work?

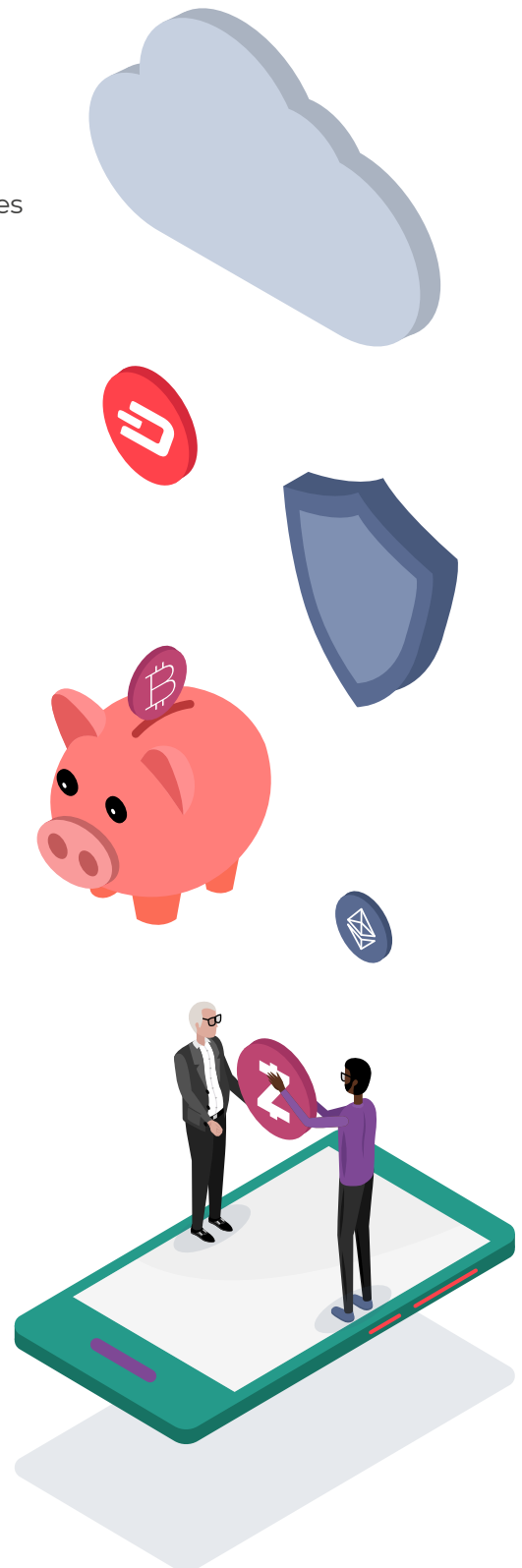
The development of cryptocurrency has taken place within the broader concept of decentralised finance – or DeFi for short. DeFi is the basis for other blockchain-based financial services, including savings and loans, insurance, and securities trading without the intervention of traditional third parties like banks or brokers.

In a DeFi model, consumers transfer, trade, borrow and lend on a global, borderless, and peer-to-peer basis. DeFi is not confined to standard business hours, so financial products and transactions can be registered and initiated 24/7. Both parties to the transaction remain anonymous, depending only on an ID code so their full identity is never revealed. When third-party authentication is required, it is conducted by algorithm.

There are immediate advantages to conducting standard B2C and B2B transactions in a DeFi system. With no banks involved, there is no longer any eligibility criteria for participation, no minimum amounts required from participants, and no commission fees for bureaucratic verification processes. Interest rates are set by the interplay of supply and demand.

For example, in a Defi system, a potential borrower enters a description of their loan requirements. The algorithm matches that borrower with likely lenders. Once a lender has been found and terms agreed, the contract and the loan transaction are recorded on the blockchain – as are all repayments. Such a system could allow SMEs to borrow from larger businesses anywhere in the world and enable larger businesses to develop a new revenue stream through targeted lending.

The DeFi concept is a crucial one, as it helps explain the next stage in crypto adoption. To date, the hype surrounding cryptocurrencies has concentrated on its function as a volatile asset for speculative investors. It has largely by-passed the original intention of Bitcoin's anonymous founder: to create a spendable alternative to fiat currency that can be used to make everyday payments.



Digital assets and the future of money

May 22nd, 2010 is Bitcoin Pizza Day, a key date in Bitcoin mythology. That's the day a Florida man paid 10,000 Bitcoins for two pizzas. It's not the transaction itself that makes the date so memorable, but the fact that 10 years later those Bitcoins were worth more US \$80 million.

The million-dollar pizza, and other similar stories, illustrate why cryptocurrencies have not yet made it as mainstream currency. The volatility and swooping fluctuations in value have made them unsuitable for daily transactions.

But that too is changing. Banks have begun to hold digital assets as institutional-grade infrastructure, regulatory clarity and the DeFi ecosystem are improving, and blockchain technology is becoming more widely established, having found use cases in trade, finance and the law.

As a result, cryptocurrency is starting to take its place in payment services from both established powerhouses and niche players around the world. For example:



Teamed up with Wirex and BitPay to create crypto cards and joined forces with LVL, a cryptocurrency exchange, to support selected cryptocurrencies directly on its network.



Have been testing the use of distributed ledger technology (blockchain) as a means to lower transaction costs and streamline payment processing.



Have developed a Visa debit card, running on Contis's Buffer technology, that enables users to seamlessly spend Bitcoin, Ethereum, gold and any other digital assets.



Now offers a crypto trading and shopping feature to US customers, in response to both consumer interest and technology advances that enable faster transactions.



The global office-sharing company now accepts payments in a number of different cryptocurrencies and will use it to pay some of its landlords and vendors.



Enables users to send crypto and fiat currency to anyone on their mobile phone's contact list.

Then there's El Salvador, which in September 2021 became the first country in the world to accept Bitcoin as legal tender. Residents and businesses can now use cryptocurrency to make payments when businesses have the technology to accept it. Bitcoin can also be used to pay debts, and creditors are obliged to accept its settlement in Bitcoin or forfeit the payment completely.

This is just the start. We can expect more countries to join El Salvador, and more payment services providers to get involved. Use cases are maturing and becoming more practical every day. As it moves away from being just a fringe investment asset, crypto represents the direction of movement for currency in general – and will radically change the way we think about money altogether.

Creative destruction and natural evolution

One simple driver for the advance of crypto as an everyday payment instrument is that of natural evolution – this is just the next step in the development of money.

Today's fiat currencies, long divorced from the gold standard and often embodied in plastic form, are already a far cry from the bartering systems, precious metals, and promissory notes that enabled the exchange of value in the past. Digital currency is just the latest stage in that evolution, fulfilling the basic functions of money as a unit of account, a means of exchange and a store of value.

Of course, that evolution has been helped along by the general move towards digitisation. The history of technology is the history of the disruption and disintermediation of existing business to make way for the new – and money is no exception. In this case, that move has been accelerated by the pandemic, which has increased economic reliance on digital technologies and encouraged central governments to create a surplus of cash, that now has nowhere to go.

Demographics also play their part, with millennials overtaking boomers as the largest generational cohort in the US in 2019 and Gen Z projected to do the same to Millennials by 2030⁵. As older generations, who tend to be more sceptical of cryptocurrency, continue to leave the economy, a very different set of market expectations will become the norm.



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The crypto advantage

Evolution of course is about the survival of the fittest: nothing is sustainable unless it can demonstrate that it is fit for the environment in which it operates. In terms of crypto, that means it has to offer discernible benefits that strengthen its position against fiat currency rivals. Those benefits are becoming more and more apparent.



Lower fees, larger volumes:

Because cryptocurrency by-passes third parties, transactors pay the amount due, unburdened by commission payments for archaic administration. With no banking rails and correspondent banking to pay for, they can save with every transaction and are not punished for increased trading volumes.



Faster, more secure transactions:

Currently, reconciliation takes days, forcing businesses to carefully plan and account for delays in receiving payments. Cryptocurrency systems remove these hurdles, enabling businesses to receive their funds quicker, take advantage of preferential rates, and pay suppliers faster – to the entire economy's advantage.



Greater value, cross-border:

Foreign exchange fees are a constant headache, and the fluctuating value of fiat currencies can leave travellers paying more and getting less whenever they need to convert currencies. By making payment in a single cryptocurrency, travellers don't need to worry about forex fees or the exchange rate. In the remittance economy, cryptocurrency minimises 'value leakage' and ensures recipients keep more of the money sent to them.



Decentralised system security

The absence of a central authority, such as a bank or monetary institution, to enforce trust and to police transactions also eliminates a single point of system failure. That makes it much harder for a single incident to set off a cascade of crises as seen in 2008/09.



Smart contracts:

Immutable, self-executing agreements, written in computer code are a key component of DeFi systems. The blockchains underpinning cryptocurrencies also allow these contracts to be recorded with no interruption in service, for greater speed. Certain cryptocurrency networks and Defi systems are designed to facilitate exactly this.



Compliant accounting:

The blockchain itself is a source of compliant record keeping, with a distributed ledger offering an immutable historical record of asset ownership stretching back as far as the first transaction. This enables Know Your Transaction (KYT) processes, as an effective means to prevent money laundering and terrorism financing.



Supply-chain stability:

Post-COVID, businesses need to find better ways of creating robust supply chains without hobbling their own finances. Blockchain technology such as automating spot contracts offers a method of performing this seemingly impossible task.

It is also worth noting that there is choice and competition within the world of cryptocurrency – the cryptosphere – as builders focus on specific areas. Ethereum, for example, is designed to facilitate the rapid deployment of smart contracts so that transactions can be automated without an interruption in service.

The emergence of stability

Both private and government bodies are looking for ways to introduce more stability into the cryptosphere.

What is a stablecoin – and why is it important?

Perhaps the biggest factor in the development of DeFi systems in general, and cryptocurrency as a viable payment mechanism, is the emergence of stablecoins. These are cryptocurrencies that are pegged to stable assets – typically the US dollar – and are intended to offer the steady value of centrally-issued money in digital format. Tether, Pax Dollar and USD Coin are all forms of stablecoin.

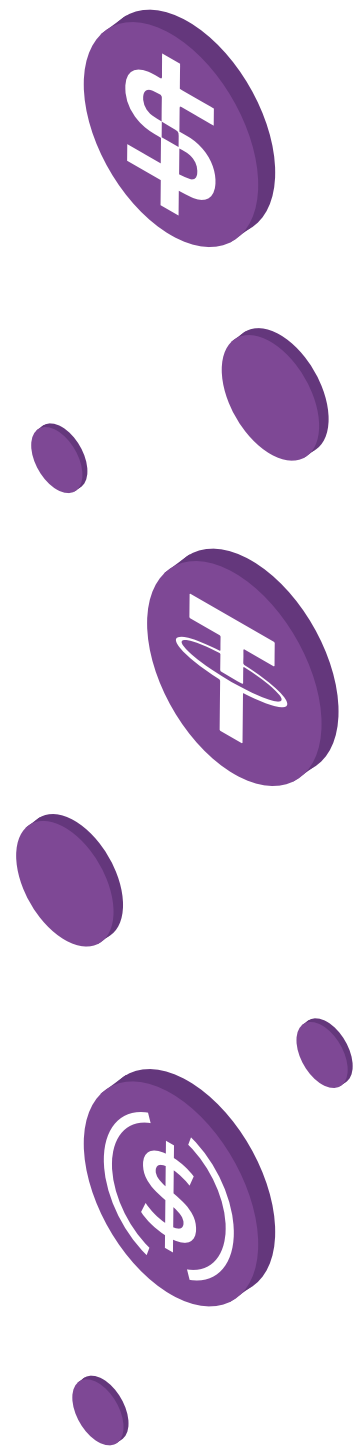
Stablecoins avoid the volatility of traditional cryptocurrencies because the issuers, although private entities, hold and monitor reserves in the same way that central bankers manage the supply of government-issued money. Currently subject to fairly light-touch regulation, governments all over the world have signalled that they are prepared to toughen their stance to ensure that stablecoin delivers on its promises – and to avoid a digitally-driven bank run.

The case for CBDCs

Central banks are also exploring innovative responses to the arrival of cryptocurrency, most notably by designing their own digital currencies. These are known as Central Bank Digital Currencies (CBDCs). Governments in the EU, the UK and China are investigating the possibilities offered by CBDCs, while the US administration launched a review of CBDCs in October 2021.

The thinking is that a digital euro or digital dollar could provide a stable value, just as stablecoins are intended to do, while undermining the private providers of the cryptosphere.

However, as central authorities start to insert themselves into the world of crypto, it raises the question of regulation. Banks and other regulated entities are required to carry out extensive KYC, AML and CTF checks, but crypto account providers have largely avoided these.

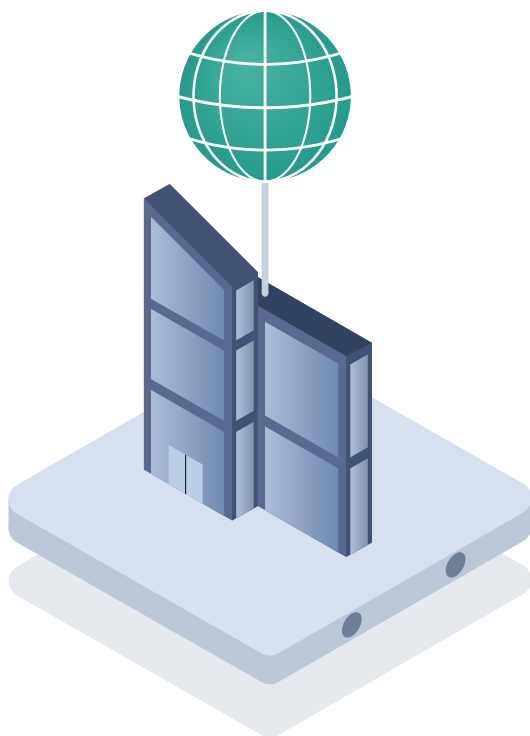


But institutional adoption of crypto currency specifically and DeFi more generally, suggests that this will have to change. Crypto network operators like Stellar and Ripple have proposed hybrid models – a mix of private and public blockchains – as a means to countering this problem.

Whether public CBDCs or private stablecoins end up dominating the market is yet to be seen. But what is clear is that the world's largest economies are demonstrating a willingness to consider the benefits offered by digital currencies and an acknowledgement that they are here to stay.

The idea that crypto is another passing investment fad is finally laid to rest. It has already paved the way for a dramatic shift in monetary distribution, even as central authorities continue to ponder the currencies that inspired the innovation.

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The time is now: why cryptocurrency matters to your business today

Everyday spending is vital to the success of any currency. Without the means to facilitate payment for standard commodities and services, currencies lose their purpose and are vulnerable to collapse. But that is no longer just a long-term goal for cryptocurrencies. It is happening right now.

Growing numbers of ordinary consumers want to have crypto products sitting alongside their standard current accounts. They want to have crypto capabilities on their payment devices. They want to use their preferred digital currency when buying a coffee from their local shop or a cocktail in their chosen holiday destination.

Cryptocurrency and DeFi more broadly are the precursors to a different economy and represent both significant financial opportunities and transformational imperatives for business owners and investors.

The challenge is to ensure that businesses are ready for the emergence of this new form of money – and work with the right partners to do so. For example, adopting the right blockchain solutions could be the difference between a financially slick operation and an ineffective processes that haemorrhages money. Choosing the appropriate currencies for business needs – both in terms of the token and the network – will be crucial.

What's more, the evolution will continue. It will inevitably result in some consolidation and the disappearance of some cryptocurrency providers and networks. Not every cryptocurrency available today will be suitable for anything other than speculative investment. Many need to tighten their compliance procedures, while others will simply not find it viable to do so.

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● The time is now: why cryptocurrency matters to your business today.

There is also a challenge for the wider ecosystem to ensure that digital currencies that offer both reliability and security are available. The sector does need consumer protections, particularly with regard to data privacy and security. Although global in scope, digital assets will still have to comply with local regulations wherever they are used. The question of stability will need to be resolved.

Nonetheless, cryptocurrency as a payment vehicle gives businesses the opportunity to expand their customer base, while giving those customers the chance to save, store and send money in new ways. Successfully capitalising on these opportunities and the demands of emerging, crypto-savvy generations will depend on how effectively businesses design experiences relevant to this demographic.

Businesses committed to positioning themselves as essential in the coming years need to start exploring crypto and DeFi services and embedding them into offerings now to safeguard business viability and relevance in the future.

Now is the time for companies to experiment with delivering ground-breaking financial products. Fortunately, they do not need to embark on this journey alone. Payments providers like Contis have dedicated their entire operations to helping businesses achieve their ambitious transformational objectives in finance.

With our innovative solutions, businesses can offer frictionless crypto spending to customers who are able to convert and spend any digital asset instantaneously at the point of sale.



About Contis

Contis's award-winning payment card solution enables cardholders to spend crypto on debit, prepaid, or virtual cards, without manually converting cryptocurrencies or liquidating assets in advance.

Founded in 2008, Contis is dedicated to empowering businesses to achieve their transformational finance projects – however ambitious. The provider of Europe's most comprehensive banking-as-a-service platform, Contis and its technology enables businesses to rapidly launch accounts, cards and payments services – including crypto cards and payments.

Contis works with key players in the cryptosphere, including Swipe, Change,

Baanx, Plutus, and Monolith among others. Binance, the world's largest crypto exchange, uses Buffer technology from Contis on their debit cards to enable frictionless crypto spending, while Bitpanda, has applied Buffer to its whole trading platform, enabling its clients to spend in stocks, metals, and cryptocurrency.

Whatever your business, Contis provides dependable, frictionless payments solutions to get your new services to market in record time.





Get in touch to find out how our team of experts can help.

