



Money is Moving to the Internet

March 2021

The turn of the century is largely regarded as the birth of the digital era, once we managed to navigate the fear of power grids not collapsing at the stroke of midnight, we turned the page on the analog era and ushered in dramatic change. The 2000's were a time when the internet was coming of age and into the hearts, minds and eyeballs of most of us. We had navigated the dot.com bust and were now finding real world uses for the internet. Still it was a time when the internet needed to be manually switched on via a noisy modem that operated at 256/64kbs speed, spitting out websites that looked like newspaper classifieds with blurry pixelated images. You would log into your Hotmail account, file share the latest Eminem MP3 and got chatting via AOL's instant messaging service. You paid for luxury items using your black Amex, wrote a cheque to pay for the kids school fees and paid the building contractor cash in hand. 20years of history feels like a very distant memory and we really had little comprehension how much things would change.

The world of business and commerce has been turned on its head driven by the growth of smart phones, social media and online marketplaces all transformative technologies facilitated by the internet. Today, 90% of the developed world uses the internet on a daily basis. Approximately 20% of global retail sales are now down via e-commerce, accelerated by Covid, and 75% of Australian adults transact online at least once a month. An amazing structural change in the way people live their lives that is now feeding through to the way our underlying infrastructure is developed, jobs are lost/created and the rise of mega-corporations.

There is one integral feature of society that has however resisted technological change and that is money. In Australia we have seen a material move away from cash to the use of cards, both debit and credit. This has been through a combination of Govt legislation (2019 Currency Bill Act reduced cash payments to a limit of \$10,000) and technology such as point of sales systems. The New Payments Platform (NPP) was introduced in Australia in 2012 which has led to the development of PayID and real time clearing via Osko and BPay for domestic transactions. More recently buy now pay later services have been heralded by the market as innovative, but in terms of true technological and product innovation the offering is far from revolutionary. The financial system is effectively the same underlying infrastructure with a new front end which has allowed the incumbents to levy fees on transactions.

It is fair to say that the technology associated with the movement of money has been a long way behind the technological creativity and radical rethinking of processes that we have seen in other industries – media and communication spring to mind as tech industry leaders. There are two main reasons why this is the case:

The finance industry has been notably slow to adopt new technology, driven by limited competition and dealing with highly regulated infrastructure.

Technological advances in money and finance were limited as we needed intermediaries to validate transactions. The internet was still unable to perform the function of trust required to deal with financial interactions.

We need to understand why the world of finance has been so backward in terms of embracing revolutionary technology. To put all this in context we need a quick monetary history lesson: The world adopted the USD standard in 1971 when President Nixon de-linked the US Dollar from the price of gold. In 1974 the US agreed with OPEC to price oil in USD, creating what is known as the petrodollar. Overtime most other countries, including Australia in 1983, moved to a largely free-floating market driven currency. On the back of the adoption of the USD standard, technology was implemented in 1973 via a cooperative of financial institutions known as Society for Worldwide Interbank Financial Telecommunications (SWIFT) to securely transmit payment information and instructions between a network of banks and financial institutions. This system is still in place today and has had limited technological advances over the 48 years it has been in operation. Hence why it still takes 2-5 business days to move money around the world.

With the release of the Bitcoin white paper in 2008, internet based distributed ledger or blockchain technology had been refined to allow computers to perform the function of trust. By performing the function of trust, blockchain technology removes the need for intermediaries in financial transactions. This technological advance is only now coming into the public forum as the market begins to understand the potential of distributed ledger or blockchain technology. With the market cap of bitcoin soaring past US\$1trillion, it is leading the interest in digitally native money. A host of other blockchain networks have now been created, Ethereum being the largest, that offer applications to undertake many of the functions performed by not only SWIFT, but the banking and finance industry as a whole. The banking and finance revolution of digitally native currency and associated decentralized finance ecosystem is occurring at the same time that the legacy USD standard monetary system is faltering from one crisis to the next.

With the modern internet being trusted to store peoples credit card details and other personal information, the question now becomes how quickly will consumers get comfortable with the internet moving and safe keeping their money without an intermediary involved. If the pace of change that has occurred over the last 20years is anything to base a prediction on, it is fair to say that structural change is coming to the world of money and finance a lot faster than most people can imagine.