Trendsights

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A regular focus on trends and innovations that matter to Interac Corp.

Crypto, pizza, and digital adventurers

What do the birth of both e-commerce and Bitcoin have in common? If your answer is Satoshi Nakamoto, the mythical and elusive creator of Bitcoin, you would be wrong. Remarkably, the answer is in fact, pizza.

Oddly, the first true e-commerce transaction occurred in 1994 and was credited to Pizza Hut through its PizzaNet service. Sixteen years later, on May 22, 2010, a Florida man named Laszlo Hanyecz showed the world that cryptocurrency, Bitcoin, could be used as a medium of exchange when he successfully offered 10,000 Bitcoins for a couple of Papa John's pizzas through an online forum. A fellow UK resident accepted the offer and sent two pizzas to Hanyecz's home. At the time, the 10,000 Bitcoins were worth $41 USD; as of June 2022, they would be worth approximately $250 million CAD (or $125 million CAD per pizza). In crypto-enthusiast circles, May 22 is now known and celebrated as Bitcoin Pizza Day.

Beyond its rapid and significant growth in value, do cryptocurrencies have a significant role to play in the future of finance, money, and the economy? Only a few weeks ago, after all, the Terra stablecoin debacle engulfed the cryptocurrency market — and while Coinbase, the most recognized cryptocurrency exchange platform, recently became the first crypto company to enter the Fortune 500,[1] only two weeks later it proceeded to rescind job offers and laid off 18 per cent of its workforce.[2]

Why the turbulence? Is the cryptocurrency world going through an evolution or a revolution? Or worse, is it facing its reckoning?

This *Trendsights* aims to take you on a journey through tales and history that will, hopefully, help spark your own opinions about these new digital assets.

Dive in

Crypto What is Money?

MONEY

Currencies were once backed by gold reserves until the collapse of the Bretton Woods System in the 1970s. Since the collapse of Bretton Woods, countries have been free to choose any form of exchange arrangement they wish.[3] Which begs the philosophical question of: what is money?

"Money" is defined as a medium of exchange, a measure of value or a means of payment. It is the accounting system for a particular economy and is meant to facilitate the exchange of goods and services. In theory, anything can be given "monetary value" — if enough people or communities accept and trust the medium of exchange. For example, in 2002 when M-Pesa launched in Kenya, users were purchasing and selling mobile phone minutes by trading "airtime" as local currency.[4] Philosophically, and putting strict definitions of legal tenders aside, money could represent anything; from M-Pesa where value is attached to mobile phone minutes, to children in the western world favoring Robux — the "Roblox dollars" on the online gaming platform.

CRYPTOCURRENCY

A cryptocurrency is a digital, encrypted, and decentralized medium of exchange – meaning that it does not rely on a central authority to maintain its value. Bitcoin is the world's most popular cryptocurrency today. At its core, Bitcoin is a libertarian promise manifested in the form of a computer program which users can download and run on their own computers. The value proposition of this and similar cryptocurrencies is that they are not only visible on one individual's computer but on thousands of computers simultaneously –together creating a permanent ledger of transactions that record each purchase, sale, or trade on a public database called a blockchain. Cryptocurrencies aim to remove the need for central banks, politicians, or governmental economists from the transfer-of-value process. Rightly or wrongly, we now have a vast array of believers in these digital assets ranging from Bitcoin purists to Dogecoin enthusiasts. As of March 2022, there were more than 12,000 cryptocurrencies in existence, with most of them untethered to any central banks.

BLOCKCHAIN

Cryptocurrencies allow for a digital representation of value that relies on a cryptographically-secured distributed ledger called the blockchain. In the case of Bitcoin, these transactions on the ledger do not appear one at a time – instead, they appear approximately every 10 minutes. One of the computers on the network rounds up a series of transactions and stuffs them into a package of computer code called a block. Each new block refers to the block that came before it and is visible to everyone, creating a "blockchain" – a method of verification without a need of centralized authority.

CBDCs

Opposite to cryptocurrencies are most Central Bank Digital Currencies (CBDCs) which exist on centralized ledgers controlled, operated, and surveilled by central banking institutions and government bodies. One of the most well-known CBDC in existence today is the digital yuan.

Crypto Bitcoin Price Timeline

"Bull markets are born on pessimism, grow on skepticism, mature on optimism, and die of euphoria."

—John Templeton

Undoubtedly, Bitcoin along with other cryptocurrencies has experienced market volatility. Despite this, crypto supporters remain unwavering in their beliefs in the technology and its decentralized blockchain architecture. Using storytelling, this next section will to take you on a journey through tales and history that will, hopefully, help spark your own opinions about the future of these digital assets.

Crypto Tulips, Stones & Stories

A new asset class, or Tulipomania for Millennials?

History, they say, is a mere chronicle of replacement. Or is it?

In 1634, during the Dutch Golden Age, we witnessed the birth of a brand new and very speculative asset class at the time: the tulip bulb. At the time, a single tulip bulb could sell for more than ten times the annual income of any skilled artisan, while the financial contracts on these bulbs were changing hands more than ten times in a single day due to the high demand. For many modern-day economists, the "Dutch tulip mania" is considered to have been the first recorded asset bubble in modern history.[5] However, like during most speculative bubbles, good times rarely last, and in February 1637 the prices of tulip bulb contracts collapsed abruptly while the trade of this new asset was grounded to a sudden halt. This unconventional asset class's bubble had finally burst leaving people with nothing but economic hardship and a general sense of desperation.

Perceived supply & scarcity: the tale of the Rai stones

Over five hundred years ago, the Yap Island people created an ingenious system of commerce along with a rudimentary and transparent ledger and consensus mechanism. Unlike other existing societies at the time, their monetary system and currency were not based on precious metals but on a special limestone not found on the island. The Yapese had to exert significant effort and sail far away, sometimes more than three hundred kilometers, to bring back thousands of large granite boulders. These boulders, often weighting 3 to 4+ tons, were carved into disks, becoming the local currency known as the Rai stones.

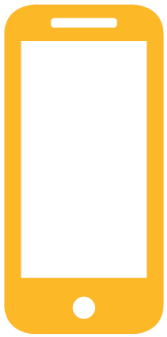
The Rai stones remained at the center of town and would rarely be moved once placed there. These stones would then be proclaimed as a specific persons property, and the whole village would then remember who it belonged to, creating a very rudimentary ledger based on collective memory. If the owner of the stone(s) wanted to make a trade, they would officially announce it to the entire village that stone was changing hands, and who the new owner was from this point forward.

This all came to an end, around 1870, when David O'Keefe, a European captain, wound up on the Yap shores after a storm and noticed the use of the Rai stones as currency by the Yapese people. Once fully recovered, O'Keefe wasted no time in setting sail to nearby islands to exploit the Yapese currency by mining the limestone boulder for himself. He used more contemporary techniques and technologies such as bigger ships, better tools, and dynamite. His hopes were to become rich by flooding the Yapese market with "his" easily and newly acquired limestone. At first, things did not go as planned as the Chief of the Yapese proclaimed that O'Keefe's counterfeited limestone were worth next to nothing **because of the ease of which he acquired these stones**. It meant the value of these counterfeited stones was not intrinsically the same as the value placed on the Yapese (Rai) stones. However, over time, the Yap people accepted these counterfeited stones. The ease at which O'Keefe was able to acquire large supplies of these stones eventually meant the introduction of inflation as well as the devaluation and the demise of the Yap Island's currency, ending half a century of the island's monetary system.

Numerous lessons are to be learned from the tale of the Yap Island. First, is that **most modern-day societies are crafted around stories**,[6] stories that have made it possible, over decades and centuries, to create cultures, nations, faiths, and yes, even monetary systems. Why then do we value gold so much despite other metals sharing similar characteristics? Which leads us to the second lesson: the concept of perceived scarcity. Scarcity is an economic concept which refers to the fact that there exists only a finite number of resources or limited amount of economic goods. The general rule of thumb is that we place a higher value on goods that are scarce than on goods that are abundant.[7] As illustrated above, the Rai stones were valuable because of their perceived scarcity. They were perceived to be scarce because they were so difficult, especially with the primitive technologies of the Yapese at the time, to quarry from an island hundreds of kilometers away.

Moral of the story: when you start creating a lot of Rai stones or start printing a lot of money, you are just depreciating the accounting system of an economy as opposed to getting wealthier. This decrease in the purchasing power of money over time is what is commonly known as "inflation". **In essence: *what comes easy will not last long and what lasts long will not come easy.***

Crypto Opportunities



Unbanked, underbanked & micropayments

Today's financial sector challenges and frictions are cryptocurrencies and blockchain's potential opportunities. In 2018, financial services represented 7.5% of the US economy or, more precisely, $1.5 trillion USD of revenues.[8] In 2020, payments revenues were approximately $1.9 trillion USD globally.[9]

With approximately 1.7+ billion people in this world that are currently unbanked, cryptocurrencies present a peer-to-peer alternative to traditional banking and payment systems (including cross-border remittances) without the need of financial intermediaries.

For example, and according to the World Bank Organization,[10] 50 percent of the Latin American population has limited or no access to a bank account. And yet, 55% of adults in the region have a mobile phone and internet access.

Crypto Drawbacks

Volatility, liquidity & *ponzinomics*

Like the tulip bulbs of 1624, cryptocurrencies remain, for now, a high-risk, volatile, and speculative asset. As the last few weeks have demonstrated, unexpected changes in market sentiment can lead to sudden moves in price. Bitcoin, to date, has lost approximately 70% since reaching an all-time high of $83,000 CAD in November 2021.

In addition to the volatility, if the current Bitcoin experiment currently taking place in El Salvador[11] has shown us anything is that the illiquid and intangible nature of cryptocurrencies make it very difficult to convert it back to cash as there very few Bitcoin ATMs and a lot of Salvadoran merchants have now given up on the cryptocurrency and reverted to accept only cash.

Lastly, the crypto world remains a domain plagued by fraudulent activities. These stories range from Ponzi schemes masquerading as DeFi initiatives to hacking group, such as Lazarus from North Korea, recently illegally infiltrating networks and platforms embezzling record-shattering number of stolen cryptocurrencies to phishing attacks where users unwittingly give scammers access to their private keys.[12] Closer to home, QuadrigaCx defrauded investors of $250 million in cryptocurrency in 2019.[13] Unfortunately, there is very limited legal recourse available to the victims as, unlike bank accounts, the crypto holdings are not protected or covered by the Canada Deposit Insurance Corporation.[14]

Crypto Considerations

Governance & regulation

At the international level, crypto regulations come in all shapes and sizes. Several countries have put restrictions in place with respect to crypto trading while countries like Turkey, China and India have banned almost all crypto transactions. In Canada and the USA, there have been ambiguities regarding the regulatory landscape for cryptocurrency asset businesses. A lot of the uncertainty with respect to the legal framework of cryptocurrency is due to its newness relative to more traditional currency and payment systems. However, since the beginning of the pandemic there has been a renewed interest in cryptocurrencies, pushing regulators to provide greater clarity on appropriate frameworks.

In the last 3 years, for example, Canadian securities authorities have published multiple regulatory notices and have brought forward several enforcement actions against crypto platforms that were violating securities laws.

More recently, at the Federal level, we have seen encouraging signs with the introduction of Bill C-249 by MP Rempel Garner. The purpose of the proposed bill is to call for a national framework with the hopes of encouraging growth in the crypto-asset sector.[15] Even if cryptocurrencies' theme is one of decentralization, many proponents are of the view that sound governance and regulatory framework would not necessarily dampen enthusiasm for crypto but would drive out bad actors and, consequently, would help legitimize this new digital asset class and, in turn, drive adoption.

Final thoughts

"PayPal had these goals of creating a new currency. We failed at that, and we just created a new payment system. I think Bitcoin has succeeded on the level of a new currency, but the payment system is somewhat lacking. It's very hard to use, and that's the big challenge on the Bitcoin side."

—Peter Thiel, co-founder of PayPal and author of the bestseller "Zero to One"

If the future is a distribution of probable outcomes - is there a future where cryptocurrencies have a bigger market capitalization than gold? Will we eventually see a ~~Gold~~ *Bitcoin* Standard? Dr. Saifedean Ammous, the author of the book of the same name seems to think so. In his book,[16] he argues that unlike gold, we can easily store cryptocurrencies on private keys as well as easily send them to counterparties on the other side of the globe.

Does fortune favour the bold in this new digital world? Is crypto the biggest innovation of this past decade? Of our lifetime?

It depends. It depends on the ease of use. It depends on Bitcoin and Ethereum solving the energy consumption problem. It depends on institutional investors' level of adoption and whether these investors recognize cryptocurrencies as worthwhile alternative assets to be part of a balanced portfolio. It depends on having a sound regulatory framework that is not inhospitable to new initiatives in the crypto space.

More than anything, I would argue that it depends on the story we are willing to tell our future selves.

And you – what do YOU think?[17]

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SOURCES & NOTES

[1] https://fortune.com/company/coinbase/fortune500/

[2] https://techcrunch.com/2022/06/14/coinbase-ceo-says-it-is-laying-off-18-of-its-workers/

[3] https://www.imf.org/external/about/histend.htm

[4] https://www.vox.com/future-perfect/21420357/kenya-mobile-banking-unbanked-cellphone-money

[5] *A Short History of Financial Euphoria*, John Kenneth Galbraith

[6] *Sapiens: A Brief History of Humankind*, Yuval Harari

[7] Bitcoin's supply limit has always stood at 21 million coins.

[8] https://en.wikipedia.org/wiki/Financial_services_in_the_United_States

[9] The 2021 McKinsey Global Payments Report https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/the%202021%20mckinsey%20global%20payments%20report/2021-mckinsey-global-payments-report.pdf

[10] https://globalfindex.worldbank.org/

[11] https://www.telegraph.co.uk/world-news/2022/07/11/el-salvador-forced-citizens-use-bitcoin-what-happened/

[12] https://techmonitor.ai/technology/cybersecurity/biggest-cryptocurrency-hacks-of-all-time

[13] https://www.newsweek.com/what-happened-quadrigacx-bitcoin-operating-gerald-cotten-crypto-king-1694074

[14] CDIC insures eligible bank deposits held in the name of one depositor up to $100,000.

[15] https://cointelegraph.com/news/canadian-mp-introduces-bill-aimed-at-encouraging-growth-in-crypto-sector

[16] *The Bitcoin Standard: The Decentralized Alternative to Central Banking* by Saifedean Ammous.

[17] In the time which has elapsed between the writing and the publication of this article, (1) Celsius Network LLC, a cryptocurrency lending company with over +$4 billion in assets, has filed for Chapter 11 bankruptcy in the USA; (2) Tesla sold 75% of their Bitcoin; and (3) Bitcoin briefly reached $30k CAD.

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