
Digital Assets – Evolution or Revolution?

2022



Brief Background

- ❑ 20+ year career revolving around investing capital for insurance companies
 - ❑ Currently SVP and Chief Investment Officer of ProSight Specialty Insurance
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- ✓ **Since 2014 I've been educating myself on the digital asset ecosystem**
 - ✓ **In 2018 I began angel investing directly in various blockchain related companies along with digital asset focused hedge/venture funds**
 - ✓ **Advisor and seed investor in the world's first decentralized insurance risk-pool, Nexus Mutual, with over \$700M in smart contract policies written annually with an investment portfolio in excess of \$600M**
 - ✓ **Founded and seeded the Bryant University Digital Innovation Fund**

Before We Get Started

Rules of the road

- ✓ What I tell you is not meant to be conclusive, but to **act as a stimulant for further dialogue**
- ✓ **My job today is to educate you** on the enormous opportunity over the horizon
- ✓ Open your mind and **think beyond today** – the digital transformation will be a major part of multiple generations
- ✓ Blockchain, crypto currencies, and the digitalization of assets **are the future and a secular play on decentralized *technology* adoption**



Did You Know that...

Each of these technologies were initially criticized by society and experts

- ❑ **Automobile** – *‘the horse is here to stay, but the automobile is only a novelty – a fad’ (President of Michigan Savings Bank advising Henry Ford’s lawyer not to invest in Ford Motor Company)*
- ❑ **Telephone** – *‘why do we need an electrical toy when we have plenty of messenger boys’ (Sir William Preece, Chief Engineer of British Post Office)*
- ❑ **Internet** – *‘I predict the internet will soon go spectacularly supernova in 1995 and in 1996 catastrophically collapse’ (Robert Metcalfe, founder of 3Com)*

Most generational technologies are categorized as gimmicks, harmful to society, and only as useful as the fools who use them...they always follow the same pattern

Stages of Acceptance

Great innovations always follow these steps

First, They Ignore You

Then They Laugh at You

Then They Fight You

Then You Win

What's Going on in the World?

A lot of chatter about blockchains, cryptocurrencies, and digital assets

Something important is going on and you should all be aware of its potential impact!

IBM Goes Big on Blockchain, Unveiling Services Suite and Strategy

Mark Zuckerberg

"We're in a different state of technology today, where some of the advancements in blockchain... allow a lot of the costs and inefficiency to be taken out of the system."

1 **JP Morgan is rolling out the first US bank-backed cryptocurrency to transform payments business**

Louis Vuitton Launches Blockchain Game with Embedded NFTs

Pepsi Introduces First NFT Series

IMF Releases New Paper – The Rise of Digital Money

2 **The Next Wave of NFTs Will Be Gamification and Play-To-Earn**

MassMutual Buys \$100M in Bitcoin, Bets on Institutional Adoption With \$5M NYDIG Stake

Marc Andreessen

"We'll all look back in 20 years and conclude that Bitcoin was as influential a platform for innovation as the Internet itself was."

3 **Nike Acquires NFT Design Studio RTFKT**

Senate Holds Hearing on Digital Currencies, Blockchain

WhatsApp To Allow Crypto Payments in Novi Wallets in US

Bill Gates: Office Meetings Will Be In the Metaverse Within Three Years

Bill Gates

"Bitcoin is a technological tour de force."

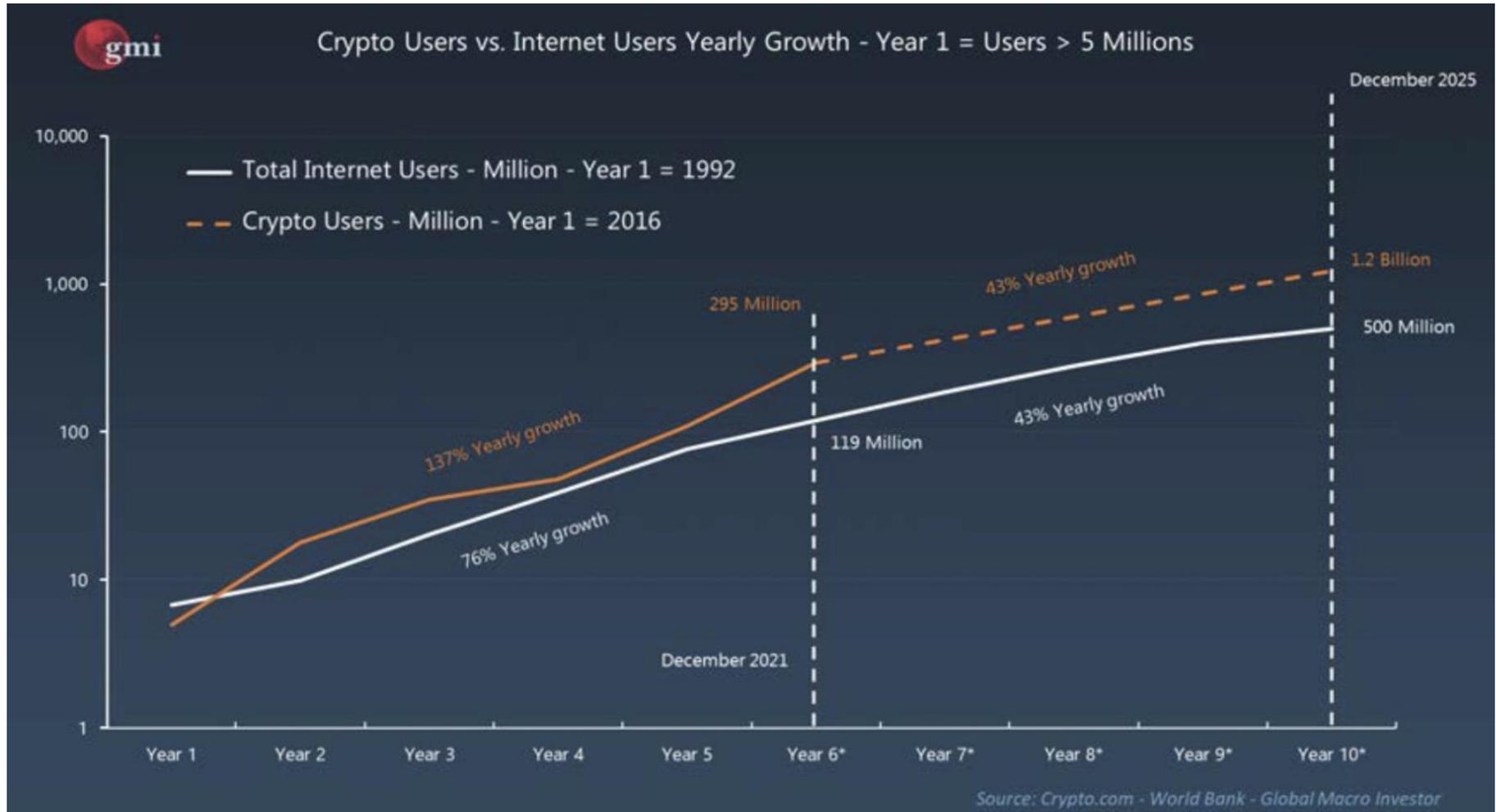
Introducing Meta: A Social Technology Company

4 **4 Reasons Why Bitcoin Represents A New Asset Class**

5 **Executive Order on Ensuring Responsible Development of Digital Assets**

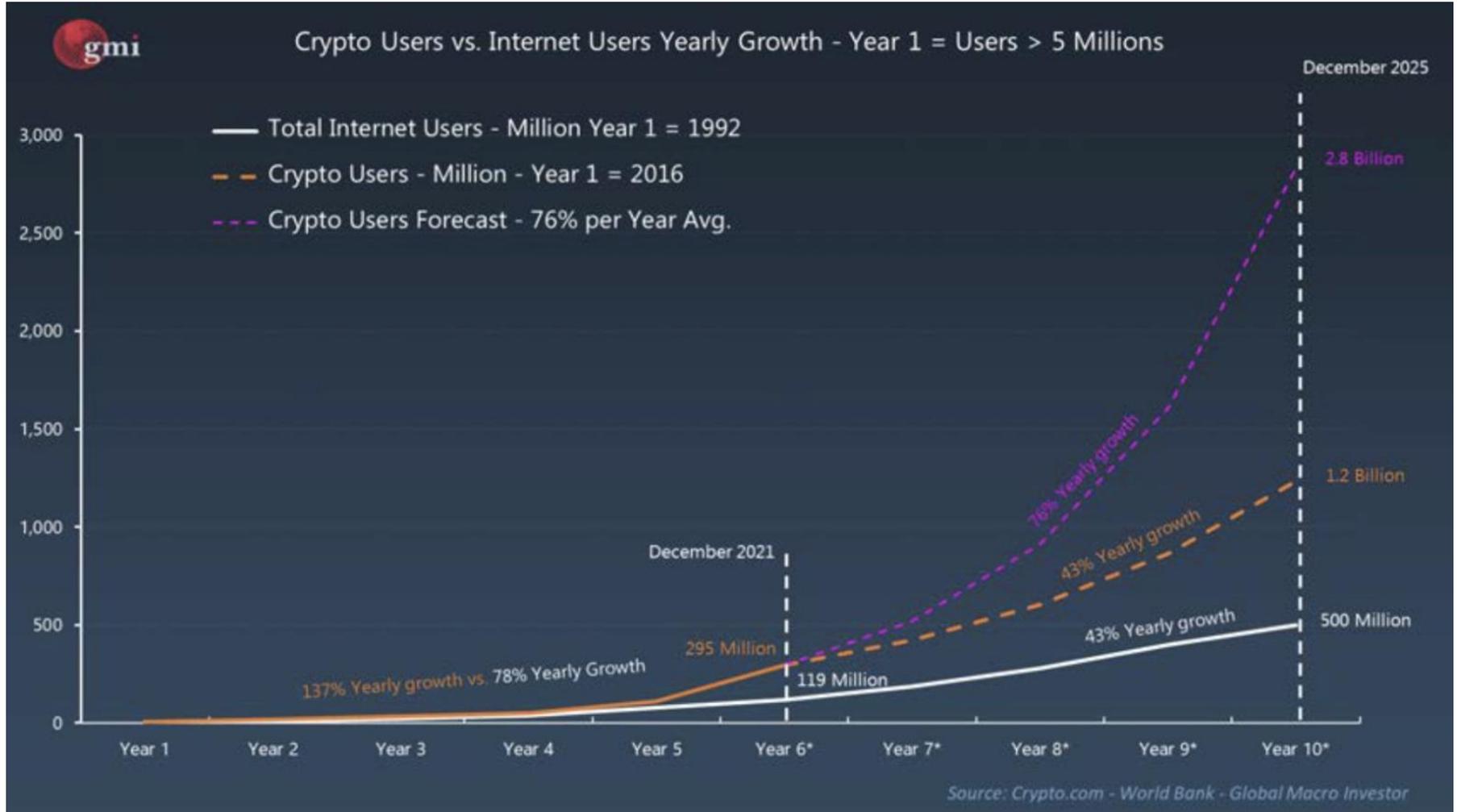
The Adoption Curve is more Impressive than the Internet

The fastest adoption rate of technology the world has ever seen!



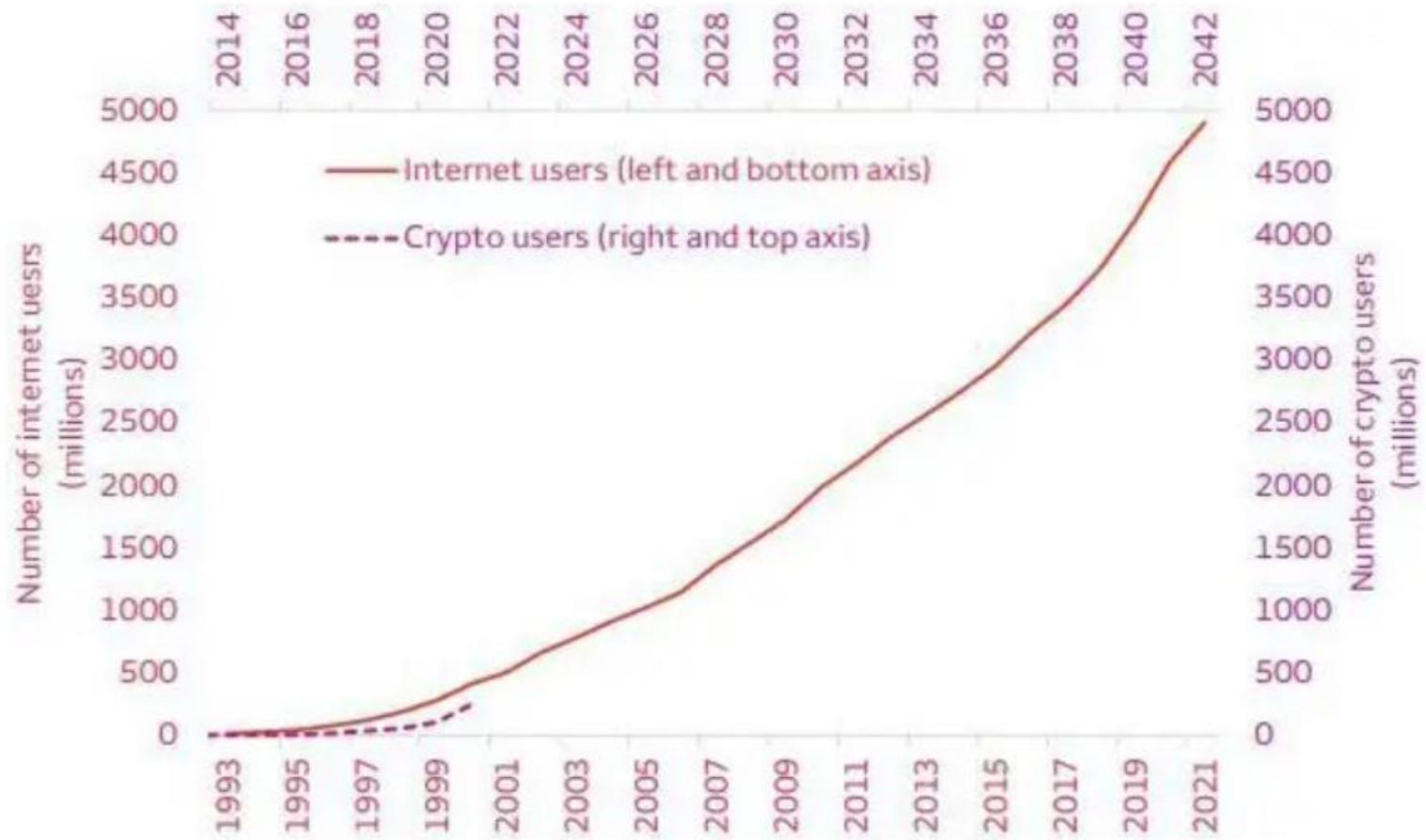
There could be Over One Billion Users by 2026

Far exceeding the internet's growth rate during this period



Zooming out - Size of Opportunity vs. Internet

We are still in the early innings of growth



World in Data, Crypto.com, Statista, Bloomberg and Wells Fargo Investment Institute

Conclusion on Growth Prospects

Growth in the digital ecosystem is expected to be explosive

Growth is expected to be more rapid than internet adoption – possibly making it the largest and fastest generator of wealth in history

- ✓ *If **network growth** continues, we could see 3B+ users of digital assets by 2030 – up from 300 million users today – **up 10x+***
- ✓ *Global equity and fixed income **market capitalizations** are around \$100 trillion each – the digital asset space at \$3T in market cap could easily grow to the size of one of these asset classes as all assets eventually become digitized – **up 30x+***
- ✓ *It's all about the adoption curve and network effects*
- ✓ ***The greatest investment outcomes come from generational technology shifts***

Why Do We Expect This Type of Growth?

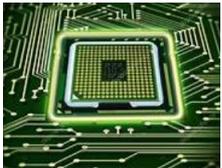
Continued advancement throughout the years



1950's – Mainframe



1990's – Internet /
Web 1.0 (**data sharing**)



1960's – Microchip



2000's – Mobile Handheld /
Web 2.0 (**social sharing**)



1970's - Personal
Computer



2010's – Blockchain /
Web 3.0 (**value sharing**)

Technological innovation always happens and Blockchain is the next logical step

Technology is Always Progressing

Technology always has traveling companions



PC



DOS



Handheld



IOS



Internet



Blockchain



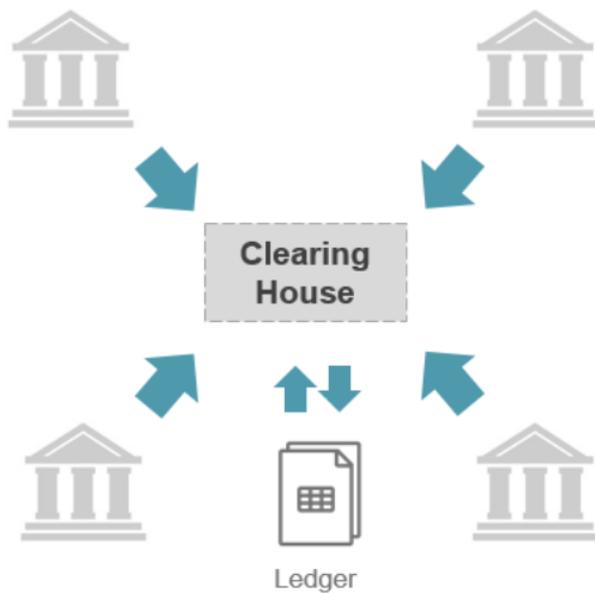
The most logical advancement is the 'internet companion'

What is the Blockchain?

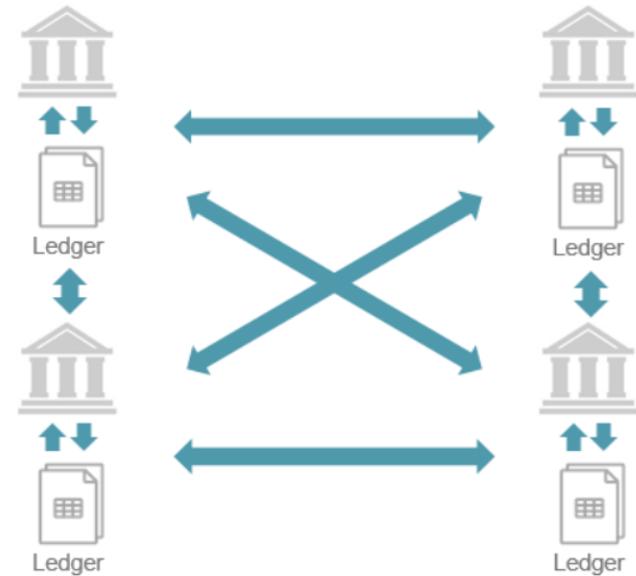


What is the Blockchain?

Centralized Model vs. Decentralized Model (or distributed ledgers)



Centralized Model



Decentralized Model

Ultimately, the power is dispersed to the users of the system, no central point of failure, and fees are dramatically reduced

What is the Blockchain?

The benefits and challenges

Benefits

- Enables decentralized systems incl. peer-to-peer transactions
- Increased transparency, tracking and traceability
- Immutable, reliable and shareable ledger of transactions
- Reduced transaction costs via disintermediation and automation
- Promotes dynamic pricing
- Access to markets for investors and issuers, incl. non-traditional assets
- Enables effective monitoring, auditing and compliance

Challenges

- Adoption challenges
- Technology barriers
- Security risks
- Legal and regulatory challenges
- Interoperability risks
- Energy consumption challenges
- Intellectual laziness

Source: World Economic Forum and PwC

Benefits far outweigh the challenges especially since the recent Executive Order promoting 'Responsible Innovation' was announced

Are there Real-World Use Cases?

Many industries are looking to harness the power of blockchain

Record keeping: storage of static information

Transactions: registry of tradeable information



1 Static registry

- Distributed database for storing reference data

Example

- Land title
- Food safety and origin
- Patent



2 Identity

- Distributed database with identity-related information
- Particular case of static registry treated as a separate group of use cases due to extensive set of identity-specific use cases

Example

- Identity fraud
- Civil-registry and identity records
- Voting



3 Smart contracts

- Set of conditions recorded on a blockchain triggering automated, self-executing actions when these predefined conditions are met

Example

- Insurance-claim payout
- Cash-equity trading
- New-music release



4 Dynamic registry

- Dynamic distributed database that updates as assets are exchanged on the digital platform

Example

- Fractional investing
- Drug supply chain



5 Payments infrastructure

- Dynamic distributed database that updates as cash or cryptocurrency payments are made among participants

Example

- Cross-border peer-to-peer payment
- Insurance claim



6 Other

- Use case composed of several of the previous groups
- Standalone use case not fitting any of the previous categories

Example

- Initial coin offering
- Blockchain as a service

McKinsey&Company

Innovations are taking place daily and developers are 'catching up' to the technology

Why Invest in Decentralized Digital Assets?



First Off, What is Considered a Digital Asset?

In essence, anything that embraces the blockchain and distributed ledger technology

- ✓ Bitcoin – decentralized **currency**
- ✓ Ethereum – decentralized **smart contract** protocol
- ✓ Filecoin – decentralized **storage** network
- ✓ Uniswap – decentralized **security exchange**
- ✓ Nexus Mutual – decentralized **insurance risk pool**
- ✓ BlockFi – decentralized **lending and borrowing**
- ✓ OpenSeas – decentralized **art** or non-fungible tokens (NFT's)
- ✓ Audius – decentralized **music** sharing
- ✓ And the list continues to expand...!

Digging Into The Transition to a Web 3.0 Economy

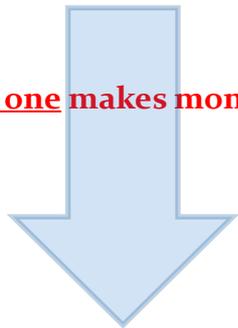
Value will move from the middleman (rent seeker) to the creator

The sharing of wealth by platforms for creators will transform the internet into a 'creator ecosystem'

The internet is about
the exchange of data:

Google
Yahoo
Wikipedia

No one makes money



Web 1.0

Extended to
centralized social sharing:

LinkedIn
Facebook
Instagram
Youtube

Middleman makes money



Web 2.0

The blockchain is about
the decentralized exchange of value

Bitcoin - Currency
Audios - Music Creators
Axie Infinity - Play to Earn

Money made gets shared



Web 3.0

Modern Portfolio Theory (MPT)

Utilized by every asset manager / consultant in the world

If you can maximize a portfolio's return per unit of risk you should thoughtfully consider an asset for inclusion in a portfolio

Modern portfolio theory argues that an **investment's risk and return** characteristics **should not be viewed alone** but should be evaluated by how the investment **affects the overall portfolio's risk and return**.

MPT shows that an investor can construct a portfolio of multiple assets that will **maximize returns for a given level of risk**. Likewise, given a desired level of expected return, an investor can construct a portfolio with the lowest possible risk. **Based on statistical measures such as variance and correlation, an individual investment's return is less important than how the investment behaves in the context of the entire portfolio.**

Would You Consider an Asset that has these Qualities?

Non-correlated

Correlation 2/1/2012 to 3/27/2020	S&P 500	Nasdaq	US Bonds	?	Gold	US Real Estate	Oil	Emerging Market Currencies
S&P 500	-	0.96	-0.26	0.01	0.00	0.72	0.36	0.30
Nasdaq 100	0.96	-	-0.26	0.00	-0.01	0.64	0.32	0.27
US Bonds	-0.26	-0.26	-	0.03	0.29	0.07	-0.16	0.11
?	0.01	0.00	0.03	-	0.03	0.03	-0.04	-0.01
Gold	0.00	-0.01	0.29	0.03	-	0.10	0.08	0.29
US Real Estate	0.72	0.64	0.07	0.03	0.10	-	0.23	0.29
Oil	0.36	0.32	-0.16	-0.04	0.08	0.23	-	0.23
Emerging Market Currencies	0.30	0.27	0.11	-0.01	0.29	0.29	0.23	-

Source: VanEck

Would You Consider an Asset (Bitcoin) that has these Qualities?

Increases the sharpe ratio of a portfolio

Portfolio	Total Return (%)	Annualized Return (%)	Annualized Volatility (%)	Max Drawdown (%)	Sharpe Ratios
BlackRock Multi-Asset Income	27.86%	7.29%	5.63%	-6.98%	1.3
<i>Customized With Bitcoin 1%</i>	33.70%	8.67%	5.63%	-7.59%	1.5
<i>Customized With Bitcoin 5%</i>	59.31%	14.26%	6.69%	-12.22%	2.1

Source: Binance Research, Bloomberg

The target study period ranges from **December 31st 2015 to June 30th 2019** which represents a period of 3 years and six months. It covers three different stages of the Bitcoin market, an increase in price, a sharp decrease in price, along with a period where Bitcoin remains flat.

What is Bitcoin?



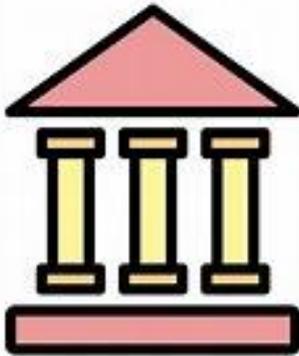
Bitcoin has Two Globally Attractive Features

This makes it attractive to people on a global scale



Global Accessibility

- ✓ Anyone can buy, sell, or store it without anyone's permission
- ✓ Trades 24/7/365



Programmatic Monetary Policy

- ✓ The system cannot be changed by any one person or group
- ✓ It is 100% auditable
- ✓ Supply is predictable

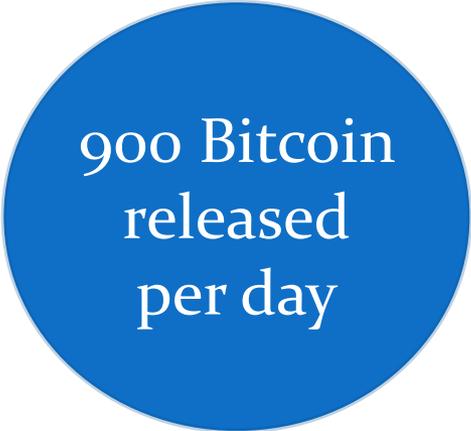
Bitcoin's Monetary Policy

Limited supply, known release, not controlled by anyone

- ✓ **Capped Supply** – there will only ever be 21 million Bitcoin
- ✓ **Disinflationary Supply Schedule** – every 4 years the supply halves
- ✓ **Programmatic Monetary Policy** – cannot be intervened by anyone



21 million
Bitcoin



900 Bitcoin
released
per day



18.5 million
Bitcoin in
circulation

Implications of Bitcoin's Monetary Policy

It is the first store of value for which its supply is unaffected by demand

- ✓ Unlike other assets, supply will not go up with price
- ✓ Unlike fiat currencies (dollar) it will hold its' purchasing power



Bitcoin Misconceptions

- ✓ **Volatile**
- ✓ **Bubble**
- ✓ **Bad for the environment**
- ✓ **Mostly used by criminals**
- ✓ **Government will shut it down**

How to Invest in the Digital Asset Space?



Opportunity Set

The digital asset space is mainly about Beta return capture

- ✓ Gaining Beta (or market) exposure is paramount when an asset class has 30x+ potential
- ✓ Allowing manager(s) to work the alpha component could lead to additional outperformance to the market

Possible solution:

- ✓ A diversified fund-of-funds structure is a great way to capture both return generators
- ✓ **It solves the problem of gaining both Beta and Alpha without having to become an expert in the underlying complexity of a rapidly evolving space**
- ✓ **A fund-of-funds format also allows a manager to change allocations based on market conditions**

Digital Asset Historical Returns

Gaining beta is important as all strategies benefited

Historical Returns

Index Name	2021	2020	2019	2018
Crypto Hedge Fund Vision Hill Composite Index	221.92%	223.60%	18.52%	-35.27%
Crypto Hedge Fund Vision Hill Fundamental Index	433.59%	423.15%	13.22%	-52.11%
Crypto Hedge Fund Vision Hill Quantitative Index	70.77%	144.67%	25.65%	2.51%
Crypto Hedge Fund Vision Hill Opportunistic Index	21.72%	35.02%	17.10%	-55.15%

Conclusions, Expectations, and Takeaways

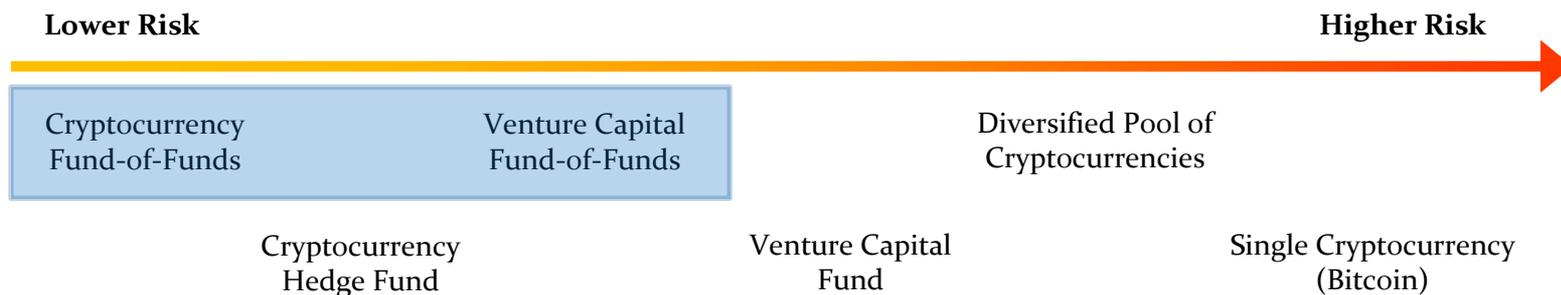
There are too many to list!

- ✓ Digital assets are here to stay and are growing exponentially
- ✓ An extraordinary amount of **talent and capital is coming into space**
- ✓ Like it or not, the **shift away from intermediaries** is happening
- ✓ **Many industries will benefit** from decentralization: insurance, banking, gaming, music, fashion

- ✓ Digital assets are likely to become the 6th asset class within the next 10 years

- ✓ View a digital asset investment as a technology play within your HF/PE/VC risk budget

- ✓ Investing in a diversified fund-of-fund structure could reduce risk



Resources

Websites

- ✓ RealVision.com/videos/crypto
- ✓ Coinbase.com/learn
- ✓ Casebitcoin.com

Podcasts

- ✓ [What Bitcoin Did by Peter McCormack](#)
- ✓ [The Pomp Podcast by Anthony Pompliano](#)
- ✓ [Unchained by Laura Shin](#)
- ✓ [The Defiant](#)

YouTube

- ✓ [Gary Gensler 24-part MIT Blockchain Course \(over 30 hours\)](#)