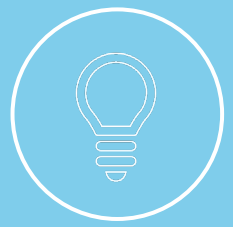
Ethics & Web 3.0

With Dr. Jane Thomason

TECHNOLOGY IS ACCELERATING

8,000 YEARS TO THE INDUSTRIAL REVOLUTION



120 YEARS TO THE LIGHTBULB

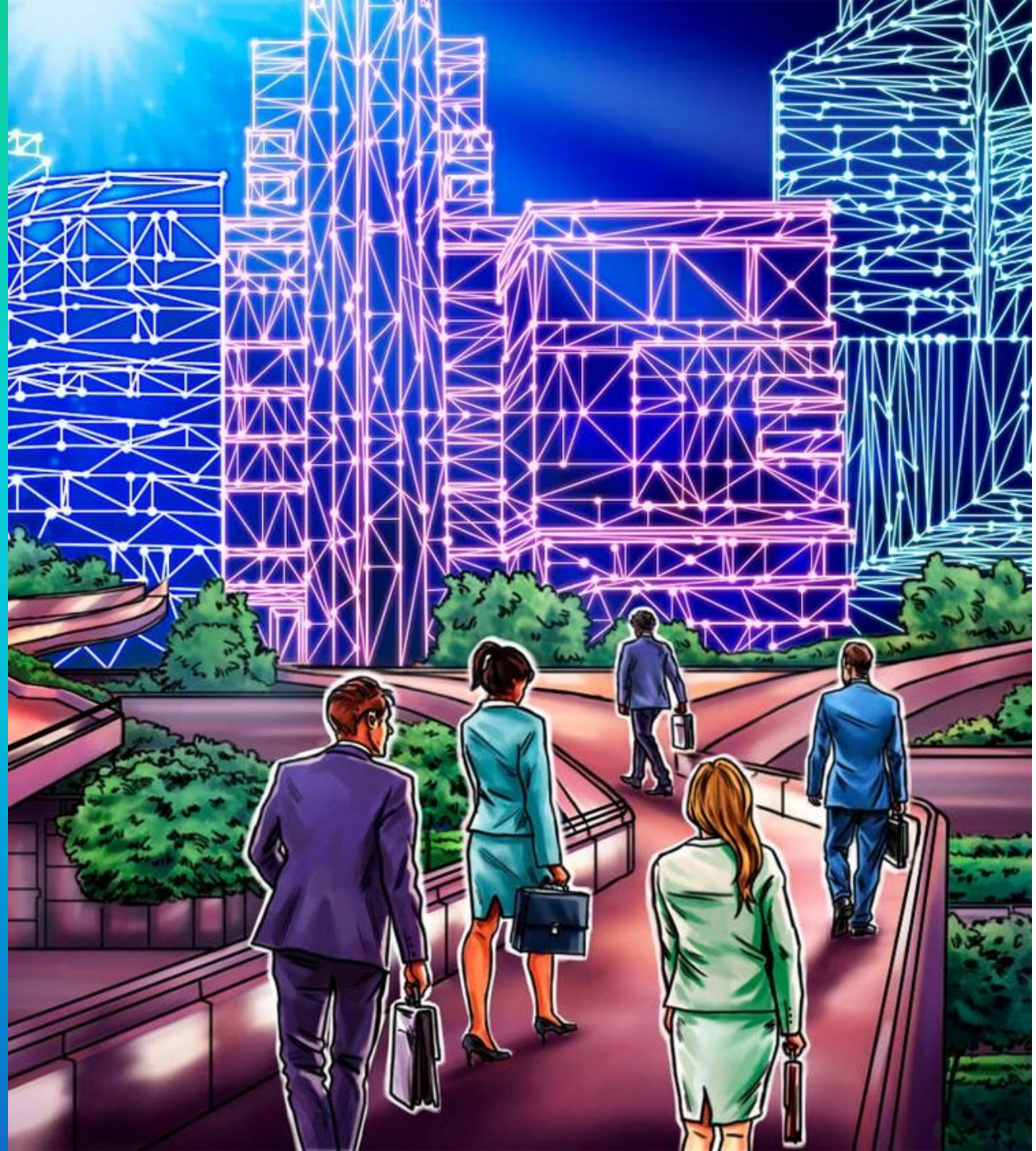
90 YEARS TO THE MOON LANDING

22 YEARS TO THE WORLDWIDE WEB

9 YEARS TO HUMAN GENOME SEQUENCING

Web 2.0 gave the world access to information. Web 3.0 will be the next iteration of the internet – "The Internet of Value"

Web 3.0 combines DeFi, NFTs, Decentralised Governance, Decentralised Services, and Self Sovereign Identity. Cloud



Metaverse

confluence of - gaming - blockchain - AI - AR/VR

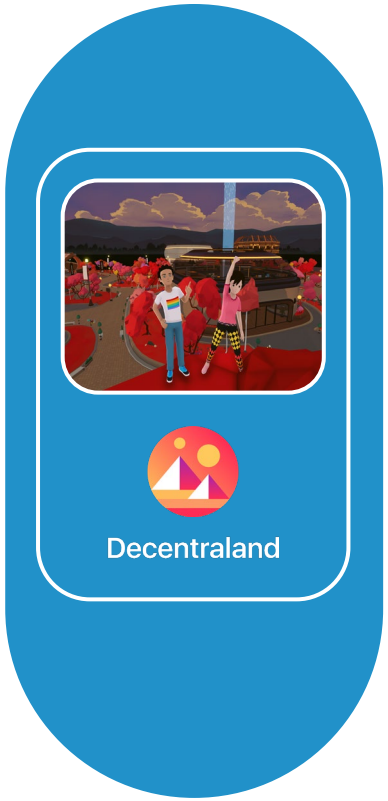
Immersive digital ecosystem that uses extended reality and blockchain, to create spaces for user interaction and exchange of value

$13 Trillion by 2030

Metaverse Ecosystem NextGen Internet

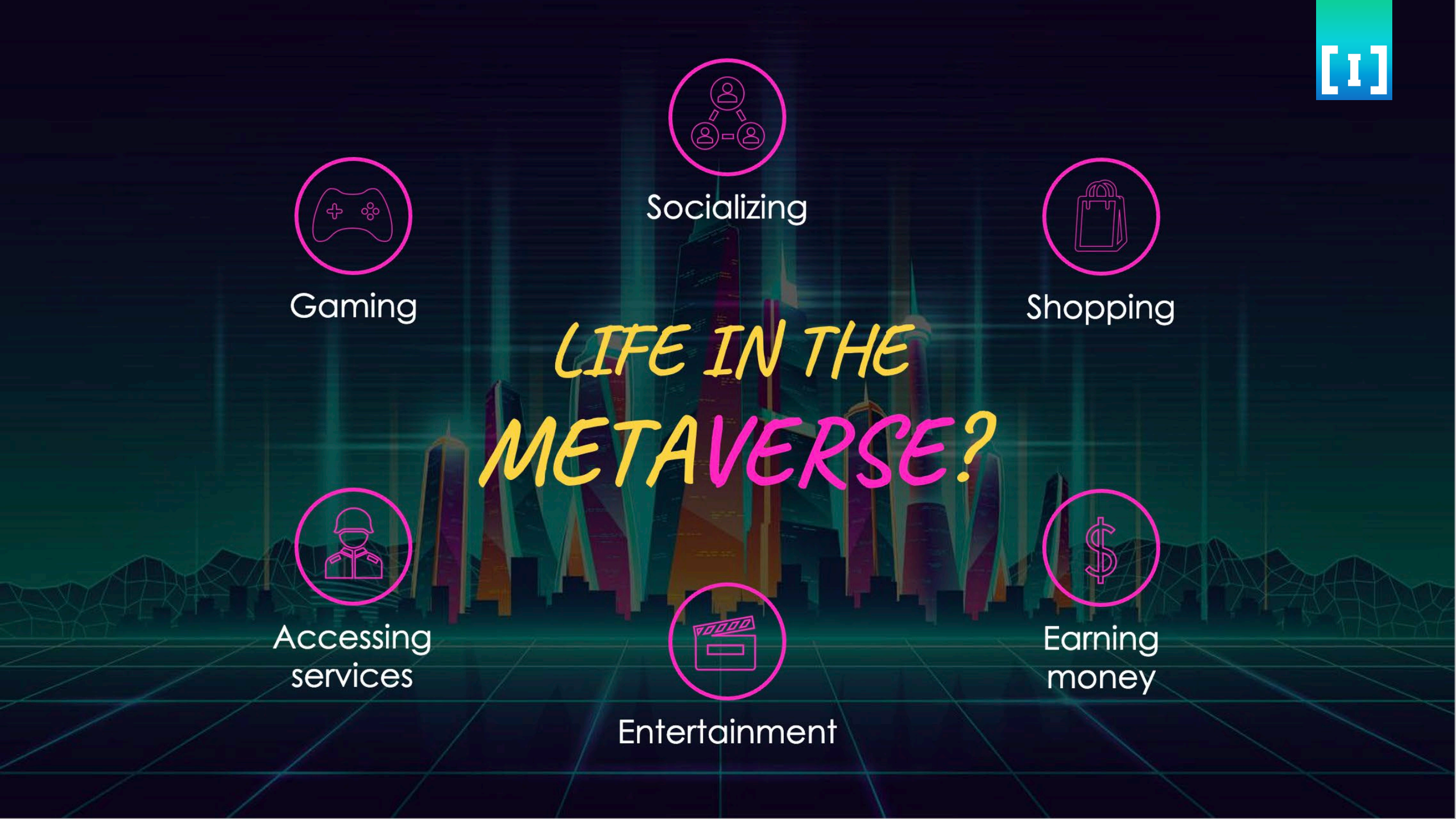
- economy and native currencies
- earn, spend, lend, borrow, or invest
- physical and virtual
- P2P
- exchange physical, economic, and content assets

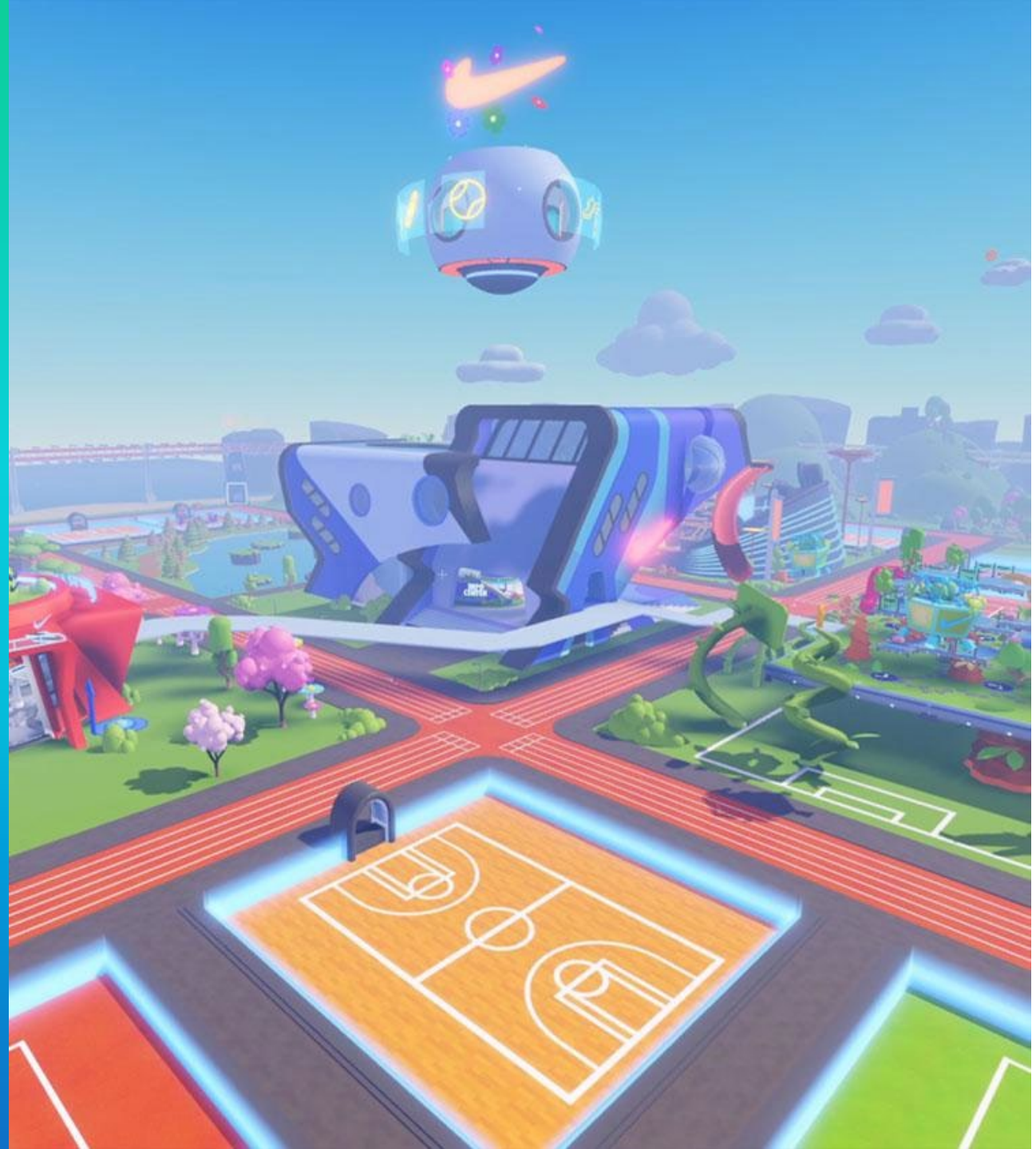
WHO IS BUILDING METAVERSES?



Meta Apple Microsoft

City of Seoul | Dubai | Neom

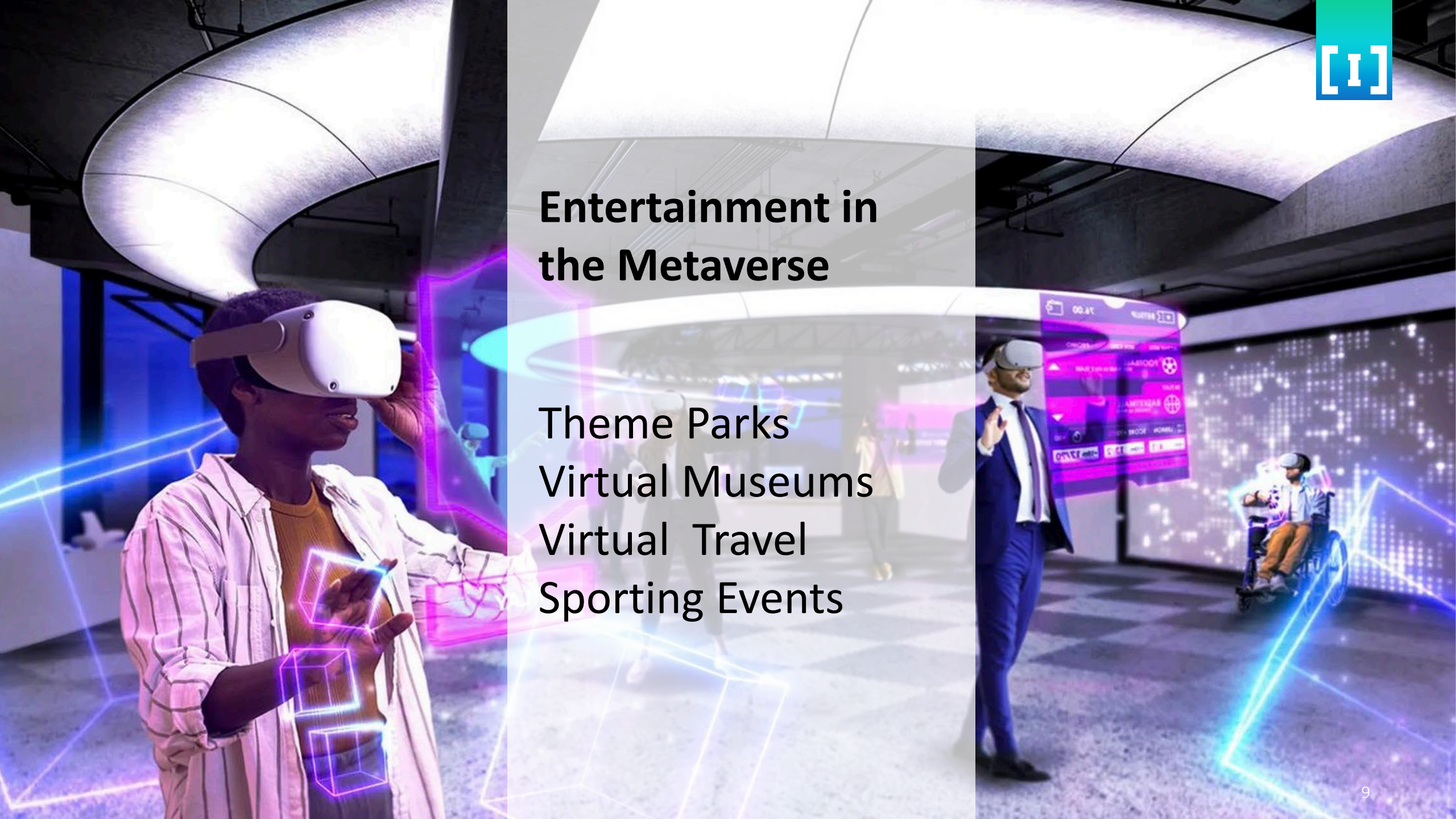

Socializing
Gaming
Shopping
LIFE IN THE METAVERSE?
Accessing services
Entertainment
Earning money



Retail in the Metaverse

Virtual & Physical

Niketown
Virtual Malls
Avatar Shopping



Entertainment in the Metaverse

Theme Parks
Virtual Museums
Virtual Travel
Sporting Events

Education in the Metaverse

Immersive History
Inside the Human Body
Precision Data

Earn to Learn

DIGITAL LAND RUSH

Real Estate in the Metaverse

NFT Property Rights
Tokenized Mortgages
Virtual Land

City of Seoul | Dubai | Neom

Government in the Metaverse

Health & Wellness in the Metaverse

Monetization of Data

- Play to earn', 'learn to earn' & 'move to earn'
- Health data marketplaces will connect and monetize data and make it available for scientific discovery
- Self-sovereign identity will enable individuals to monetize their health data

Community Owned Economies

- Digital communities form networks through token economies.
- Metaverse will enable a new immersive community economy using social tokens.
- Bi-directional beneficial relationships between provider and consumers.
- Consumers can become the agents of innovation in a distributed model of collaboration.
- Social tokens reward community members for their contribution.

What are you afraid of?

Social & Ethical Implications

Digital Ethics - not different from conventional ethics

BUT

Potential for automation of unethical conduct

AT SCALE

Ethics

Standards of behavior that tell us how we ought to act

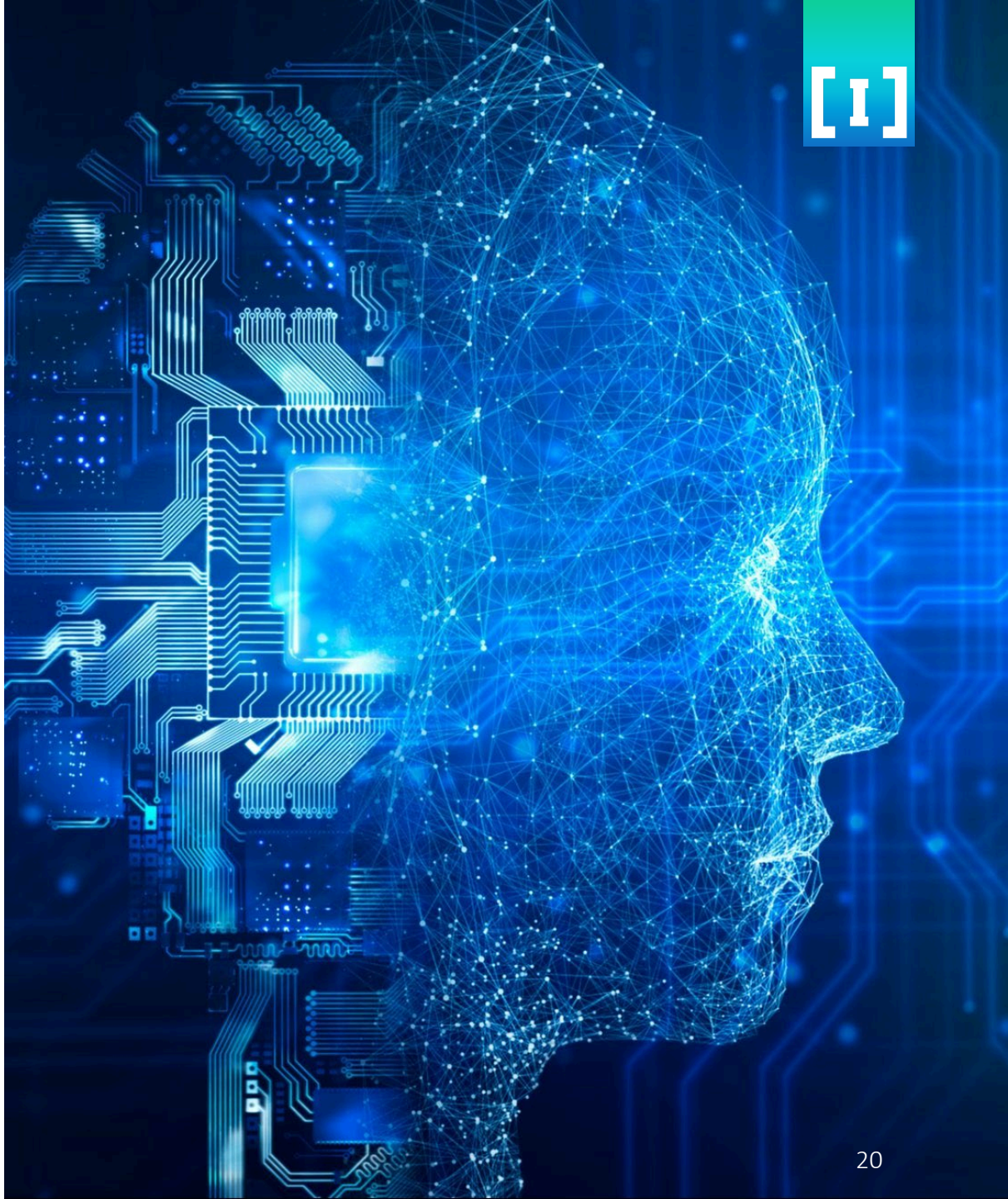
- Concern
- Respect
- Trustworthiness
- Compliance with law
- Being fair
- Preventing harm

Ethics & Tech Stack

- Security
- Privacy
- Efficiency
- System integrity
- Ethical information management strategy

Crypto - Digital Assets - DeFi

- Consumer protection, money laundering, criminal abuses, volatility & tax evasion
- Smart contract failure
- Energy consumption



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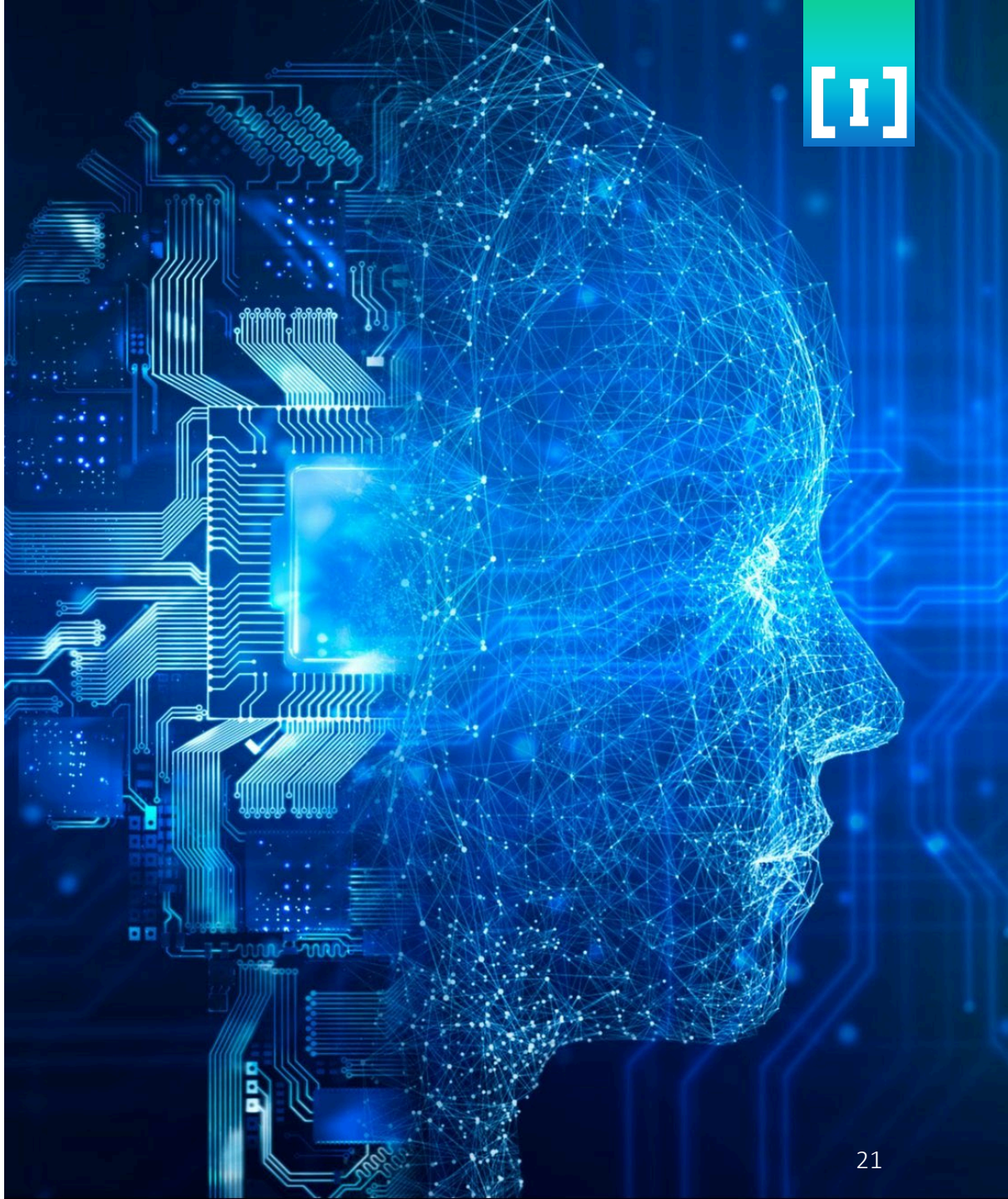
Decentralized Autonomous Organizations

- Automated and code-governed
- Weak mechanisms for dispute resolution encoded in smart contract
- Consumer protection
- Who do you call?



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Societal Issues

- Economic stability
- Consumer protection
- Authorities track people's choices
- Surveillance of persecuted populations
- Authoritarian states using data against persecuted
- Consequences of displacement of middlemen

Metaverse Challenges

- Open (Web 3) or closed (Meta)?
- If you create - who owns it?
- Should avatars have human rights?
- Data security, privacy & rights?
- Consumer protection?
- Physical & mental health impacts?
- Children in the Metaverse?
- Equitable, inclusive & decentralized Metaverse?
- Maximize benefit & minimize harms?

Ethics & Code

- Encode ethical principles
- Show developers ethical outcomes of algorithms
- Train software developers in ethics
- Professional ethical standards for software developers
- Create community demand for ethical approaches

Technology
gives us new choices, but only
ethics can tell us which choices
are good.

Building the Future

We are responsible for the things we make and use.

Get the ethics right, and we will look back without regret.

GETTING READY
FOR THE
Future
Don’t be afraid of the future, for the future
will be in our own hands

“Age of Unlearning”-

Future of work, society, government?

- Video games are bad
- Go to university and you will get a job
- Stick with what you know
- Age and experience matter
- Reading, writing & arithmetic are the basics
- Work-life balance is important
- The global monetary system is backed by the US$
- Digital States

IN THE FIRST INDUSTRIAL REVOLUTION
YOU NEEDED A FACTORY
MOBILE PHONE

INTO THE *Metaverse*

Contact Me

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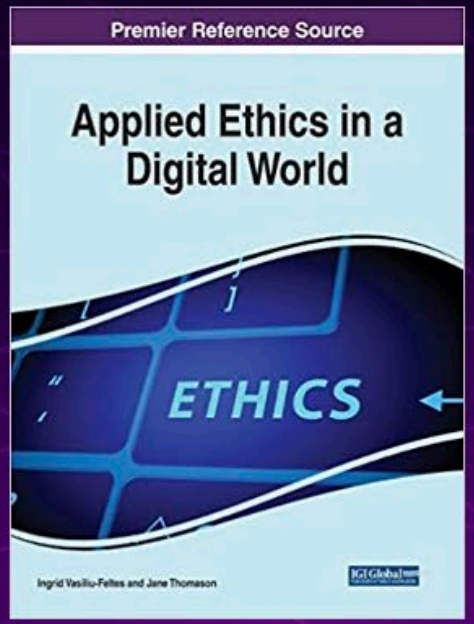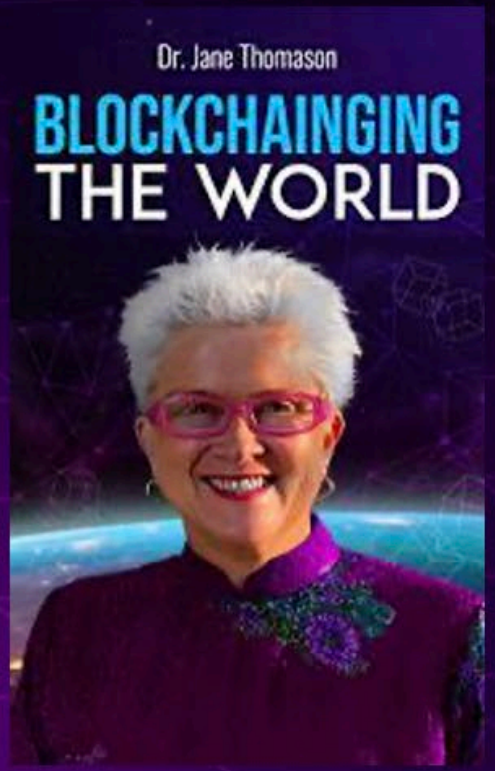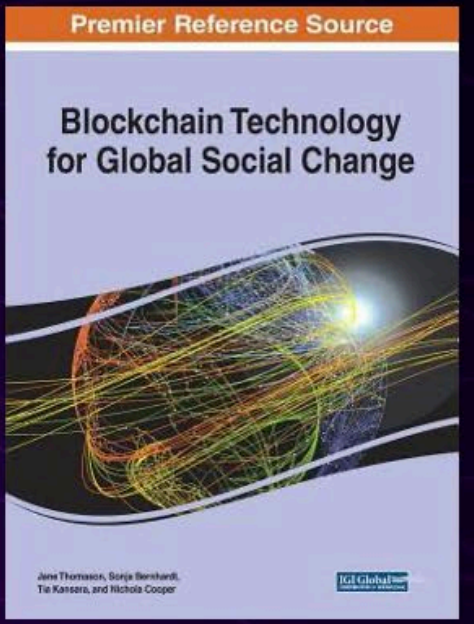
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