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MITRE | SOLVING PROBLEMS FOR A SAFER WORLD

Generations of the World Wide Web

Layers of Web 1.0

Layers of Web 2.0

Layers of Web 3.0

Applications

Email, Chat, File Sharing, Web

Internetworking
TCP/IP

Connectivity
Dialup, 2G, Leased Circuits

Platforms

Social Media, Search

Web Layer

Content Delivery Networks, Cloud

Internetworking
TCP/IP

Connectivity

WiFi, 3G/4G, Cable, Metro Fiber

Interface Layer

Coinbase, OpenSea, Decentraland

Services Layer

DAOs, Cryptocurrencies

Blockchain Layer

Bitcoin, Ethereum

Internetworking
TCP/IP

Connectivity

WiFi, 5G/6G, Satellite, Metro Fiber



Potential NextG Stack

Metaverse

AR/VR/XR

Smart Contracts

Tokens / Cryptocurrency

Blockchain

Cloud/Edge Computing

Smart Transport

Smart RAN

Questions to consider:

- What is unique about this stack that could drive requirements for 5.5G/6G architectures?
- Pervasive AI anticipates cross-layer optimization. What can we optimize about the compute/blockchain layer?
- How can we optimize the network for blockchain-specific things like transaction throughput and settlement latency?



New, Disruptive Business Models for Wireless







