

Landscape -Enterprise collaboration in Metaverse

TEAM 4
ELPP 2022 SPRING
UC BERKELEY, COLLEGE OF ENGINEERING

What is Enterprise Collaboration

Collaborative Meetings Traditional Players

- Adobe
- Bluejeans
- Cisco
- Facebook
- ► IBN
- Igloo
- VMware
- Microsoft
- Atlassian
- Google
- Slack
- Zoom
- Polycom

Overall Global enterprise collaboration market size is expected to grow from \$36.24B in 2020 to \$82B by 2028 at a CAGR of over 10.7%*

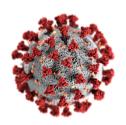
Current State...













Boring square grid meetings

We deserve better

Metaverse the next frontier



"We'll be able to feel present, like we're right there with people, no matter how far apart we actually are," - Zuckerberg



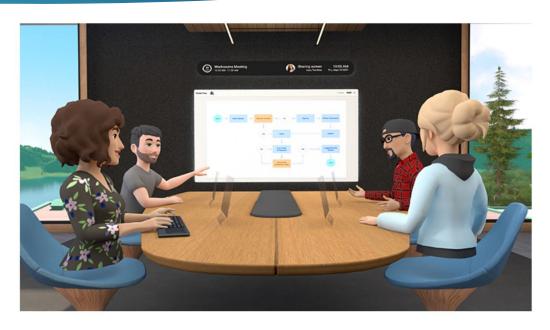
- No geographical barriers
- Lifelike Avatars

- Immersive experience
- Higher productivity

Metaverse collaboration from Meta (Facebook)







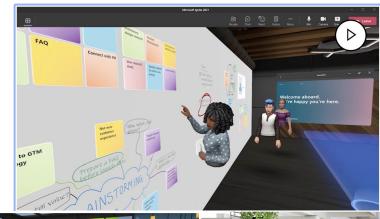
Horizon meeting rooms



Metaverse collaboration from Microsoft

Mesh







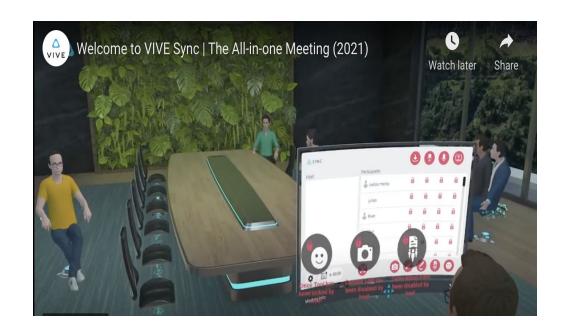




Metaverse collaboration from HTC

HTC Vive Sync



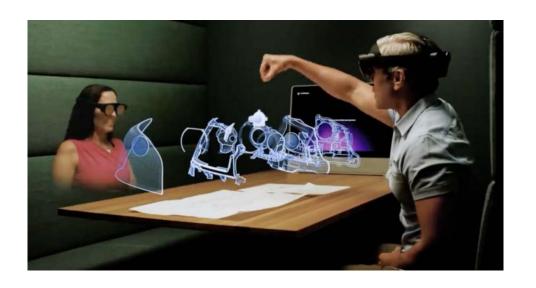




Metaverse collaboration from Cisco

Cisco Hologram







Google's failed attempts





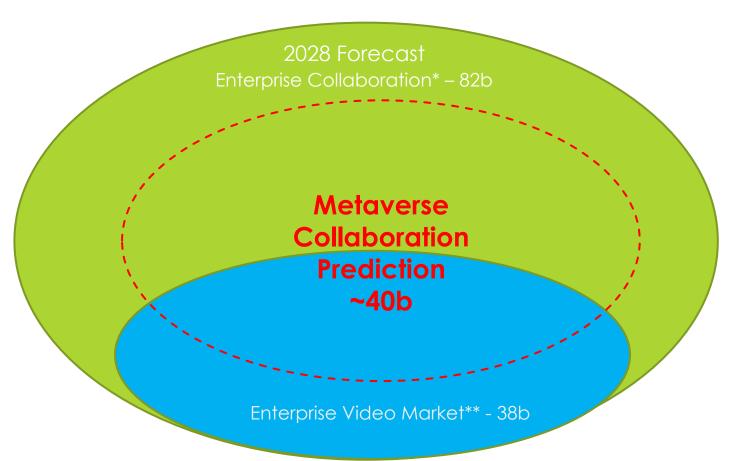


Transitioned to Software player.

Current investment pipeline: 33.5 million in a private equity fund

Market Size



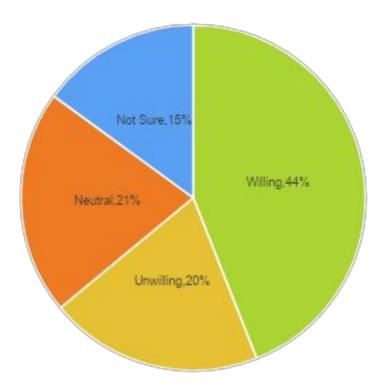


- * Grant View Research report on Ent Video market, 2020
- ** Mordor Intelligence Ent.
 Collaboration market report, 2022





Employee Survey conducted by Lenovo on adopting Metaverse workplace



Four pillars to success

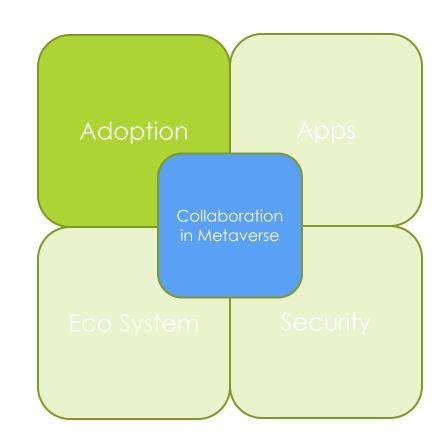




Adoption



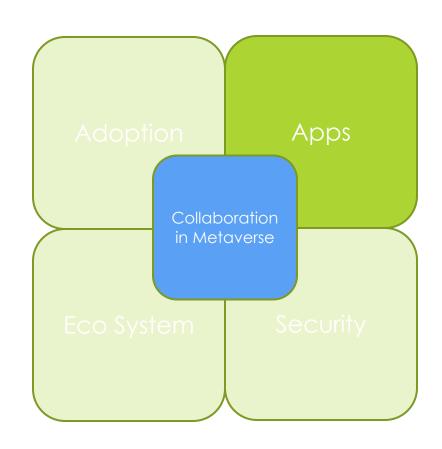
- Age Attract mature enterprise customers.
- Access Make it ubiquitous
- Cost Cheaper for SMBs and Educational institutions to adopt
- Simplicity Easy to use



Apps



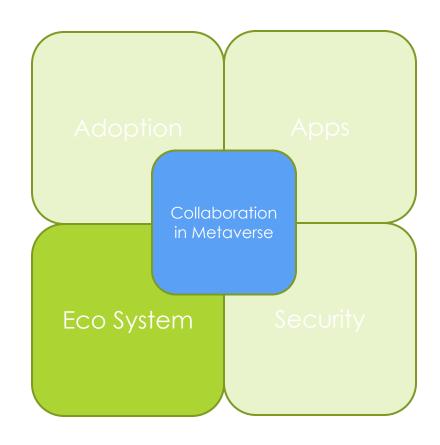
- Unified messaging
- Project Management applications
- Non-metaverse application integration
- Realistic professional avatars



Eco System



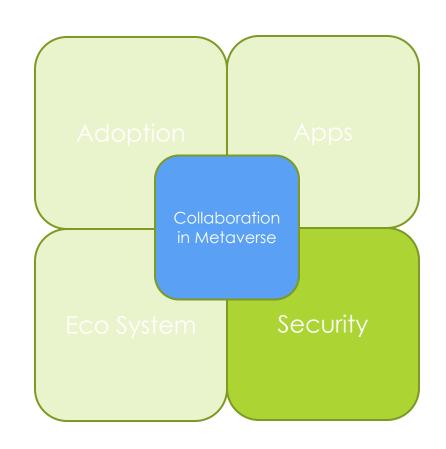
- Hardware CPU, GPU,Storage
- Network bandwidth
- Superior optical technologies
- Environmental Impact reduction



Security



- Enforce Privacy
- Provide User, data and network security
- Protect users from abuse, racism, harassment
- Web 3.0 and blockchain integration



Tale of two markets







Metaverse is a Trillion-dollar opportunity

Enterprise Collaboration in Metaverse -\$40B opportunity Incumbent Players

- Microsoft
- Google
- Cisco
- Zoom
- BlueJeans

Mature VR/AR solutions for enterprise collaboration

Niche Players

- Microsoft (mature VR applications)
- Meta (Facebook)
- HTC

Mature Metaverse concepts and make / reinvent collaboration as part of the overall virtual world

Technical challenges



- Interoperability between different Metaverses
- Danger of omnipresent cyber attacks for enterprises
- Needs lot of resources which are real and limited

Market challenges



- Appetite for remote collaboration declines – return of in-person collaboration.
- Governance, Legal and Fiduciary compliancy requirements inhibit adoption.

Key Takeaways



- Hybrid work is here to stay.
- Metaverse offers great potential for enterprise collaboration, engineering and design.
- Collaboration solutions that focus on adoption, applications, ecosystem and security will lead the market.
- Billions of dollars being invested by Microsoft, Meta platforms, Google, Sony, Apple, nVidia, Qualcomm















