

Technologies for Metaverse

2023. 03.

Backgrounds

Digital Transformation



VR, AR, **Metaverse...**

Hyper-Reality Services

LTE/5G...

GPU, HMD...

Ultra-fast/Ultra-low latency and Devices

AI

Sophisticated Analysis

IoT

Diversification of Data

BIG DATA

Informatization of Data

DIGITALIZATION

Accumulation of Data

Approaches to be a Metaverse

Metaverse

- ❑ 3D Virtual World, Immersive Virtual Reality...
- ❑ Various Virtual Realities
 - Virtual Reality(VR)
 - Augmented Reality(AR)
 - Mixed Reality(MR)
 - eXtended Reality(XR)
 - Substitutional Reality(SR)

Approaches to be a Metaverse

Haptic for Hyper-Reality

- ❑ Haptic technology is being developed to enhance the tactile experience to enhance the realism of the metaverse world
 - Haptic Gloves: A Study on haptic gloves for touch and grip
 - Haptic Vest: A haptic vest that provides a virtual impact experience
 - Telehaptics: Technology for remote reproduction of touch



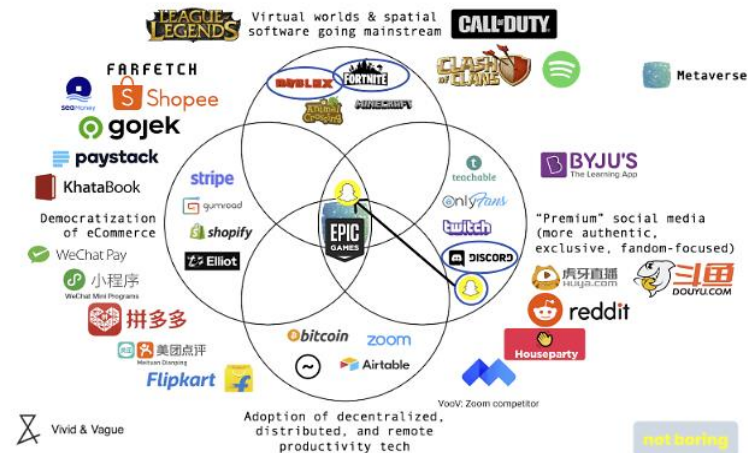
Technology Trends

Platform

- ❑ (Global IT Company) already experienced ecological dominance and huge profits if they dominate the platform
- ❑ Even in the era of the metaverse, it is engaged in a war to become the next platform



Tencent's Metaverse



Technology Trends

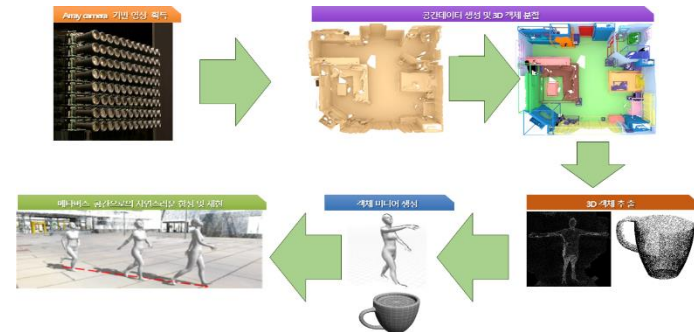
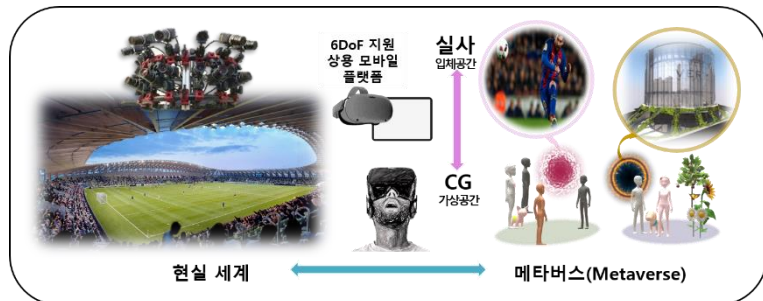
Contents

❑ Real-life-based stereoscopic space

- Live-action-based stereospacial media technology that freely moves and experiences in a three-dimensional virtual space

❑ Programmable Object Media

- Freely transform and reconstruct within the metaverse by breaking down the plane and space you want to deliver into minimum units (object, background, lighting, etc.)



Media to Metaverse

- ❑ The emergence of the metaverse demands the evolution from the current experience of Digital Transformation to Metaverse Transformation
- ❑ In the metaverse era, it is necessary to go beyond the current limits of content consumption and visual perception, and enable the generation, transmission, and reproduction of sensations.
- ❑ To spread the metaverse, it is necessary to reduce entry barriers and expand accessibility, so that anyone can easily and quickly build and utilize the metaverse

Thank you