Metaverse and Web 3.0

An introduction to a new paradigm of internet

What is Web 3.0?

- It all started with Web 1.0
  - 1990 - Tim Berners-Lee's Web
    - "I just had to take the hypertext idea and connect it to the TCP and DNS ideas and—ta-da!—the World Wide Web." - Tim Berners-Lee, Physicist, CERN, Switzerland.
  - Static HTML pages
    - Little or no interaction
    - Not a lot of user-generated content
    - Mostly text based
    - Lacking animations or effects.

What is Web 3.0?

- **Web 2.0 - from 2004 till now**
- Known as social web (Facebook, Twitter, YouTube, TikTok etc)
- It's all about creating, sharing, subscribing, and streaming content
  - Likes and comments cannot be ignored here
- More interactive:
  - content is not provided by the owner of website merely
  - mostly generated & consumed by the end-users

What is Web 3.0?

- **<u>Web 3.0 is the future of the Web (or at least predicted)</u>**
- Focuses on:
  - Increased Compatibility
  - Decentralized implementation of user-generated content
  - Tokenization relying on Blockchain (or similar decentralized) technology
  - Users may earn tokens to demonstrate the ownership of their content
  - More interactive

What is Web 3.0?

- **Backed by decentralized technologies:**
    - Changes are only possible by voting mechanisms of the participating members.
    - Its neither **Static** like Web 1.0
    - Nor reliant on Big Tech corporations like **Web 2.0**

What is Web 3.0?

WEB 3.0

Decentralisation

NFT

NFT's

Decentralisation

Metaverse

Change can be made through voting

Decentralization - Web 3.0?

- In today's web, the content is managed/ controlled by big corporations

  - Example: Twitter disabled Trump's account

- Web 3 aims to remove these gatekeepers for a model which is:

  - Autonomous
  - User-centric
 - User-oriented ownership

Decentralization - Web 3.0?

Tokenization - Web 3.0?

- Allows to receive network tokens
  - Based on adding value to the network
  - Reward for value addition
  - No need to get monetized on the conditions of Big Techs
- These tokens may be used as a currency in other social spaces to:
  - Buy other tokens
  - Own digital assets
  - Own physical assets (real estate may be)

Metaverse

Combination of 2 words

Meta-Verse

Beyond/ After/ Alternate

Derived from Universe
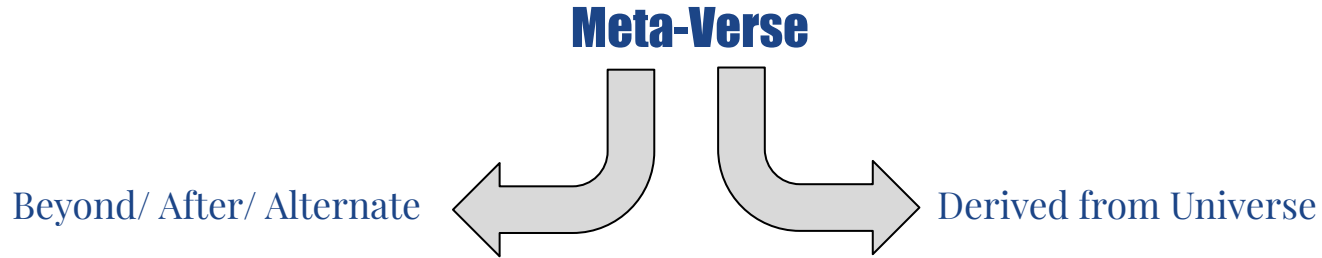
Metaverse: When used together – it means Beyond Universe, or an Alternate Universe

Metaverse & Web 3.0

Web 3.0	Metaverse
Evolution of internet where users can own & control the content and assets they create.	A digital space that would blend augmented reality with virtually persistent social spaces.

Metaverse - Definition

An interaction of internet space with following characteristics:

- Scaleable
- Interoperable
- Real-time rendered 3D virtual worlds (or social spaces) using:
  - Virtual reality
  - Augmented reality

- Synchronous
- Persistent
- Decentralized

Metaverse

- Scalability
  - We are talking about virtual worlds, not just web pages
  - Often termed as social spaces, which contains a universe within itself
  - A user should not be restricted to create the amount of content

Metaverse

- Interoperable
  - The contents of one virtual world should be reused in another
  - They may be able to perform the following in another world
    - Sold
    - Changed
    - Remixed
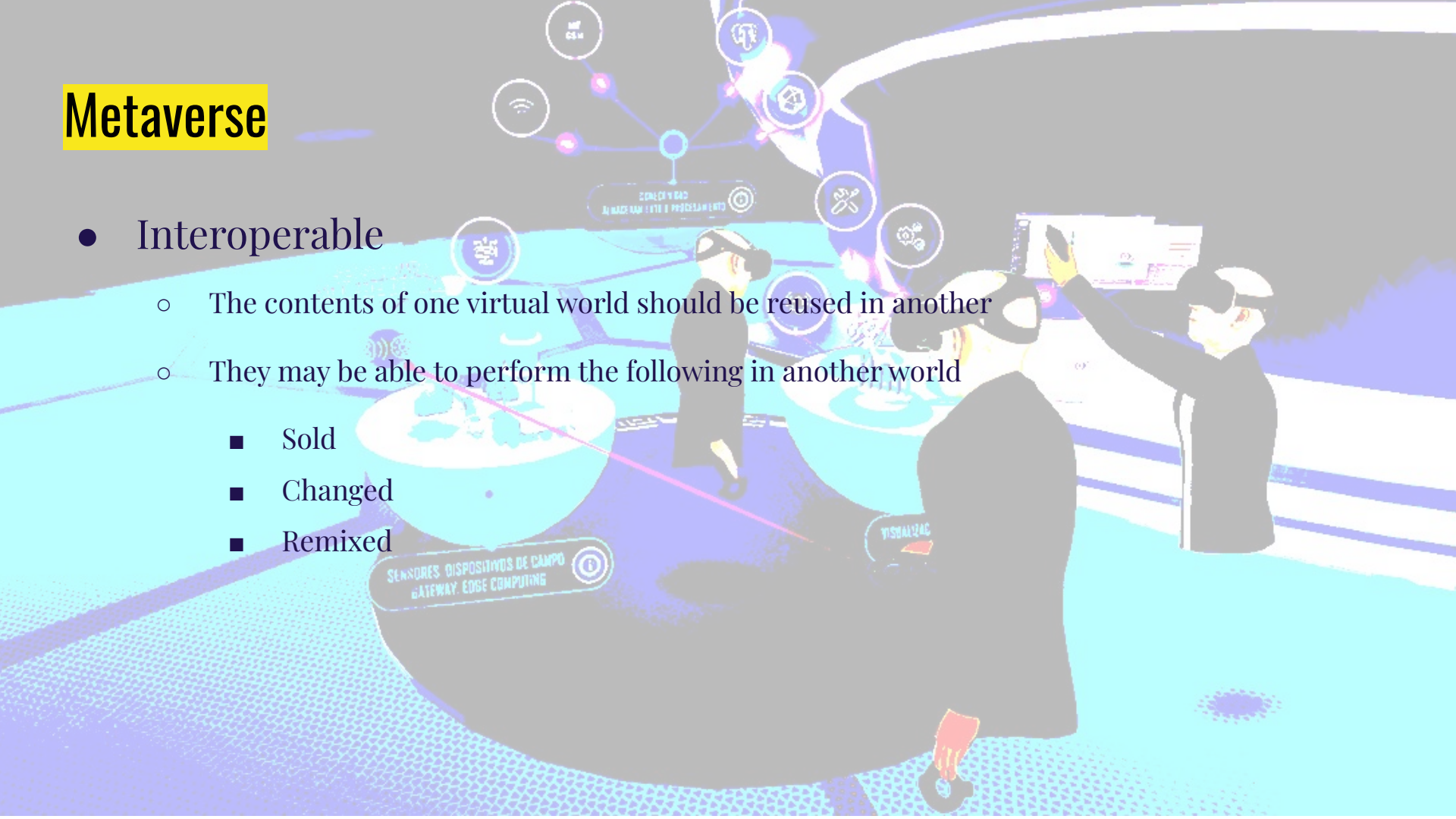
Metaverse

- Real-time rendered
  - Metaverse is commonly being called as 3D internet
    - 3d objects like Avatar will be common here
  - Supported by:
    - Augmented Reality
    - Virtual Reality
- Its virtual space must be fed by continuous data

Metaverse

- Synchronous
  - Shared experiences among different virtual worlds is desirable
  - Interoperable virtual spaces must be synchronised for seamless user experience.
  - Also, imagine a broadcast stream of avatars using different social spaces

Metaverse

- Persistence
  - The worlds must remain persistent
  - For example, a wood caught fire in a game, but after 30 seconds, the wood was all green because the page rendered again for a refresh
  - The experiences must be sustained across all the users
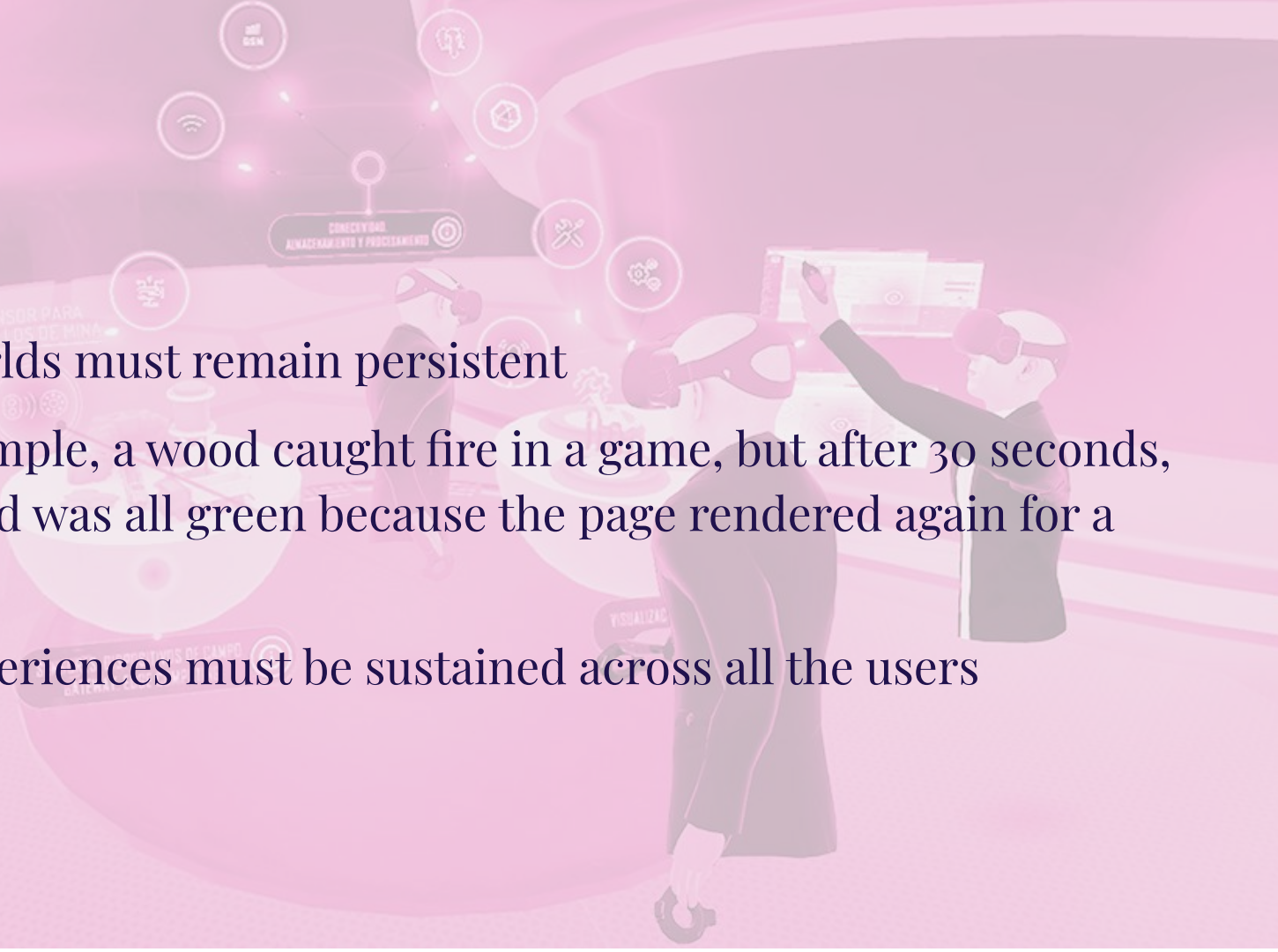
Metaverse

- Decentralized
  - Token earned or transaction of assets should not be controlled by a signal governing body
  - Using smart contracts, digital assets need to be maintained
  - NFTs marketplace will hold a great share within Metaverse

Web 1.0
"Read Only",
Decentralized

Web 2.0
Participatory,
Centralized

Web 3
No Intermediaries,
Decentralized

Conclusion