



METaverse

The Future of Socializing



Rickman Roedavan

Rikman Aherliwan Rudawan, S.T., M.Kom

NIP : 20820003
NIDN : 0419068205
Ponsel : 082315151906
Email : rikman@telkomuniversity.ac.id

- Penulis Best Seller Unity Tutorial Game Engine
- Dosen Pemrograman Aplikasi Permainan Telkom University
- Dosen Kelas Internasional Game Design & Technopreneur
- Kepala Multimedia Engineering Technology (METALABS)
- Koordinator Program Microcredential Game Developer (PMGD)
- Peneliti Riset Internasional Game-Based Learning Universiti Teknologi Melaka Malaysia (UTEM)
- Peneliti Riset Internasional Game-Based Learning Multimedia University (MMU)

MASSIVE MULTIPLAYER ONLINE

Video game online dengan banyak pemain di server yang sama pada saat bersamaan

Ragnarok Online



Elemen MMO



Quest



Chat



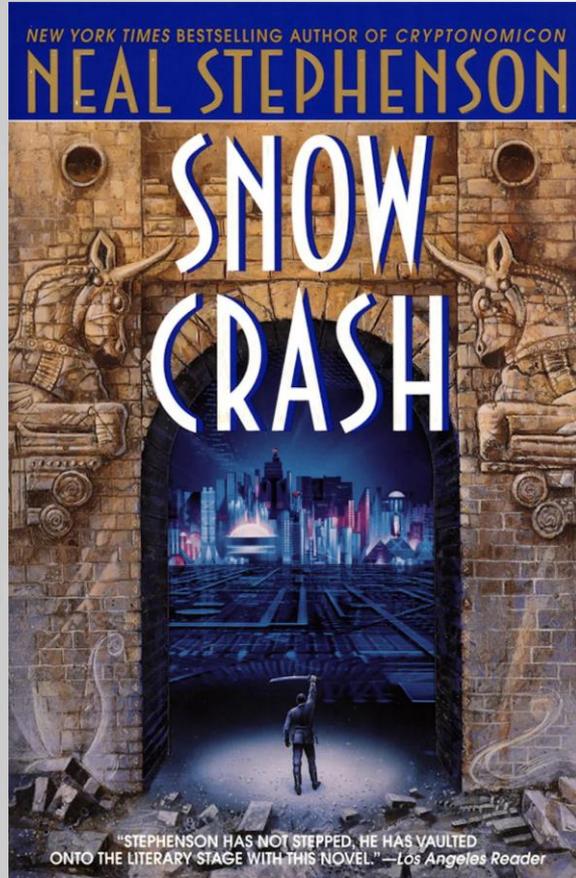
Exploration



METaverse INTRODUCTION

Ruang virtual tempat pengguna bisa membuat dan menjelajah dunia dengan pengguna lainnya (Marc Zuckerberg)

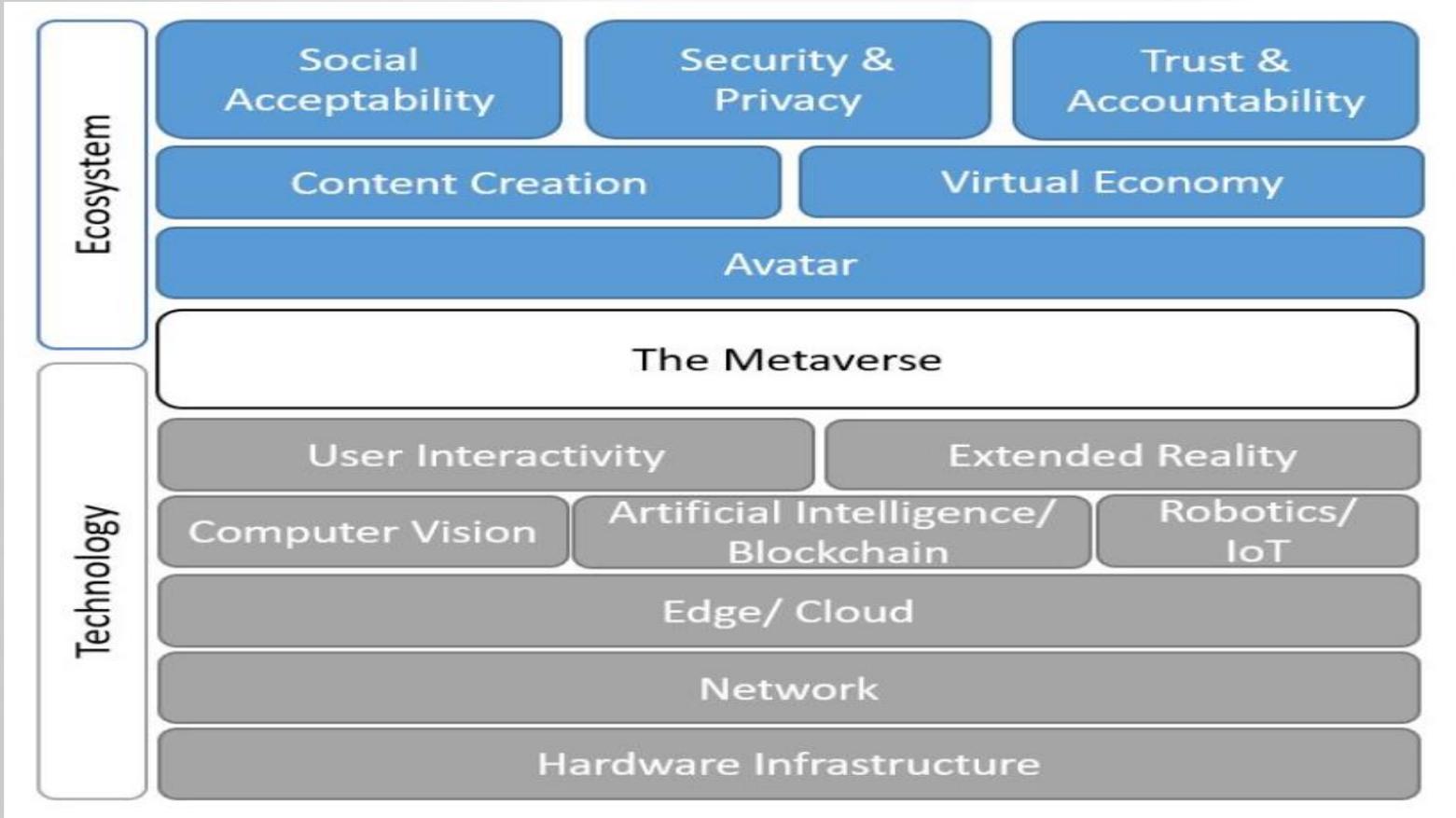
Metaverse History



Metaverse:

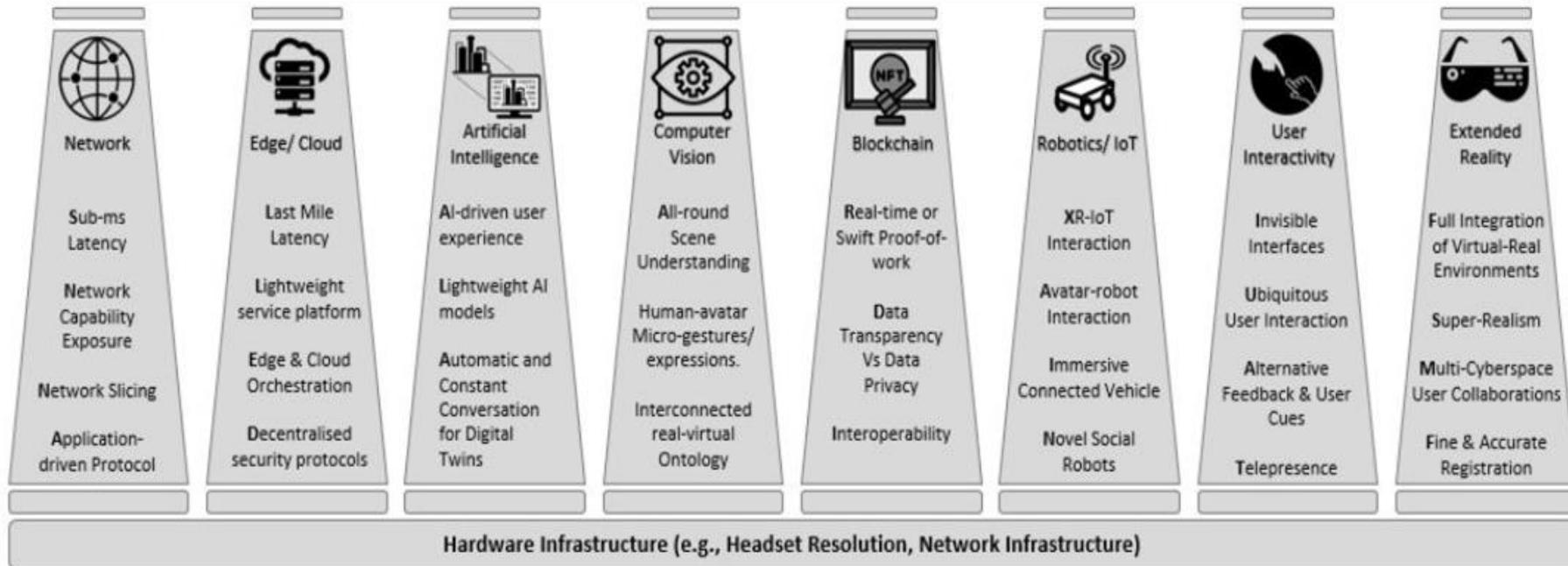
The concept of a fully immersive virtual world where people gather to socialize, play, and work

Metaverse Component



Metaverse Technology Enablers

The Eight Pillars of Metaverse Technology Enablers



Metaverse Ecosystem

The Six Pillars of Metaverse Ecosystem



Avatar

User Identity & Representation
(Physical Self vs Avatar)

Avatar Liability Responsibility

Avatar Immortality & Digital Humanities



Content Creation

Censorship

Authoring Tools

Acceptability of New Contents

Ownership of New Creation

Virtual Brainstorming

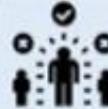


Virtual Economy

Inter-world Asset Management

Low-Carbon NFT Transaction

Economic Crisis & Decentralised Governance



Social Acceptability

User Addiction

Cybercrime

Green Metaverse

User Fairness

Privacy Threats

User Diversity



Security & Privacy

Seamless Authentication

Identifying Deep-fake under Super-realism

Fairness & Consensus for Data Trading



Trust & Accountability

Trust between User & Avatars

Consistent Digital Identity (Single vs Multiple)

Cyberspace Accountability

Trust Repair

The image features a vibrant red background on the left side, which transitions into a white area on the right. A large, white, curved shape, resembling a stylized 'C' or a drop, is positioned on the left side of the white area, creating a sense of depth and movement. The overall design is clean and modern.

METaverse TRENDS

Metaverse akan mengubah proses kerja seseorang di masa depan

Metaverse Trends

Changes that will occur due to the metaverse trend include:

- **Work Culture**
- **Bussinees Opportunities**
- **Screen Time Duration**
- **Social Relations**

Work Culture



Online work culture will be one of the main alternatives in the future

Screen Time Duration



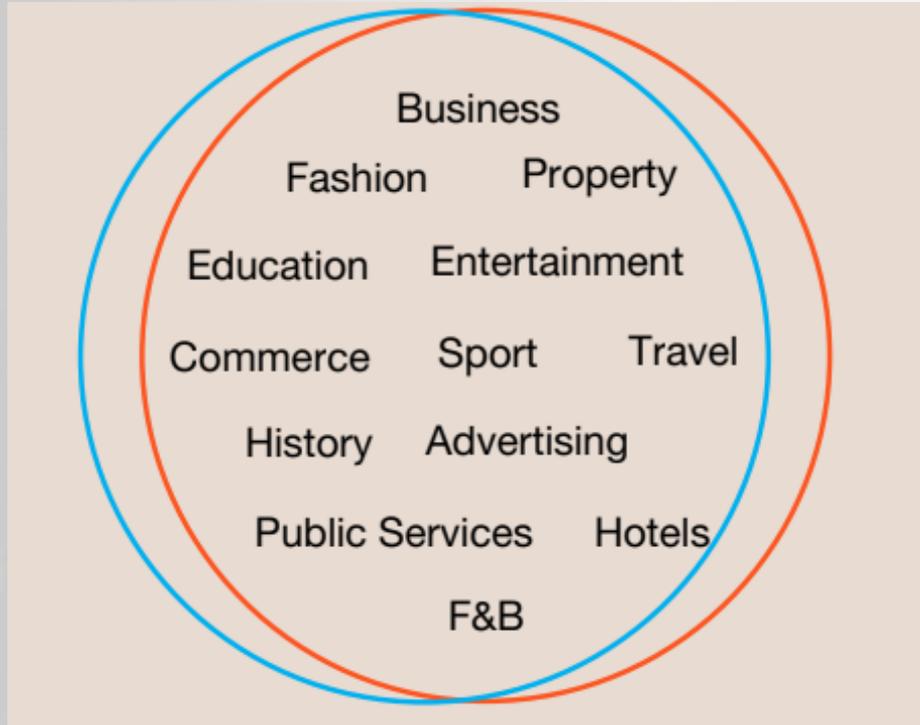
The duration of staring at the screen in the new generation is getting longer

Social Interaction



Social interactions can occur more smoothly in the virtual world

Business Opportunity



The job opportunities in the metaverse are almost limitless



METaverse PLATFORM

Metaverse Platform merupakan software yang dapat digunakan untuk membangun mekanisme interaksi virtual

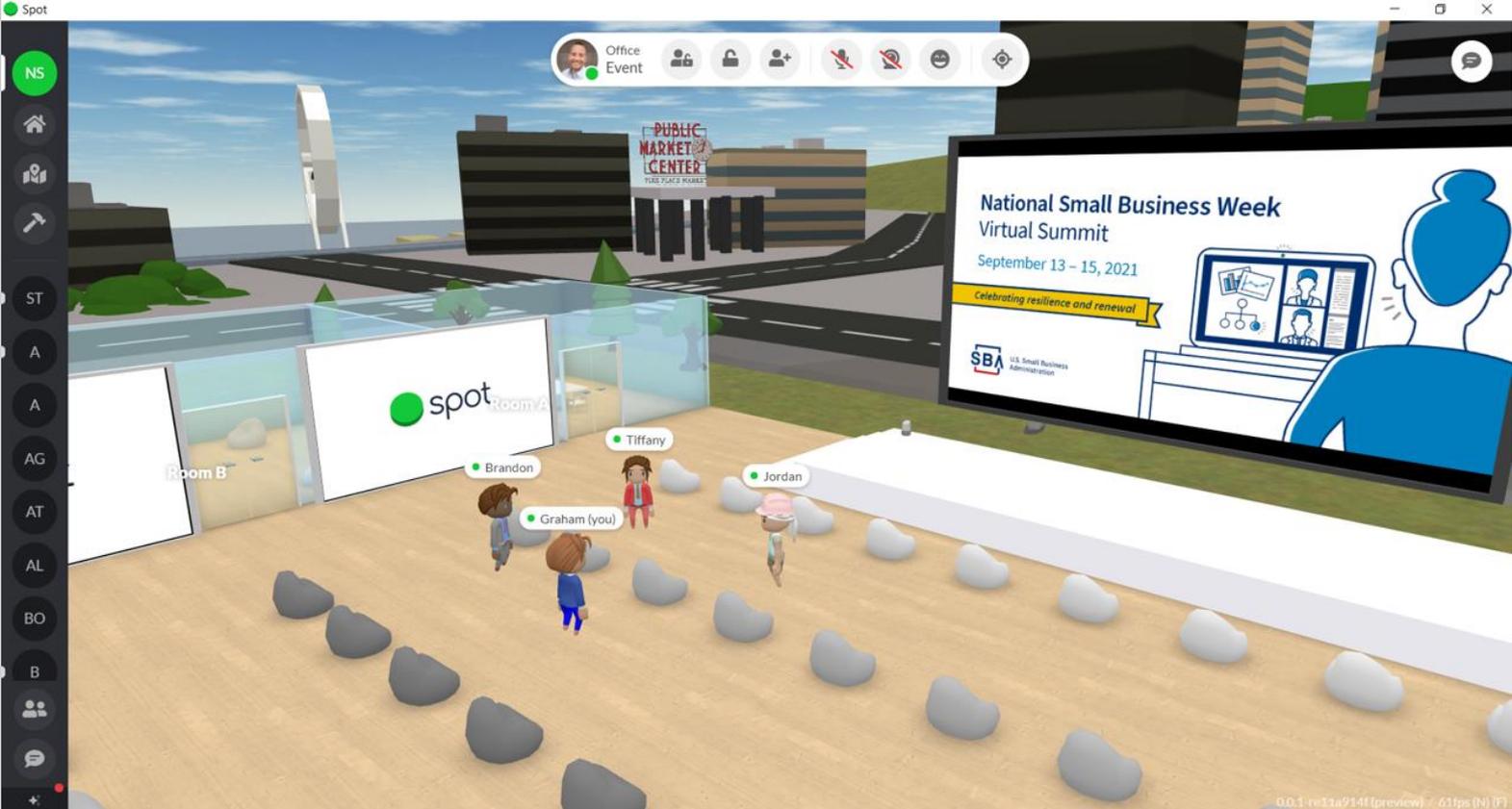
Metaverse Builder (Gather Town)

The screenshot displays the Gather Town metaverse interface. On the left is a chat window with a home icon and a back arrow. The chat history includes:

- Jean to nearby: Please use nearby chat!
- JB to everyone: water (4:33 PM)
- Cass to everyone: oops (4:33 PM)
- Jean to nearby: And then the fire nation attacked (4:33 PM)
- Cass to nearby: there (4:33 PM)
- JB to nearby: I was hoping we'd all hit an element and Captain Planet would show up (4:34 PM)

The main 3D environment shows a brick building with a river and a sign that says "MEETINGS". Two video feeds are visible at the top: one for Jasmine and Jean, and another for Adam and Lola. A central meeting screen displays a list of participants: Adam, Maddie, Nathan, Cass, JB, Riley, L. Sathya, and Jean. A red 'X' is next to the name "ine". At the bottom, there is a navigation bar with icons for a question mark, a map, a monitor, and a smiley face. A "Riley Online" notification is shown in the bottom right corner.

Metaverse Builder (Spot Virtual)



Metaverse Builder (Horizon)



Metaverse Builder (AltSpace VR)



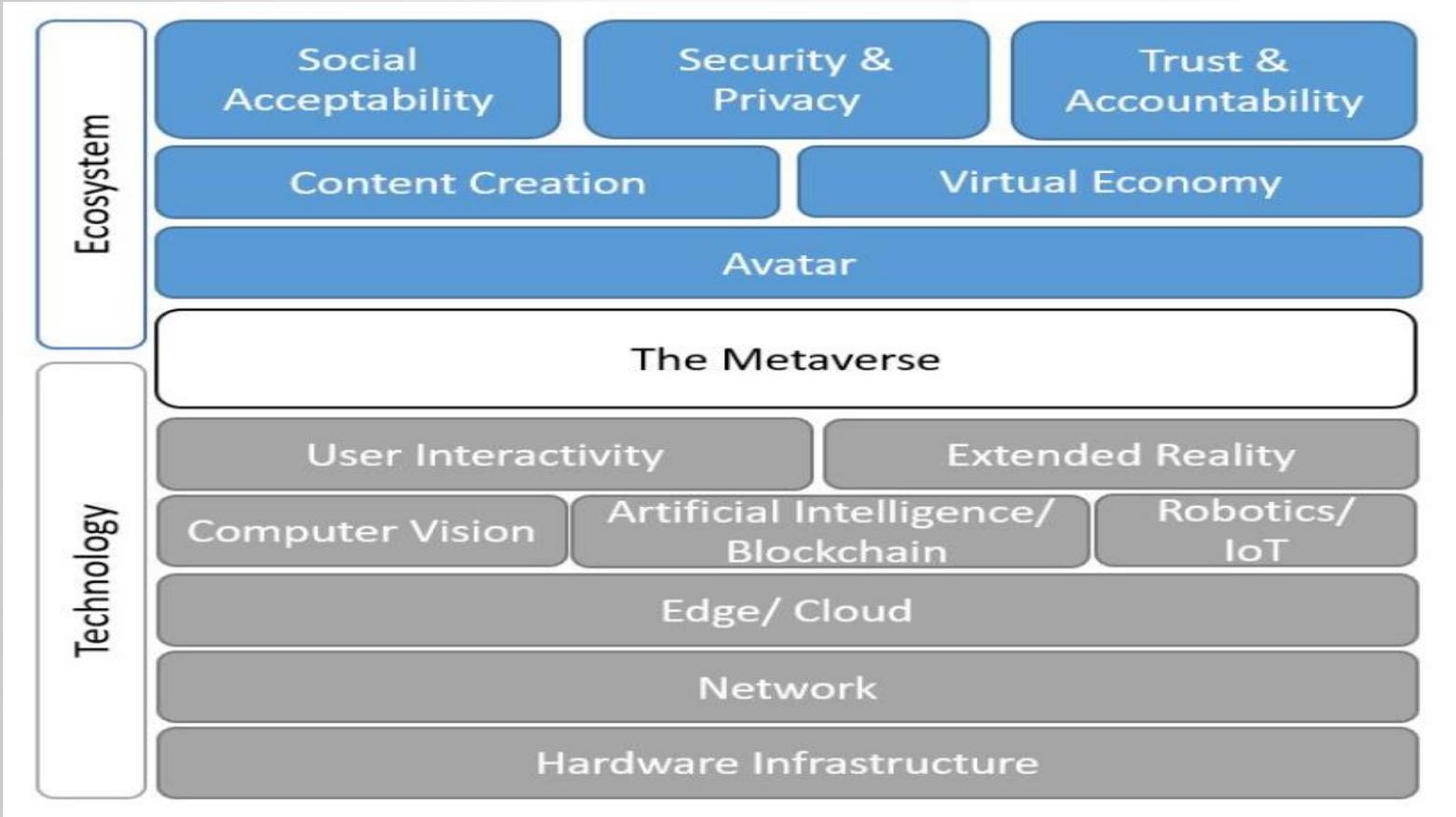
Metaverse Builder (Mozilla Hubs)



Metaverse Builder (Mozilla Hubs)



Conclusion





TERIMA KASIH