

Ready Player One - Research Document

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Abstract—The research document covers the ideology of the Metaverse. The research perspective is from a Software Engineer role to see how the technology and how Software Engineering may change in the future.

Index Terms—Metaverse, Collective, Virtual Reality, VirtualSpace

I. INTRODUCTION

The Metaverse idea was introduced as early as 1992 by Neal Stephenson in the Science-Fiction Novel ‘Snow Crash’.

To make us think that the Metaverse is applicable in 50 years of today in universities, Mark Zuckerberg has recently proposed changing the name of Facebook to Meta. By taking a look at [Facebook’s Meta](#) to understand Mark Zuckerberg’s intention with Meta.

Essentially, the Metaverse is a platform, which joins other platform’s together, less realistically speaking, similar to the Matrix in a 3D environment. The way the Matrix works, in theory, is that the human body is in a container and lives in a dying world, whilst living in a different reality, a virtual environment. However, the proposed Metaverse we are looking at will not be unethical or as advanced as the Matrix movies.

The research document will cover the ethical issues, obstacles and benefits that the Metaverse may encounter, covering how the implementation, User Interaction (UI), and User Experience (UX) are covered.

II. LITERATURE REVIEW

A. Ethical Issues

The metaverse, like countless other technological advances, each possess the possibility of ethical obligations. The metaverse brings humanity one step further through technical concepts such as human augmentation, artificial intelligence and brain bridging. This platform brings the following issues forward, which include:-

- Metaverse would require one company to control. If many companies raced for a metaverse platform, then many multiverses are made available, which can consume resources and cause a bigger problem for climate change. It is important to address this issue, as it could impact our survival status.
- Racing the metaverse without initial thought can make humans more unaware of life surrounding themselves, increase health problems, or neglect the life and environment humans live within. The metaverse can bring the human race closer to technologies, like human augmentation, artificial intelligence, and brain bridging by providing a virtual space, which contains human intelligence and other methods. Nevertheless, the question, ‘will this in turn damage our bodies mental or physically?’ remains.
- The platform would require information from each consumer. These consumer’s may exist in many different countries. Therefore, it is important to collect relevant information that is according to the consumer’s country law, which suggests that the metaverse must not collect information against user’s wishes, otherwise the UK’s General Data Protection Regulation (GDPR) and Data Protection Act 2018 is infringed on. Also, to note, it is unethical to collect data from individual’s without their knowledge. This point is mentioned due to the issues social media has encountered in the past, and the Metaverse may require sensitive information like height and weight, perhaps to create a 3D character, that resembles the user.
- A important question to ask, ‘How much data can another consumer access?’, would privacy be in place to prevent online stalking or any other cyber abuse.

B. Online conference

C. Virtual Reality

III. USER SEQUENCE DIAGRAM

IV. CONCLUSION

V. TERMINOLOGY

List of terminologies used in this document:-

- UI - User Interaction.
- UX - User Experience.

VI. REFERENCE LIST