


Chapter 7

Virtual Democracy: Exploring the Viability of Election Voting via Metaverse Technology


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ABSTRACT

The creation of the metaverse will change how we live, work, and play in a digital environment, one of which the metaverse opens up great opportunities for the development of virtual democracy. One of the implementations of virtual democracy is through digital election voting using the metaverse. A paradigm shift in democratic

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participation is brought about by integrating the metaverse into election voting. In the metaverse, voters can participate in the election process through an immersive virtual environment; the digital platform also changes the voting experience. The objective of this study is to explore the feasibility of election voting through metaverse technology. The result of this research is that election voting using metaverse technology has been implemented in several countries, where the implementation uses a blockchain system that ensures every vote is recorded securely and cannot be manipulated, thereby reducing the risk of fraud. This research concludes that applying metaverse technology in election voting will significantly change virtual democratic activities.

1 INTRODUCTION

The “metaverse” concept refers to a collective virtual shared space formed by the fusion of physically persisting virtual reality and virtually enhanced physical reality. (Lee et al., 2021). In simpler terms, the metaverse is a virtual universe where humans can interact with the digital environment and each other directly (Nevelsteen, 2018). It is an interconnected universe between the internet, augmented reality experiences, and virtual reality spaces. It encompasses many things, including social interaction, work, commerce, education, and more (Scavarelli et al., 2021). The Metaverse opens the boundaries between the digital world and the physical world, providing engaging and interactive experiences beyond what is possible in the physical world alone. Big companies like Facebook (now known as Meta Platforms, Inc.), Epic Games (with Fortnite), and many others are spending much money to build the infrastructure and platforms of the metaverse, which is considered the next evolution of the internet (Jungherr & Schlarb, 2022).

Early examples of the metaverse concept can be found in science fiction literature, such as Neal Stephenson's novel “Snow Crash” (1992) and William Gibson's “Neuromancer” (1984)(Boehm, 2004). These novels depict the fascinating concept of virtual worlds where people interact with avatars. Virtual worlds such as Second Life (released in 2003) and online games such as World of Warcraft (released in 2004) provide an early glimpse into the proto-metaverse environment of the late 20th and early 21st centuries.(Heath, 2023). With the help of various platforms, people can create and inhabit virtual spaces, interact with each other, and engage in various activities.

In the early 2000s, the term “metaverse” became popular due to the book “Snow Crash” by Neal Stephenson, which referred to a virtual reality-based successor to the internet. (Dionisio et al., 2013). The metaverse concept has broadly expanded to encompass online social interaction, virtual experiences, and augmented reality.

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