


## Chapter 3

# Traditional Finance vs. Web 3: A Comparative Analysis of Key Features and Characteristics for Better Readability Purposes

**Babita Jha**

 <https://orcid.org/0000-0001-8586-0250>

*CHRIST University (Deemed), India*

**Pratibha Giri**

 <https://orcid.org/0000-0002-9700-4918>

*CHRIST University (Deemed), India*

**Deepak Jha**

*CHRIST University (Deemed), India*

**Debora Dhanya**

*CHRIST University (Deemed), India*

### ABSTRACT

*Web3 is a ground-breaking invention that has the ability to address the shortcomings of web1 and web2. The industry witnessing its major impact is the finance sector. A wave of innovation in traditional finance has been inspired by the introduction of Web3. It is also referred to as the decentralised web and is a developing movement that is upending conventional finance by providing a more open, safe, and decentralised substitute. Traditional banking should work to adopt the features that Web3 offers, including stability, scalability, interoperability, security, performance, extensibility, management, and openness. In order for TradFi to maintain its relevance and expertise in the face of the widespread adoption of digital financial modes, it is now necessary to embrace several Web3 capabilities. Keeping into consideration the relevance and importance of Web3 in finance, this chapter will basically focus on analysing the key features and characteristics of Web3 in comparison to traditional finance.*

DOI: 10.4018/978-1-6684-9919-1.ch003

## **INTRODUCTION**

The internet has become such a vital part of everyday life for so long that its evolution may be divided into several separate stages. These stages define technical progress, how we engage using digital technology, and the impact that interaction has on society as a whole and the economy. The initial consumer-ready form of the internet was available in the mid-1990s. web 1 is the name given to this phase. web 1 enabled the development of basic websites (Nath, 2014) as well as internet applications, which influenced both the social and financial systems. The dot-com surge and its concomitant exemplified in this era.

Then came web 2, which brought an improved user-focused, responsive internet (Wan et al., 2023) that enabled more effective and equitable data sharing that wasn't previously feasible. This internet era encompasses everything from Wikipedia to apps for mobile devices to online banking, and it continues to influence much of today's internet experience. However, many people argue that the web 2 internet is faulty because of its reliance on centralized architecture and rent-seeking business structures. web 3, which is mostly based on blockchain, has gained more traction in recent years, promising decentralization, more egalitarian access, and more democratized economic models. Defi has played a crucial role in the expansion of the blockchain technology known as Ethereum as well as web 3. The advent of the blockchain platform Ethereum and related smart contract capability in 2015 established the basis for the far-reaching growth of web 3. Many people believe that web 3 is enabling the establishment of a new internet that will eliminate the inefficiencies that have plagued web 1 and web 2. Web 3 makes use of decentralized computer networks, distributed apps, and smart contracts by incorporating blockchain technology (Cao, 2022). The network of Ethereum contributed to the creation of many protocols aimed at facilitating accessibility to a more transparent, unrestricted and accessible financial system.

The development of web 3 technology has created a plethora of new options across the financial services sector. web 3 is gaining popularity in traditional finance because the fundamental technology of web 3 has the potential to change the face of trading. The world of money is undergoing a huge transition, and the way that we conduct financial transactions is changing. web 3's emergence has spawned an upsurge of innovation in traditional finance. The decentralized web, as it is often known, is a developing phenomenon that poses a challenge to traditional finance by providing a more transparent, safer, and decentralized alternative.

## **THEORETICAL BACKGROUND**

In recent years, internet has witnessed remarkable transformation. Infrastructural support for operating enterprises and delivering services is also becoming increasingly important. The Semantic web serves as the backbone of web 3, a new Internet architecture that makes the internet far more stable, resilient, and practical (Suryono et al., 2020). A decentralized, unrestricted blockchain-based economy, new types of information architecture, and new forms of worldwide social interaction are all allegedly part of web 3. Due to its distinctive decentralized features, Web 3.0 has gained a lot of attention (Chen et al., 2022).

Using the Internet, new financial systems have proven more unified, efficient, and trustworthy. web 3 is a term used to describe an era of financial systems that has the potential to disrupt the present financial system as a result of the Internet's development. This term is widely used in the banking industry to describe solutions that function as a digital medium for the exchange of value as well as instruments for managing and trading value. For digital wallets, the cost of acquiring a customer is about \$20, compared

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/traditional-finance-vs-web-3/329855](http://www.igi-global.com/chapter/traditional-finance-vs-web-3/329855)

## Related Content

---

### An Agent-Mediated Platform for Business Processes

Hoa Khanh Dam, Aditya Ghose and Mohammad Qasim (2015). *International Journal of Information Technology and Web Engineering* (pp. 43-61).

[www.irma-international.org/article/an-agent-mediated-platform-for-business-processes/138294](http://www.irma-international.org/article/an-agent-mediated-platform-for-business-processes/138294)

### Predicting the Success of a Startup in Information Technology Through Machine Learning

Edilberto Vasquez, José Santisteban and David Mauricio (2023). *International Journal of Information Technology and Web Engineering* (pp. 1-17).

[www.irma-international.org/article/predicting-the-success-of-a-startup-in-information-technology-through-machine-learning/323657](http://www.irma-international.org/article/predicting-the-success-of-a-startup-in-information-technology-through-machine-learning/323657)

### Empowering Small and Medium Enterprises Through IT and Semantic Web Technologies in Digital Economies

Rachna Rana and Pankaj Bhambri (2025). *IT and Semantic Web Contributions to Digital Transformation: Towards Inclusive Economies and Societies* (pp. 1-30).

[www.irma-international.org/chapter/empowering-small-and-medium-enterprises-through-it-and-semantic-web-technologies-in-digital-economies/374919](http://www.irma-international.org/chapter/empowering-small-and-medium-enterprises-through-it-and-semantic-web-technologies-in-digital-economies/374919)

### A Novel Method for Calculating Customer Reviews Ratings

Ioannis S. Vourgidis, Jenny Carter, Leandros Maglaras, Helge Janicke, Zoe Folia and Pavlina Fragkou (2018). *Handbook of Research on Contemporary Perspectives on Web-Based Systems* (pp. 460-478).

[www.irma-international.org/chapter/a-novel-method-for-calculating-customer-reviews-ratings/203436](http://www.irma-international.org/chapter/a-novel-method-for-calculating-customer-reviews-ratings/203436)

### Measuring the Unmeasurable?: Eliciting Hard to Measure Information about the User Experience

Andrew Saxon, Shane Walker and David Prytherch (2011). *Web Engineered Applications for Evolving Organizations: Emerging Knowledge* (pp. 256-277).

[www.irma-international.org/chapter/measuring-unmeasurable-eliciting-hard-measure/53064](http://www.irma-international.org/chapter/measuring-unmeasurable-eliciting-hard-measure/53064)