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Research on the Value of Digital Assets in the Era of Industrial Economy

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Abstract

With the rapid development of information technology, digital economy has become an important engine for global economic growth. As the core element of digital economy, the value evaluation and management of digital assets have become an important topic in the era of industrial economy. This paper discusses the value of digital assets in the era of industrial economy from the three directions of current situation research, reason analysis and countermeasure research. Firstly, the paper analyzes the definition, classification and market status of digital assets, and points out the challenges facing their value evaluation. Secondly, it discusses the reasons for the rise of digital assets, such as technology drive, market demand change and policy environment support. Finally, countermeasures such as improving laws and regulations, establishing unified evaluation standards, strengthening technology research and development and application, and enhancing market transparency are proposed to promote the healthy development of the digital asset market.

Keywords

Digital Assets; Industrial Economy; Value Assessment; Big Data; Artificial Intelligence; Laws and Regulations; Market Transparency.

1. Introduction

With the rapid development of information technology, digital economy has become an important engine for global economic growth. As the core element of digital economy, the value evaluation and management of digital assets have become an important topic in the era of industrial economy. This paper will discuss the value of digital assets in the era of industrial economy from the three directions of current situation research, reason analysis and countermeasure research.

2. Current Situation Research

2.1. Definition and Classification of Digital Assets

Digital assets refer to assets that exist in digital form and have economic value, including digital currency, digital copyright, data assets, etc. According to their nature and use, digital assets can be divided into the following categories: digital currencies: cryptocurrencies such as Bitcoin and Ethereum; Digital rights: intellectual property rights in digital content such as music, movies, and software; Data assets: such as enterprise user data, market data, etc.

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Table 1. Development History of Blockchain Technology

year	Important events
2008	Bitcoin White Paper Released
2015	Ethereum goes live
2017	ICO craze
2020	DeFi Rise
2023	The era of blockchain 3.0

Table 2. Scale of the Blockchain Market

year	Market size (in billions of US dollars)
2018	12.4
2019	23.0
2020	40.0
2021	72.0
2022	120.0

2.2. Market Status of Digital Assets

In recent years, the digital asset market has shown a rapid growth trend. According to relevant data, the global digital asset market has exceeded one trillion dollars and continues to expand. The digital currency market is particularly active, attracting a large number of investors and institutions to participate. At the same time, the market value of digital copyright and data assets has gradually been recognized and become an important intangible asset of enterprises.'

Table 3. Changes in Demand in the Digital Asset Market

year	enterprise demand	Personal needs (%)
2018	30	20
2019	40	30
2020	50	40
2021	60	50
2022	70	60

2.3. Challenges of Digital Asset Valuation

Despite the promising prospects of the digital asset market, there are still many challenges in assessing its value. First of all, the volatility of digital assets is large, and the market value is difficult to stabilize. Secondly, the definition of property rights and legal protection of digital assets are not perfect, which increases the complexity of evaluation. In addition, the value evaluation method of digital assets has not yet formed a unified standard, resulting in large differences in evaluation results.

3. Reason Analysis

3.1. Technology-Driven Innovation

Technological revolution rebuilds production factors, and technological breakthroughs such as 5G, artificial intelligence, and blockchain transform data from affiliated resources into core assets that can be confirmed, traded, and added value. The rise of digital assets is mainly due to the rapid development of blockchain, big data, artificial intelligence and other technologies.

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Blockchain technology provides a decentralized trading platform for digital currencies, ensuring the transparency and security of transactions. Big data technology makes the collection, storage and analysis of data assets more efficient, increasing the economic value of data. Artificial intelligence technology further promotes the development of the digital asset market through smart contracts, automated trading and other means.

3.2. Changes in Market Demand

With the acceleration of the digitization process, the demand for digital assets by enterprises and individuals continues to increase. New forms of business, such as platform economy and sharing economy, require enterprises to turn data such as user portraits and transaction records into barriers to competition, and enterprises can optimize resource allocation and improve operational efficiency through digital assets. Individuals invest and finance through digital assets and access digital content. The diversification of market demand has driven the boom of the digital asset market.

3.3. Support of Policy Environment

Governments' emphasis on the digital economy has also provided policy support for the development of digital assets. Many countries have introduced relevant laws and regulations, China's "Data Article 20" clearly defines the "three rights" of data resource ownership, processing rights, and product management rights, and the EU's Data Governance Act promotes cross-border data flows, regulates the digital asset market, and protects investors' rights and interests. At the same time, the government also encourages the innovation and application of digital assets through tax incentives, financial support and other measures.

4. The Future Development Trend of Digital Assets

4.1. Continuous Promotion of Technological Innovation

In the future, technological innovation will continue to drive the development of digital assets. For example, a breakthrough in quantum computing technology could have a significant impact on the security of the blockchain; The popularization of 5G technology will further improve the speed and efficiency of data transmission, and provide technical support for the wide application of digital assets.

4.2. Diversification of Market Demand

With the deepening of the digitization process, the market demand for digital assets will be more diversified. For example, enterprises will rely more on data assets for decision-making and operations; Individuals will make more diversified investments and consumption through digital assets.

4.3. Optimization of Policy Environment

Governments will continue to optimize the policy environment to support the healthy development of digital assets. For example, by developing clearer and more detailed laws and regulations to regulate the digital asset market; Encourage the innovation and application of digital assets by providing tax incentives and financial support.

5. Countermeasure Research

5.1. Improving Laws and Regulations

In order to ensure the healthy development of the digital asset market, relevant laws and regulations need to be improved first. The government should formulate clear property rights definition and protection measures for digital assets to ensure the legality and security of digital

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assets. At the same time, the regulation of digital asset trading should be strengthened to prevent market manipulation and fraud.

5.2. Establish a Unified Evaluation Standard

In view of the challenges of digital asset value evaluation, unified evaluation standards and methods should be established. Industry associations and professional bodies can take the lead in developing evaluation guidelines, clarifying evaluation indicators and processes, and improving the accuracy and comparability of evaluation results. In addition, the development of third-party assessment agencies to provide independent assessment services should be encouraged.

5.3. Strengthen Technology Development and Application

Technological innovation is the core driving force for the development of digital assets. Investment in research and development of blockchain, big data, artificial intelligence and other technologies should be increased to improve the security and efficiency of digital assets. At the same time, we should promote the practical application of technology and explore the innovative application scenarios of digital assets in finance, healthcare, education and other fields.

5.4. Enhance Market Transparency

Increasing the transparency of the digital asset market is an important measure to enhance investor confidence. An open and transparent trading platform should be established to disclose trading information in real time and reduce information asymmetry. At the same time, investor education should be strengthened to improve their awareness of digital assets and risk prevention capabilities.

6. Conclusion

As an important resource in the era of industrial economy, the value evaluation and management of digital assets are of great significance to economic development. Measures such as improving laws and regulations, establishing unified evaluation standards, strengthening technology research and development and application, and enhancing market transparency can effectively promote the healthy development of the digital asset market and release its huge economic potential. In the future, with the continuous progress of technology and the gradual maturity of the market, digital assets will play a more important role in the global economy.

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