

# The dilemma and path of digital empowerment of enterprise asset management

Shaohui Mo

Liverpool University (UK), Liverpool, Post code: L3 8LG, UK

**Abstract.** The digital economy, as an important product of the third technology, has played a driving role in promoting the development of the global economy in the post-COVID-19 era. The digital economy-enabled enterprise asset management has not been specifically explained from the standpoint of enterprise asset management, and more research is required. This paper takes the specific embodiment of digital economy-enabled enterprise asset management as the breakthrough point, and focuses on analyzing the current problems of network security, vicious competition and labor employment that may exist in digital economy-enabled enterprise asset management, which have a negative impact on the sustainable development of enterprises. This paper provides corresponding countermeasures to serve as a reference for resolving problems that may arise as a result of the digitalization of enterprise asset management. Finally, this paper concludes that, while the digital economy enables enterprise asset management to play a relatively positive role in promoting traditional enterprise asset management, there are still some related issues that must be addressed. Enterprises need to take advantage of their own situations and avoid weaknesses, so as to improve the efficiency of enterprise asset management under the empowerment of the digital economy as much as possible.

**Keywords:** Digital economy; Enterprise asset management; Network security; Blockchain; Risk management; Monopoly; Digital financial platform.

## 1. Introduction

Asset management has played a particularly important role in the history of human development, and the financial industry has been the earliest beneficiary of the development of ICT. In the era of digital economy, with the continuous development and innovation of the commercialization of advanced technologies such as the Internet, Internet of Things, cloud computing, big data, and artificial intelligence. Data no longer represents a single technical symbol, but as a basic resource and a strategic resource, it has become an emerging driving force for global economic and social development, and a key factor of production for the data-driven digital economy. At the same time, important factors including capital, labor, land, knowledge, technology and management will be promoted and integrated when the digital economy integrates with traditional production models such as the emergence and innovation of digital finance, Internet agriculture and e-commerce. The integration model of digital + entity combines virtual technical means with real economic management, which further promotes the transformation and upgrading of enterprises and brings tangible economic benefits to enterprises. In enterprise asset management, the status of the traditional enterprise asset management model is being shaken by the rapid development of digital asset management platforms (Kenney and Zysman, 2016; Evans and Gawer, 2016; Langley and Leyshon, 2017). Compared with the traditional mode, digital asset management has better correlation and intelligent operation mode. The development of enterprise management with the help of the digital economy has gradually become the mainstream of enterprise development in recent years. In the context of this digital economy era, the financial sector needs digital technology support in terms of information intensity, organization and regulatory flow far beyond other industry sectors (Haberly et al., 2019). The asset management innovation of enterprises and the high-quality development of enterprises are inseparable from the support of the digital economy.

In theory, this paper helps to promote the integration of the digital economy and the real economy. Discuss the impact of the digital economy on enterprise development from the perspective of asset management, and provide direction and reference for the digital economy to empower the real

economy and enterprise management. Practical significance: The impact of digital economy-enabled enterprise asset management on enterprises is mainly concentrated in the following aspects:

The first is in terms of stability. Compared with enterprise management in the era of non-digital economy, digital asset management uses complementary methods in multiple dimensions (Edelman and Geradin, 2015), which eliminates the use of too many and complicated human resources and greatly reduces the cost of digital asset management (Haberly et al., 2019), using the Internet, big data, intelligent systems, cloud computing and other technologies to replace traditional intranet computers, making it easier for relevant departments to supervise enterprises, reducing corporate corruption and bureaucracy to a certain extent.

The second point is safety. On the basis of stability, security needs also need to be guaranteed. Enterprise asset management in the traditional sense. Internal control, auditing, finance and other departments are most prone to management loopholes. In the context of the digital economy era, enterprise security will be guaranteed to a certain extent. Compared with the Internet era of traditional asset management, under the conditions of digital asset management, factors such as hackers and financial shocks that have a huge impact on enterprises will be greatly reduced.

The third point is economic efficiency. From the perspective of its own technology, digital asset management has an efficient management model and a transparent operating environment, which provides great vitality for the development of enterprises. From the perspective of input and output, digital asset management can learn from and adopt a large amount of digital data and successful operation models in terms of investment income, and use online financial brands to achieve rapid financing and loans, and improve corporate investment and income.

Contributions of this paper. From the perspective of the integration of digital economy with entities, enterprises lack relevant documents in transforming from traditional management models to digital enterprise asset management, aiming at enterprise innovation performance and implementing financial credit. This paper combines the digital economy with enterprise asset management, and provides a new perspective to solve its current problems. From a macro perspective, countries and regions focus on innovation and development in the context of the digital economy, economic efficiency, and practical issues of energy conservation and emission reduction. In comparison, there are few studies on enterprise management and digital economy at the micro level. From a micro perspective, this paper studies the impact of the digital economy on enterprise management, finds possible micro-problems in enterprises, and proposes corresponding solutions. On the other hand, this article takes digital empowerment of enterprise asset management as the starting point to explore the opportunities and challenges in the digital economy era. Seek the convergence of digital and enterprise asset management to promote the safe and stable development of enterprises. Help enterprises understand the challenges and difficulties they face in the process of transforming from traditional asset management models to digital asset management, and provide them with new solutions.

The remainder of this article is divided into four sections. In the second part, the article will explore the specific performance of the digital economy enabling enterprise asset management. In the third part, the article focuses on describing the various problems existing in the asset management of digitally enabled enterprises. In the fourth part, the article puts forward corresponding countermeasures and suggestions for digitally empowered enterprise asset management. In the last part, the article is summarized and discussed to provide reference and reference for the research on digital empowerment of enterprise asset management.

## **2. The specific embodiment of digital economy empowering enterprise asset management**

### **2.1 Digital Financial Platform**

A digital financial platform (financial technology platform) refers to a platform-based Internet technology or financial institution that integrates financial services into digital technology (Zhuo and

Li, 2022). In the development of the platform economy or enterprise asset management, digital finance is an indispensable part. According to Table 1, China's digital financial development is currently at the world's leading level in terms of market size and technical level.

**Table 1.** Digital financial platforms worldwide

| Ranking | Company              | Country        |
|---------|----------------------|----------------|
| 1       | Ant Financial        | China          |
| 2       | Grab                 | Singapore      |
| 3       | JD Finance           | China          |
| 4       | GoJek                | Indonesia      |
| 5       | Paytm                | India          |
| 6       | Du Xiaoman Financial | China          |
| 7       | Compass              | United States  |
| 8       | Ola                  | India          |
| 9       | Opendoor             | United States  |
| 10      | OakNorth             | United Kingdom |
| 11      | Lufax                | China          |

Note: H2 Ventures and KPMG, 2019 Fintech 100

Compared with the traditional financial service model, the business models of mobile payment, online investment, BigTech, credit and online banking under the digital empowerment of enterprises have undergone relatively large changes. Taking China as an example, on the basis of digital empowerment, the innovation and development achievements of the real economy under the positive influence of the digital innovation platform have been proved. First, under the scale effect of the technology platform, China's mobile payment platform has significantly reduced the marginal cost of financial services compared with traditional payment models, forming scenario-based financial services (Hang and Zhu, 2022). The series of financial products launched by the service platform set a good precedent for mobile payments, financing and credit (Zenon, 2018). Form a solid foundation for the world's leading digital finance level. The second point is that the digital financial platform effectively utilizes the massive users and the big data risk control technology of the BigTech platform (Hang and Zhu, 2022) to form a credit model with Chinese characteristics. This greatly eases the financing difficulties faced by small, medium and micro enterprises and enterprises with credit problems, and also promotes the improvement of the national credit system. The last point is to promote the digital reform of traditional financial institutions by strengthening the awareness of credit cooperation and competition among enterprises.

However, digital finance combines the dual attributes of technology and finance, which is undoubtedly a huge challenge to related supervision. The asset management of enterprises involved in digital finance includes related compliance issues, such as loopholes in the traditional supervision model, low effectiveness of big data risk control, systemic financial risks, large platforms monopolizing the market and data supervision and other issues (the above issues are specific reflected in the third paragraph). Therefore, the establishment of a digital financial platform adapted to the current corporate background and a relevant regulatory framework for the digital financial industry is the current research direction to guide the digital empowerment of corporate assets.

## 2.2 Blockchain

While the pros and cons of cryptocurrencies are still debated, the underlying technology for their development, blockchain, can be applied in other ways to solve problems with traditional enterprise asset management. Unlike traditional enterprise asset management, a shared distributed ledger based on blockchain can enable enterprises to record transactions between parties in an efficient, verifiable and permanent way (Beadley, 2019). Different from the ledgers and contracts of the blockchain, the

emergence of the blockchain provides some evidence in the transaction details of the parties that is difficult to change through external means, changing the regulatory issues that are difficult to achieve in today's traditional enterprise asset management. At the same time, due to its better privacy and confidentiality, the possibility of data leakage problems that may exist in the enterprise is greatly reduced (Beadley, 2019). For example, in Kuhle et al. (2021) research, blockchain technology has the potential to significantly improve the efficiency and security of supply chains from a regulatory and business demand perspective (Forum W.E., 2019). The advantages of blockchain technology in terms of scalability, security and performance can be better integrated into commercial aircraft leasing services. Blockchain implementations in enterprise asset management are often aimed at improving efficiency and reducing costs (Al-Jaeoodi and Mohamed, 2019), but need to be discussed further due to understanding and costs associated with operating large-scale blockchains. On the other hand, the energy footprint of blockchain is also a matter of debate now (Vranken, 2017). This leads to the need for more mature research on blockchain technology to be better applied in enterprise asset management.

### **3. The problem of digital economy empowering enterprise asset management**

#### **3.1 Network Security**

As the digital economy empowers the development of enterprise asset management, the corresponding problems are gradually increasing. Cybersecurity has significant implications for a business's assets. According to Pesic (2018), cybercrime has an exponential growth trend with the development of the digital economy. The criminal methods of cybercriminals have gradually expanded from the most basic network fraud and phishing to stealing key information such as proprietary industrial designs, resource management, personnel data, and information that affects corporate acquisitions and mergers. In Pesic (2018), countries that are accustomed to operating under higher ethical standards tend to view such crimes as the normal way to obtain foreign business information. On the other hand, the introduction of digital financial technology is an important measure for the transformation of enterprise asset management. According to Demyanova, E.A. (2017), the introduction of financial technology brings unprecedented new risks. Some SMEs lack local guidance and commitment, and lack of risk prevention and control measures can lead to associated risks ranging from personal privacy and confidentiality of company assets to widespread organizational intervention and the threat of operational disruption, including involving illicit large-scale funds Transfer and other cases, by the actual interests of the damage. Although the international community is making relative contributions to the digital economy empowering enterprise asset management, according to the implementation of the Canadian government's 2015 "Digital Privacy Act" to protect the privacy and security of enterprises and individuals in the network to a certain extent, its laws have an impact on privacy, data Sovereignty, data security and legislative threats provide corresponding protections. But there are still many areas that need to be covered. For example, for enterprises empowered by the digital economy, they use network risk assessment, formulate security policies, establish security supervision points, install biometric technology for identity verification and audit relative security, etc. to alleviate the pressure caused by network security issues (Wang et al., 2022).

#### **3.2 Vicious competition**

The second problem that follows is that the traditional law cannot fully address the consequences of the intensification of external competition in the process of improvement. The digital economy and multifaceted markets have greatly facilitated the effectiveness of modern transactions between most businesses. Digital platforms have become an irreplaceable cross-border asset (Srivastava and Tiwary, 2021), which also brings dividends and opportunities for companies. However, in the relevant regulations of competition law in most jurisdictions around the world, due to the lack of parameter evaluation of digital platforms in the traditional market system, the problem of judging competition

in enterprise asset management dominated by the digital economy still exists (Srivastava and Tiwary, 2021). In the process of digital economy empowering enterprise asset management, non-price factors of enterprises, multi-faceted markets and data-driven networks are the main sources of such problems. For example: Google, Facebook, and WhatsApp are all multi-faceted markets and rely heavily on interacting with different consumers to generate value (Srivastava and Tiwary, 2021). The multi-party market expansion has also contributed to the ambiguity of competition in digital platforms. In the process of mergers and acquisitions of large enterprises, whether the acquisition method is aimed at eliminating potential competition threats or continuing target research, it is difficult for traditional competition law to define the legal responsibility of enterprises on competition issues. According to Gautier and Lamesch (2020), between 2015 and 2017, the five leading technology giants Google, Amazon, Facebook, Apple and Microsoft successively acquired 175 companies. Acquisitions also range from small startups to large companies with multi-billion dollar deals. While not all projects are acquired with hostile intent, most startups are wiped out by large corporations in their infancy. Therefore, this phenomenon also shows that the relevant competition authorities need to conduct more reasonable supervision of external competition.

### **3.3 Employment**

Finally, the interaction between enterprise asset management under digital empowerment and the labor market in the digital platform economy is also very important. As the digital economy of the enterprise continues to develop, digital businesses are able to use their concentration of power to experiment with new labor regulation and management structures. The labor market in digital platforms also divides traditional labor contracts, requiring re-signing of labor contracts in a more precise manner and time. The root cause of the devaluation of long-term human capital investments such as higher education is due to the fact that individuals are required to use their competencies as employment capital as micro-skills such as photo-marking and copy-editing (McKenzie, 2022). These long-term human capitals are replaced by highly volatile short-term human capitals, which lead to large fluctuations in the reputation scores and indicators of many companies at various stages. Although this method can help companies reduce trial and error costs to a certain extent, and match excellent and suitable labor for digital reform. However, at the same time, it may also lead to the inability of relevant regulatory agencies to accurately locate, and adversely affect the digitalization process of enterprise asset management.

## **4. Digital economy empowers enterprise asset management path**

### **4.1 Government level**

The government plays a very important role in the process of enterprise asset management empowered by the digital economy, and its supervision and support have played a positive role in the digital reform of enterprise asset management to a certain extent. First of all, from the perspective of supervision, the market of enterprise asset management when empowered by the digital economy is more inclined to a market-oriented competition model, which may lead to the absence of the government to a certain extent. At the same time, it may lead to extreme measures for the development of the digital economy in the process of market competition. For example, giant companies use their assets and technological advantages to form extreme monopolies. Different degrees of digital empowerment lead to asymmetric market information, which in turn leads to market failure. Security issues such as data and information leakage in enterprise competition need to be promoted by government supervision to a certain extent. Therefore, taking Denmark as an example, from the very beginning, the government has formed reasonable supervision for the private sector to promote the digitalization of the high-tech industry, and has formulated a corresponding digitalization strategy for the public sector of the government. The purpose is to improve services and improve process efficiency. Finally, the goal of administrative digitalization is achieved (Colling, 2021), and it will play a supervisory role in the era of enterprise digitalization reform.

On the other hand, the government has improved and formulated the systems and regulations corresponding to the digital economy and the real economy, which will play a driving role in the asset management of enterprises empowered by the digital economy. At the same time, by taking advantage of information, the government can build a corresponding smart platform and big data platform while digitizing administration, so that enterprises can better clarify issues such as taxation and return on investment, and provide certain technical support for the digitization.

#### 4.2 Enterprise level

In the process of digital economy empowering enterprise asset management, enterprise-level management is also particularly important. In the era of the digital economy, due to the precedents and lack of resources for the digital reform of enterprise asset management, SMEs face greater risks of sustainable growth than large companies in emerging economies (Wang et al., 2019). As a risk management tool, corporate internal control can support the sustainable development of SMEs to a certain extent (Wang et al., 2019). It plays a certain role in the supervision of financial security and network supervision of enterprises, which helps enterprises to prevent risks and resolve internal conflicts. Under perfect internal control, enterprises can play the roles of finance, auditing and supervision departments, control risks within the scope of the enterprise, and ensure the sustainable development of the enterprise.

On the other hand, by seizing the opportunity of digital development, enterprises vigorously develop digital platform construction, build internal digital intelligent systems and digital economic platforms, and provide data and technical support for enterprises. According to Luo (2022), taking China as the research object, the development of digital finance plays an important role in promoting the digital transformation of enterprise asset management, and has a stronger promotion effect on the construction of smart platforms for non-state-owned enterprises. In the process of development, enterprises monitor personnel information, financial data and enterprise conditions and other factors affecting enterprise development, provide more effective data analysis support for enterprise financing and investment, improve the internal creativity and efficiency of enterprises, and enable enterprise administrators and managers to Better participation in the construction of digitally empowered enterprise asset management.

### 5. Conclusion and discussion

As an important product of the third technological revolution, the digital economy has had an important impact on the development of human society. In the context of the 2019 coronavirus (COVID-19) outbreak, the digital economy is considered an effective measure to effectively mitigate its negative economic impact (Zhang et al., 2022). The development of the digital economy and enterprise production are relatively well integrated, and the digital economy has become a research hotspot at this stage. At the same time, the digital economy also promotes industrial upgrading in the post-COVID-19 era, and employment and trade play a good role in promoting (Zhang et al., 2022), which has a certain role in promoting the successful transformation of enterprise asset management. This paper studies the specific embodiment of digital economy empowering enterprise asset management from the perspective of digital finance and the Internet. Analyze the problems that may exist in the process of enterprise asset management at this stage. And from the perspective of the government and enterprises themselves, it provides relevant suggestions for enterprises to better transform in the process of asset management digitalization.

The modernization and transformation of enterprise asset management is currently based on the digital economy, and a series of reform plans are carried out around the digital economy. The innovative development directions of different enterprises in the post-COVID-19 era are mostly different from the previous development models. How to better make the digital economy empowered enterprise asset management applicable to most enterprises is the goal of future research and development. From the current point of view, the application of digital financial platforms and the

application of emerging blockchain technology in the embodiment of digital economy empowerment of enterprise management have also created a new idea for the change of traditional enterprise asset management. Although there is still room for optimization in the construction of relevant laws and information security issues. However, the development prospect of making enterprise asset management more efficient and convenient by means of technological innovation provides new ideas for the current development of enterprise asset management. This paper also has certain limitations. For example, this paper currently analyzes the impact of the digital economy on enterprise asset management from a qualitative perspective. Since data collection involves corporate privacy, it is difficult to collect effective data. Accurate data for fixed enterprises It is expected that relevant companies will publish relevant detailed data in the future to promote research and conduct quantitative analysis.

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