International Journal of Trend in Scientific Research and Development (IJTSRD)
Volume 9 Issue 6, Nov-Dec 2025 Available Online: www.ijtsrd.com e-ISSN: 2456 – 6470

Research on Key Issues of Enterprise Data Asset Valuation

Xu Yang, Xia Ruixi, Yu Jiayang, Zhang Yi

Beijing Wuzi University, Beijing, China

ABSTRACT

In the digital economy, data assets serve as the core strategic resources of enterprises, and their valuation is a key link in the market-oriented allocation of data elements. This study focuses on three core aspects of enterprise data asset valuation. Firstly, regarding the authenticity of data asset management registration, it proposes an evaluation system of "sample inspection + process traceability + technical analysis" by decomposing key indicators such as completeness and accuracy. Secondly, for the adaptation measures to domestic and foreign data systems, it compares the similarities and differences of data policies among China, the United States, and the United Kingdom, and formulates a "policy map + hierarchical matching" plan. Thirdly, aiming at the policy obstacles and operational difficulties in the valuation process, it analyzes the causes from both policy and corporate perspectives and puts forward collaborative solutions. Based on multi-source data including policy documents, academic literature, and survey reports, this study provides theoretical support and practical paths for enterprise data asset valuation, and promotes the process of data assetization.

KEYWORDS: *Data Assets; Value Estimation; Registration Reliability; Policy Compliance; Dilemma Resolution.*

How to cite this paper: Xu Yang | Xia Ruixi | Yu Jiayang | Zhang Yi "Research on Key Issues of Enterprise Data Asset Valuation" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-9 | Issue-6, December 2025, pp.183-185, URL: www.ijtsrd.com/papers/ijtsrd98786.pdf

IJTSRD98786

INTRODUCTION

With the implementation of policies such as the "Interim Provisions on the Accounting Treatment of Enterprise Data Resources" [1], the inclusion of enterprise data assets in financial statements has become a rigid requirement. However, their valuation still faces multiple challenges, including weak valuation foundation caused by false registered data [2], compliance conflicts arising from different foreign policies, and inappropriate traditional valuation methods [3]. According to data from the Beijing Data Exchange, 91% of data pledge financing requires third-party valuation reports, but 70% of appraisal institutions still use traditional intangible asset templates, indicating the need to accelerate research progress [4]. This study mainly focuses on three aspects and explores the key points of enterprise data asset valuation relying on a multi-source database composed of policy documents, academic papers, and survey reports from China, the United States, and the United Kingdom, so as to put forward practical solutions.

1. Reliability Evaluation of Enterprise Data Asset Management Registration

Data asset management registration is the foundation of asset value valuation, and the reliability of registration directly affects the validity of asset valuation results. This study conducts research from three aspects: dimension decomposition, model analysis, and method establishment. In terms of the decomposition of core dimensions, it is clear that registration reliability needs to meet four indicators. Completeness requires covering the enterprise's core data assets, such as customer consumption data and production operation data; accuracy requires that metadata is consistent with actual data to avoid field filling errors; timeliness requires that registered information is dynamically adjusted to adapt to the market; and security requires ensuring that registered data cannot be tampered with to guarantee data authenticity [5]. The current manual registration has defects: the error rate of humans will increase under TB-level data volume, while automatic registration relies on algorithms; once the company launches new financial products or other business changes occur, the update of algorithms will be delayed, resulting in poor timeliness; finally, hybrid registration has

become the first choice for most enterprises, but it still fails to solve the inherent problems of these two registration methods [6].

Based on this, a multi-method integrated evaluation framework of "sampling inspection - process traceability - technical verification" is constructed: the sampling verification method randomly selects samples, compares them with registered data, tests their accuracy, and quickly identifies errors and deviations in the data; the process traceability method traces the responsible subjects of each link in the entire registration process, sorts out the data flow trajectory, finds out the factors causing errors, and clarifies the responsibility attribution; the technical verification method uses data encryption to verify data uniqueness and ensure data security. Through the integrated application of these three methods, optimization approaches are proposed, such as establishing a cross-verification mechanism, formulating a main responsibility list, and introducing automated registration tools to reduce human intervention and improve registration reliability.

2. Enterprise's Adaptation Strategy to Domestic and Foreign Data Asset Policies

The differences in domestic and foreign data policies bring compliance challenges to enterprise data asset value valuation. This study provides applicable solutions through policy analysis, problem identification, and solution provision. Domestic policies adhere to the principle of "strengthening supervision and smoothing circulation", stipulate data classification and grading standards and security requirements. The "Interim Provisions on the Accounting Treatment of Enterprise Data Resources" incorporates data assets into financial accounts. The 2025 semi-annual report shows that the total data assets of 102 listed companies amount to 5.637 billion yuan [7]. However, there are still many issues to be resolved regarding data ownership definition and data asset accounting rules. Foreign policies show differentiated characteristics: the EU's GDPR strictly regulates cross-border data flow and user authorization, the US's CCPA is more inclined to protect consumers' data rights [8], and the UK's "Data Use and Access Act" implements a "smart data" plan [9], striving to find a balance between innovation and security. Enterprises face dual pain points in adaptation: multinational enterprises have "compliance conflicts" - the domestic data outbound security assessment is different from the GDPR cross-border rules, and a cross-border e-commerce company needs to meet the compliance requirements of both countries, resulting in a 40% increase in compliance costs; small and medium-sized enterprises (SMEs) lack talents in the interdisciplinary field of "data + law" and cannot effectively implement relevant policies. In the survey, 60% of SMEs said they cannot accurately locate the compliance boundary.

In response to the above pain points, this study designs the following "compliance and operational adaptation strategies": from the compliance perspective, construct a "policy map", sort out domestic and foreign data-related policies and regulations, integrate them by business scenarios, and clearly present the permitted, prohibited, and approval-required behavior boundaries under different scenarios; according to the data collection, storage, and cross-border flow of different business scenarios, refine and decompose the corresponding rule clauses to form directly implementable operational guidelines, making prohibited and permitted behaviors clear at a glance. At the operational level, adopt a "hierarchical adaptation strategy": large enterprises establish cross-regional compliance teams, composed of legal, business, and technical personnel, to regularly review business processes and update compliance plans; SMEs rely on third-party compliance testing platforms, and use their professional tools and experience to complete compliance testing, vulnerability repair, and other work at low cost, reducing compliance thresholds and costs.

3. Policy Constraints and Operational Dilemma Resolution of Enterprise Data Asset Valuation

Policy constraints are mainly reflected in three aspects: the valuation scope is relatively vague, there are no clear regulations on whether public data and derived data are included in the valuation; after an enterprise develops derived products using government-opened data, the valuation boundary cannot be defined; there is no unified standard for valuation methods, the applicable scenarios of cost method, income method, and market method are not refined, and there are disputes between financial enterprises and manufacturing enterprises on the choice of data asset valuation methods.

On this basis, this study proposes a collaborative resolution path: at the policy end, issue data asset valuation guidelines, clarify the valuation scope, methods, and application rules of results, and establish an inter-departmental coordination mechanism involving cyberspace administration, finance, and financial departments; enterprises build a closed loop in policy, valuation, and use links, introduce third-party appraisal institutions, build a composite team at the company level, and pilot "small-scale valuation, verification, and promotion

application" to avoid potential risks; at the governance level, industry associations take the lead in formulating the "Industry Standards for Data Asset Valuation" to connect policy needs and market needs.

Conclusion

This study conducts multi-source data and case analysis around the three core themes of enterprise data asset valuation and draws the following conclusions: in terms of registration credibility, the multi-method integrated evaluation framework of "sampling inspection - process traceability - technical verification" established in this study can effectively improve the completeness, accuracy, and security of registered data, and provide reliable data for enterprise data asset valuation; in terms of policy adaptation, the evaluation strategy centered on "policy map + hierarchical adaptation" can help enterprises avoid the differential risks of various domestic and foreign policies and reduce compliance costs; in terms of dilemma resolution, the joint solution of "policy - enterprise - third sector" can effectively solve the problems such as unclear valuation objects, inconsistent methods, and low recognition of valuation results. The research results provide theoretical and practical support for enterprise data asset valuation, but there are also certain limitations. In the future, the data sample and research scope can be further expanded.

References

[1] Ministry of Finance of the People's Republic of China. Interim Provisions on the Accounting Treatment of Enterprise Data Resources [Z]. 2024.

[2] Ministry of Finance of the People's Republic of China. Guiding Opinions on Strengthening Data Asset Management (Caizi [2023] No. 141) [Z]. 2023.

[3] China Appraisal Society. Guiding Opinions on Data Asset Valuation (Zhongpingxie [2023] No. 17) [Z]. 2023.

[4] Beijing Data Exchange. 2024 China Data Asset Trading White Paper [R]. 2024.

[5] Wang Jianbo. Research on Data Asset Value Evaluation Methods [J]. Times Finance, 2016, (12): 292-293.

[6] Song Jiekun, Zhang Yemeng, Zhao Zhihao. Research on Enterprise Data Asset Value Valuation [J]. Friends of Accounting, 2021, (13): 22-27.

[7] National Bureau of Statistics of the People's Republic of China. 2025 Half-Yearly Statistical Communique on National Economic and Social Development [R]. 2025.

[8] British Standards Institution. BS ISO 55013:2024 Asset Management - Guidelines for Data Asset Management [S]. 2024.

[9] United States Congress. Open Government Data Act [Z]. 2019.

[10] Zhao Xingli, Liu Zhikang, Fu Yujing. A Review and Prospect of Data Asset Value Valuation Research [J]. China Appraisal Journal, 2025, (04): 24-31.