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Retraction

Retracted: Exploring the Influence of Big Data Technology on the Innovation of the Enterprise Economic Management Mode

Security and Communication Networks

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope
(2) Discrepancies in the description of the research reported
(3) Discrepancies between the availability of data and the research described
(4) Inappropriate citations
(5) Incoherent, meaningless and/or irrelevant content included in the article
(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] Y. Wu, "Exploring the Influence of Big Data Technology on the Innovation of the Enterprise Economic Management Mode," *Security and Communication Networks*, vol. 2022, Article ID 6241182, 13 pages, 2022.

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Research Article

Exploring the Influence of Big Data Technology on the Innovation of the Enterprise Economic Management Mode

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The aim of this study is to help financial enterprises establish a solid foundation in a big data ecosystem (BDE) and fully play their competitive edges in the fierce business competition. This paper innovatively conducts research studies on the reform of enterprise financial management. First, it expounds on the relevant concepts of big data technology (BDT) alongside financial management. Afterward, the impact of BDT on enterprise financial management is examined. Consequently, a financial enterprise-oriented economic management model is proposed by integrating BDT, enterprise economic management (EEM), and enterprise performance evaluation methods. Further, an experiment is designed to verify the proposed model on estimating the annual enterprise operating income (OI) and human resource (HR) structure. The research findings show that the predicted and actual OI error is within 6%. The predicted enterprise personnel deployment only deviates slightly from actual personnel deployment. Thus, the proposed economic management model can accurately predict OI and cost. It provides a reliable reference for enterprise innovation management, optimizing recruitment conditions, sales strategy, and development strategy. Lastly, the research deficiencies are pointed out alongside corresponding suggestions.

1. Introduction

The 21st century is the era of network science and technology (S&T), when computer and networking technology (CNT) is undergoing a new revolution, thus bringing dramatic social changes [1]. New technologies are seeing broader applications. For example, mobile computing (MC), Internet of Things (IoT), and edge computing (EC) technologies [2] have expanded to social media and system manufacturing. It replaces the traditional communication approaches, leading humanity into the big data era [3]. In China, the dawn of the big data era can trace back to the action plan for promoting the development of big data in 2015 [4]. Various technical exchange platforms were launched to offer enterprises the latest industrial updates and encourage industrial innovations. In financial sectors, economic management safeguards financial and monetary transactions and thus is indispensable for the development of financial enterprises [5].

However, with a deeply rooted traditional management concept, many enterprises are still skeptical about data sharing services (DSS), such as data interactive management [6]. Big data expands the scope of knowledge. Thus, today's enterprise management (EMA) involves more than just business experience and management concepts but also real-time transaction data and online resources. At the same time, EMA [7] must be innovated by integrating various CNT into the big data ecosystem (BDE) to survive and prosper with a solid technical foundation in international competition [8]. Enterprise competition has a long history and exists throughout an entire enterprise life cycle with a legal appearance. Fajar believed that the competition law must be designed pragmatically to keep up with rapidly changing business models. Generally, it was agreed upon by business actors to create a more dynamic market environment and more prosperous consumers [9]. Hence, enterprise competition management is necessary, and most EMA models are affected by the mainstream setting. Shao et al. analyzed environmental regulation (ER) on economic sustainable development (SD), enterprise innovation on ER, and enterprise initiative on ER from the perspective of the

enterprise ecosystem. They also examined the relationship between ER and enterprise innovation and social security, as well as the integration of eliminated enterprises [10]. Lin et al. held that maintaining competitive advantage and improving innovation performance in the BDE was crucial for enterprise development. They found that the positive role of management power and network centrality was more significant in the BDE. These findings enriched the research on high-tech enterprise innovation from the perspective of portfolio governance and contributed to the literature research on enterprise innovation in the BDE [11]. Thus, network technologies, such as BDT, can improve the EMA significantly.

After a literature review, this paper proposes a new management and innovation concept for financial enterprises using BDT based on the existing economic management model. First, the relevant concepts of big data are explained alongside the economic management mode and influencing factors. Then, an innovative integrated economic management model is proposed. The model performance is verified by two experiments. One is to estimate the operating income (OI) and compare the result with the actual OI. The other is to estimate the enterprise's human resource (HR) structure. The results provide some opinions for the innovation of enterprise economic management (EEM). The research innovation lies in evaluating the rationality of the proposed model by comparing the historical data with the model prediction data.

2. Methods

2.1. Big Data Concept. Big data is primarily used in innovative modes of high-volume, high-velocity, and high-variety information assets [12]. Big data can be used in decision-making (DM), information mining, data analysis, and service recommendations. For example, by analyzing user's preference big data, businesses can recommend products and services to users as a new "marketing" approach [13]. Anyway, high volume is the most revealing but not the only feature of big data. Table 1 shows the presentation characteristics of big data [14].

The BDE has significantly changed the world by integrating traditional single-data networks. Metaphorically, today's world is a vast digital network surrounded by a BDE. Hence, users can obtain information concerning almost all social spheres through network terminals. Figure 1 summarizes the characteristics of BDT [15].

Table 2 explains the specific meanings of the four characteristics of BDT.

The BDE has brought a different impact on enterprises. In BDE, people can extract valuable data to understand and analyze things more clearly because data correlations are much stronger. Figure 2 lists people's mind set transformation from four aspects in BDE.

2.2. Enterprise Economic Management. An enterprise is a socioeconomic unit with a unique structure that focuses on economic exchanges [16]. The traditional economic concept divides the enterprises' business activities into two types [17], as outlined in Figure 3.

As illuminated in Figure 3, EMA includes business and production management and economic management. The former stresses commodities operations, while the latter focuses on businesses values.

Traditionally, economic management concerns only enterprises' basic business activities, such as goods collection, investment amount, fund use, and profit distribution [18].

The emerging economic management considers the complex enterprise architecture instead of the enterprise itself and pays more attention to the balance of funds and cost. The new economic management model factors cost control and performance evaluation, most of which are a series of standard processes for monitoring and assessing the enterprise economic activities. Different enterprises have different management objects [19]. Figure 4 depicts the several characteristics of modern EEM.

2.3. Impact on Enterprise Economic Management. The BDE and economic globalization both have a far-reaching impact on the management and operation of enterprises and people's social behaviors. Economic management is the cornerstone of an enterprise. Thus, the economic management concepts, environment, and technologies must all be innovated for enterprises to adapt to the new era [20].

Particularly in BDE, the offline marketing environment has transformed into virtual, online, and digital modes, from face-to-face communication to networked exchange with economic objects. Moreover, the enterprise can obtain instant real-time feedback from local markets. Figure 5 specifies the economic regulation from several aspects.

2.4. Economic Management Model. This section strives to propose an optimized economic management model. Generally, the EEM level can be evaluated through the internationally recognized enterprise operation indexes to improve EMA. Accordingly, the proposed economic management model selects the EEM ability as the benchmark and divides it into five levels: the initial level, the basic level, the specification level, the management level, and the optimization level. Meanwhile, the five levels will be gradually upgraded to the subsequent higher levels through adaptation to the previous levels, as illustrated in Figure 6.

As illustrated in Figure 6, enterprises can self-evaluate, identify, analyze, and repair loopholes through the above-mentioned five levels using technical innovation to balance reform and sustainable development [21]. Table 3 enumerates the five EEM levels with their meaning.

2.5. Performance Evaluation System (PES). According to the literature review, humans always weigh the input-output Ratio (IOR) during production activities for life, survival, or reproduction. Some scholars believe IOR to be the early statement of performance evaluation. Therefore, the idea of

Table 1: Big data characteristics.

Characteristic name	Characteristic content
Huge amount of data	Numerous network terminals can record many data, such as user trajectory and browsing data. Each user can be provided with a gigantic data pool
Diverse data types	Various sensors, social platforms, and network terminals generate semistructured and unstructured data, making the data types complex and diverse
Efficient processing rate	By analyzing big data, businesses can push similar products in real-time according to users' browsing interests, such as the well-known amazon and JD shopping platforms
Data authenticity	With their actual content partially ignored, big data provide a reference basis for decision-makers to extract valuable information from the real data center (DC), which is the basis for obtaining knowledge

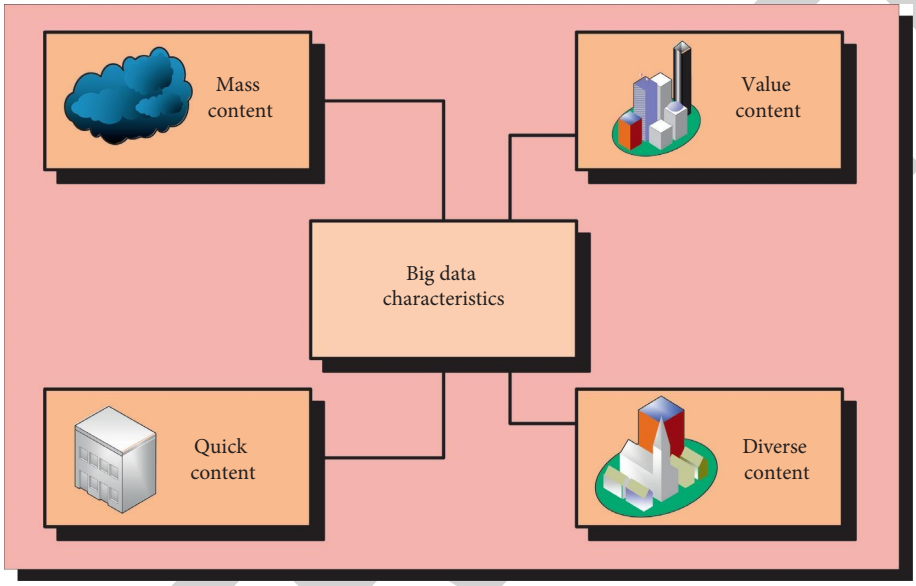

Figure 1: Characteristics of BDT.

Table 2: Connotation of BDT characteristics.

Characteristic	Connotation
Massive content	BDT uses a tremendous amount of data volume
Diverse content	BDT involves various data types from all social levels
Quick content	BDT utilizes CNT to achieve fast data transmission
Value content	BDT analyzes large amounts of low-density data

performance evaluation might have existed as early as a primitive society. The current performance evaluation theory [22] mainly includes the following:

2.5.1. Asset-Based Valuation Method. It includes cost replacement, market value, and accounting value. Of these, cost replacement is the final enterprise cost after mergers and acquisitions, removal of related consumption, and devaluation. Market value is an effectiveness hypothesis used in macro conditions according to the market price fluctuation. The accounting value is determined according to the asset amount of the traditional accounting book, which is a static valuation method and generally expressed in the balance sheet. Figure 7 displays the specific structure.

2.5.2. Relative Valuation Method. The relative valuation indexes can intuitively display the enterprise's worth. For example, the price/earnings ratio (P/E) directly relates to the enterprise's profitability and operation effect. The market sales rate is a key standard for enterprise listing and development. These indexes are used either for the enterprise loss evaluation with strict requirements or investor's fund evaluation. Figure 8 demonstrates the specific structure.

2.5.3. Discounted Cash Flow (DCF) Method. It is a mainstream valuation method focusing on the discounted cash flow (CF) in the enterprise life cycle. In actual situations [23], the DCF method depends on the future CF. In the 1980s, research experts defined liquidity as part of CF. CF can be divided into two types according to payment objects.

Enterprise CF is calculated by the following:

$$V_t = \sum_{t=1}^{n} \frac{\mathrm{FCF}F_t}{(1 + WACC)^t}. \quad (1)$$

Share CF is calculated by the following:

$$V_t = \sum_{t=1}^{n} \frac{\mathrm{FCF}F_t}{(1 + K_c)^t}. \quad (2)$$

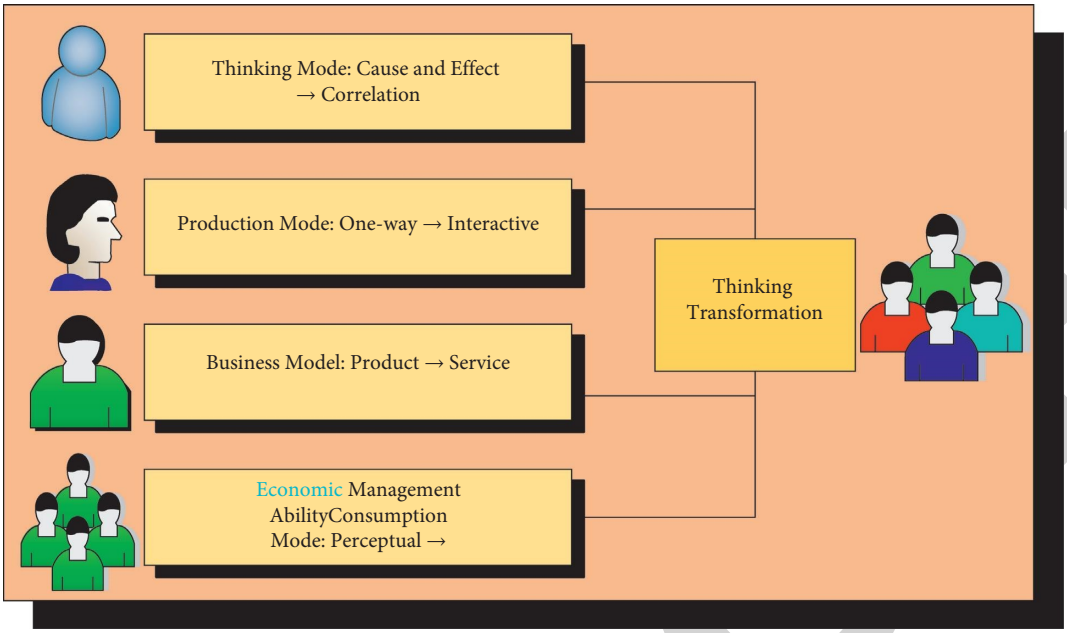

Figure 2: Transformation of people's mindset by BDE.

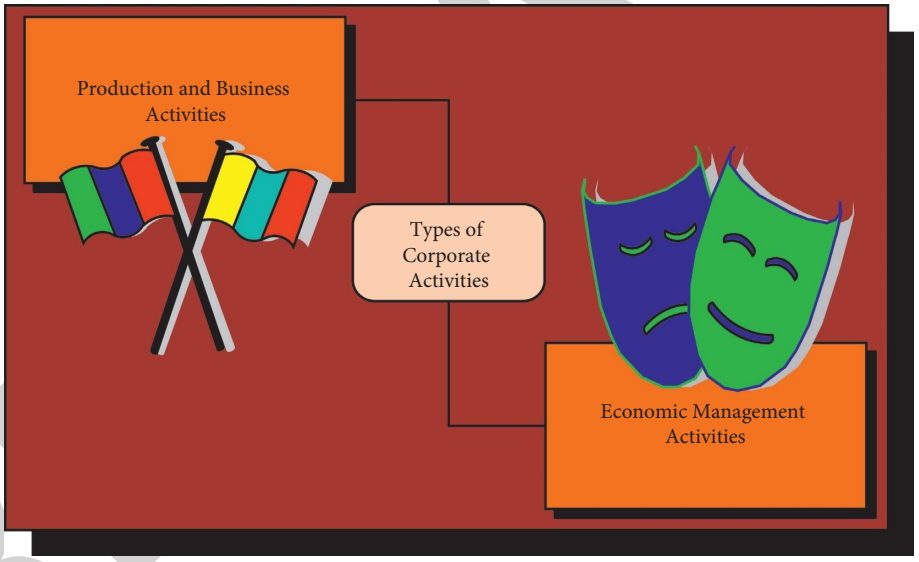

Figure 3: Types of business activities.

In (1)–(2), *Vt*, *FCF*, and *WACC* represent value, the free CF, and the weighted average loss, respectively. K_C refers to the cost. *F* means the fixed investment added when sales rise one RMB. *T* stands for the time. (1) and (2) present different cash disbursements.

Debt cost occurs with enterprise financing, namely, weighted average loss. The calculation method is as follows:

$$WACC = K_b \times \frac{B}{V} \times (1 - T) + K_s \times \frac{S}{V}. \quad (3)$$

In (3), K_s, K_b, *S*, *B*, and *V* denote the share cost, pre-tax cost, the share value, the debt, and the total assets of the enterprise.

The enterprise applying the DCF model must comply with the following conditions in terms of the CF criteria. (1) The enterprise discounts according to the CF in the future period. (2) The enterprise must maintain an incoming-fund flow in recent years, and the risks should be controllable.

2.5.4. Option Valuation Method. The accuracy and universality of domestic enterprise performance evaluation have been improved by consulting European and American research [24]. The Black-Scholes (B-S) model was proposed in the 1970s. The conceptual basis is the value of financial options. After optimization, this model is applied in practice

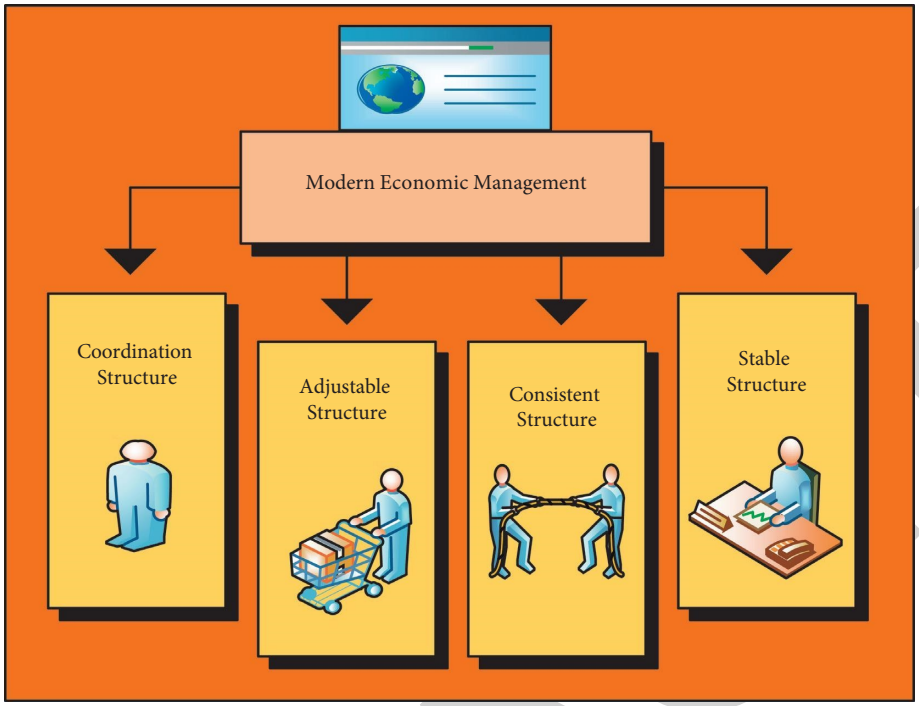

Figure 4: Characteristics of modern EEM.

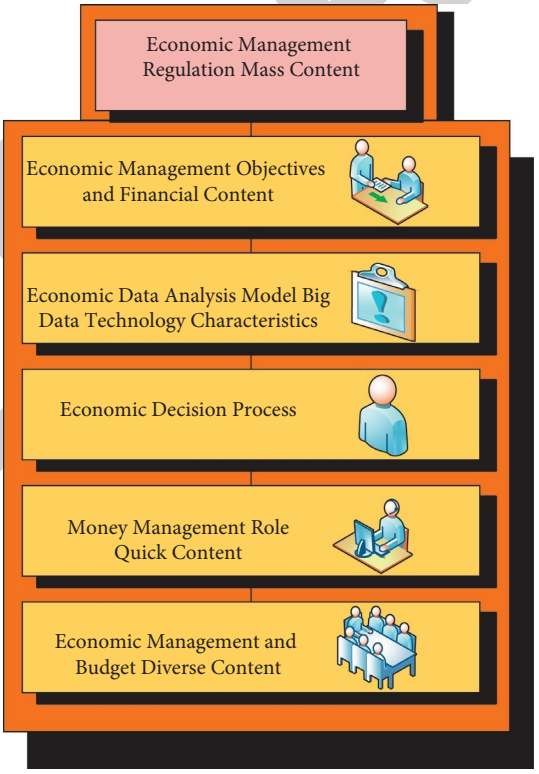

Figure 5: Aspects of EEM regulation.

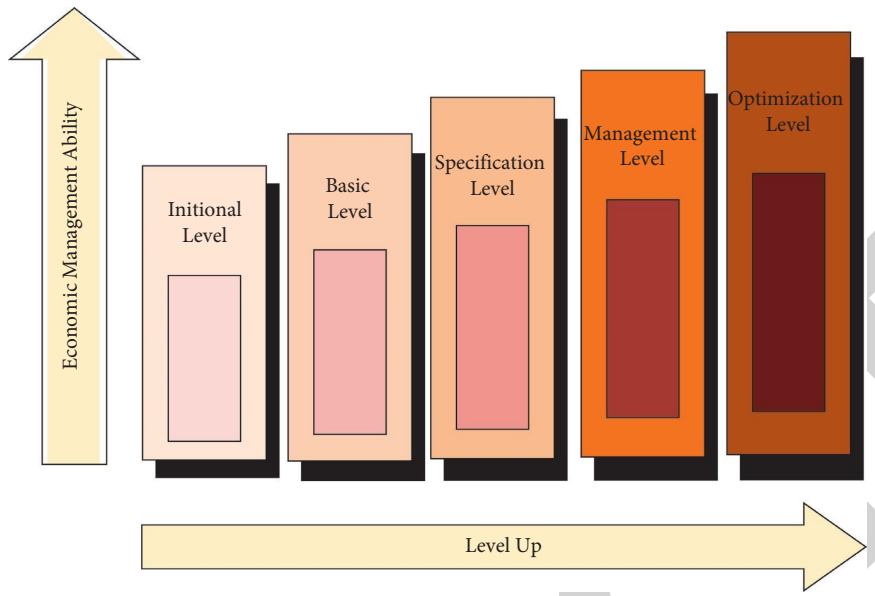

Figure 6: EEM hierarchy chart.

Table 3: Meaning of the EEM level.

Name	Specific meaning
Initial level	At this stage, the enterprise is still in the initial step. Its structure is relatively simple and single. EEM ability is relatively weak. How to optimize the use structure of funds has become the main problem
Basic level	Compared with the initial level, this level emphasizes the cultivation of EEM ability and can have a relatively independent set of institutional strategies. In this link, artificial intervention is common, and the implementation of the fund system lacks effective management
Specification level	At this stage, enterprises begin to transform from a single growth stage to diversification and gradually complete their legal structure. The leadership begins to pay more attention to EEM. The main optimization concern is strengthening the communication between the capital department and other positions
Management level	Enterprises reaching this stage have an integral internal structure and system. They can control and analyze business activities in terms of EMA and provide reference data for performance evaluation. Meanwhile, they can improve their strategic abilities and play a leading role
Optimization level	The enterprise scale is considerable at this stage, and the EMA level will be upgraded to the strategic level. The whole capital flow (CF) system has been perfected, so the financial activities can be changed according to the external environment to guide enterprises to develop an excellent competitive management ability

to explain the actual work of enterprise valuation and expound the methods and principles.

Besides, the B-S model belongs to a binary tree model, and its calculation reads as follows:

$$C_0 = S_0[N(d_1)] - Xe^{-r_c t}[N(d_2)]. \quad (4)$$

(4) can also be expressed as follows:

$$C_0 = S_0[N(d_1)] - PV(X)[N(d_2)]. \quad (5)$$

In (5),

$$d_1 = \frac{\ln(S_0 \div X) + \left[r_c + \left(\sigma^2 \div 2\right)\right]t}{\sigma\sqrt{t}}. \quad (6)$$

Equ. (6) can also be expressed as follows:

$$d_1 = \frac{\ln[S_0/PV(X)]}{\sigma\sqrt{t}} + \frac{\sigma\sqrt{t}}{2}. \quad (7)$$

In (7),

$$d_2 = d_1 - \sigma\sqrt{t}. \quad (8)$$

In (4)–(8), C_0 is the risen value of shares. S_0 denotes the current value of shares. $N(d_1)$ represents the deviation less than d in the normal distribution. X means the exercise value of options. r_c refers to the compound interest risk-free profit for consecutive periods. t is the maturity time. σ^2 stands for the variance of share return of continuous compound interest.

2.5.5. Economic Value Added (EVA) Evaluation Method. Traditionally, enterprise profit is calculated by debt costs and has limited applications because equity financing will increase enterprise costs [25]. Comparatively, the EVA approach [26] can break through such limitations. A single-stage model is viable to mature enterprises with relatively

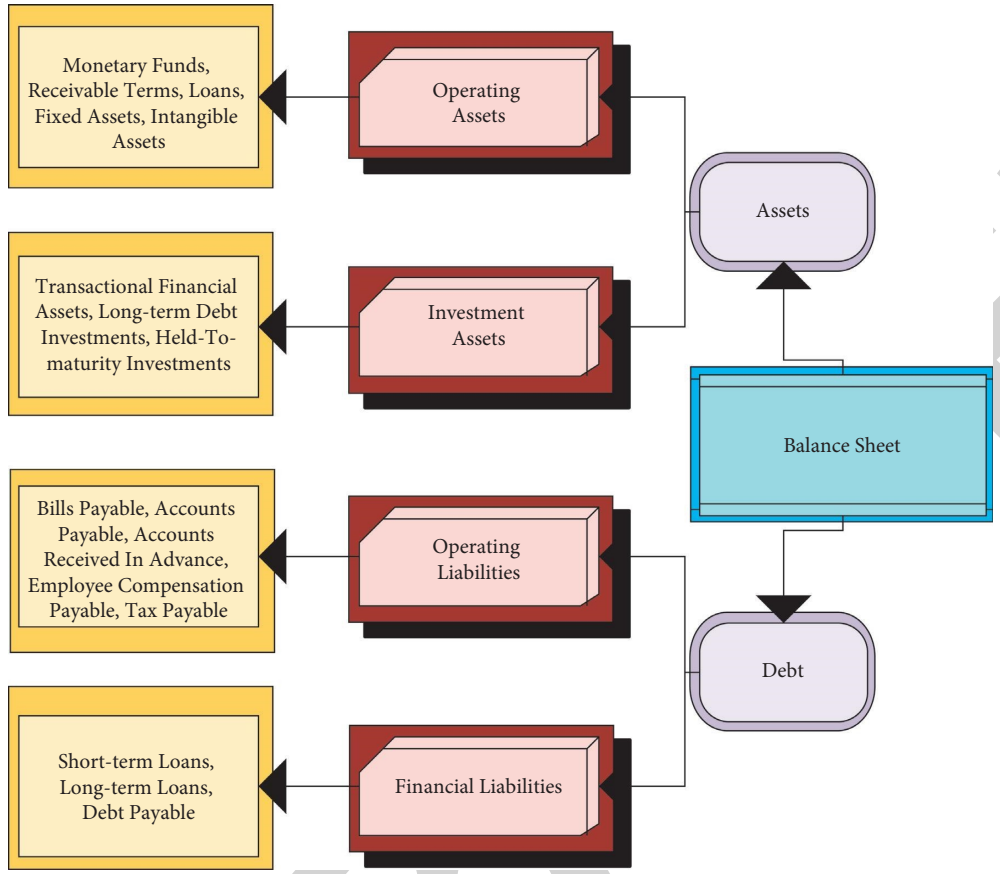

Figure 7: Asset valuation structure.

stable organization structures, CF, and development. In such cases, the EVA is recorded as g calculated by

$$V = \frac{IC + EVA}{WACC - g}. \tag{9}$$

EVA refers to the first EVA value in the period of stable growth.

2.6. Enterprise Economic Management Model. Economic management models select different enterprise characteristics according to unique situations. Timely innovating the economic management model will directly impact business strategies. Such transformation is not natural but requires initiative, planning, and structural innovation based on unique enterprise competitive edges. Only a well-built enterprise innovation structure can inject new concepts, proactive elements, and innovation into enterprises. There is a need to build an integrated model to maximize EMA efficacy. Table 4 unfolds the key features of the proposed integrated economic management model from two dimensions.

Subsequently, this section selects several financial enterprises with maladaptive economic management modes to design the model verification experiment. The concepts of EMA and BDT have been described in the previous sections. Accordingly, a new economic management model is implemented to optimize the business process by integrating business operations and fund management [27], thus providing information and fund as an effective enterprise service. Figure 9 describes the specific structure.

Afterward, the rationality and practicability of the proposed economic management model will be verified by predicting the enterprise's income, fund, and HR structure. The experimental results are shown below.

The new economic management model needs to build three matrices.

(i) User scoring matrix. It collects the user's specific itemized scores. The corresponding matrix element is zero when users skip scoring a certain item.

(ii) User feature attention matrix. It represents the user's preference for features.

(iii) Item feature quality matrix. It represents the feature level of the item.

The rationale of the proposed integrated economic management model is to make edge nodes smarter, such as acting as agents for consumers and providers, to improve content retrieval and distribution. On the one hand, the new economic management model can help consumers use the edge router as a fast content repository to meet consumers' requests and as an intelligent agent to request content from upstream nodes. On the other hand, it can help providers use optimized intranetwork recovery/retransmission to detect packet loss and even accelerate content distribution. The present work aims to improve the performance of edge

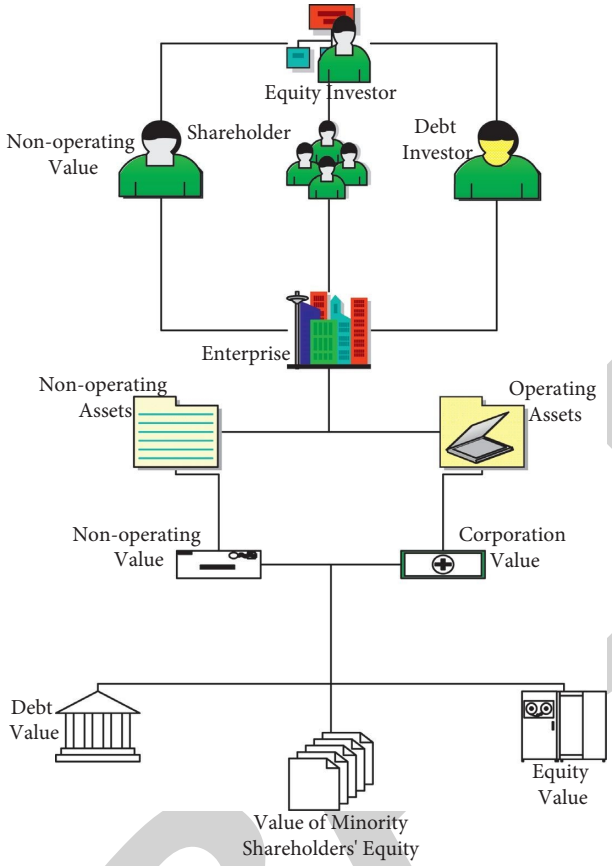

Figure 8: Relative valuation structure.

Table 4: Key features of the proposed integrated economic management model.

Key features	Meaning
Establishment of new ideas	Managers should abandon traditional ideas and learn innovative EEM knowledge to build a new management structure, especially the importance of the EEM. Inevitably, the optimized management model involves fund responsibility. Thus, it is necessary to strengthen trust between departments to ensure optimization
Centralized management of funds and budget	EEM should be supervised through formulation and approval. Enterprises must strictly adhere to the formulated articles to execute EEM

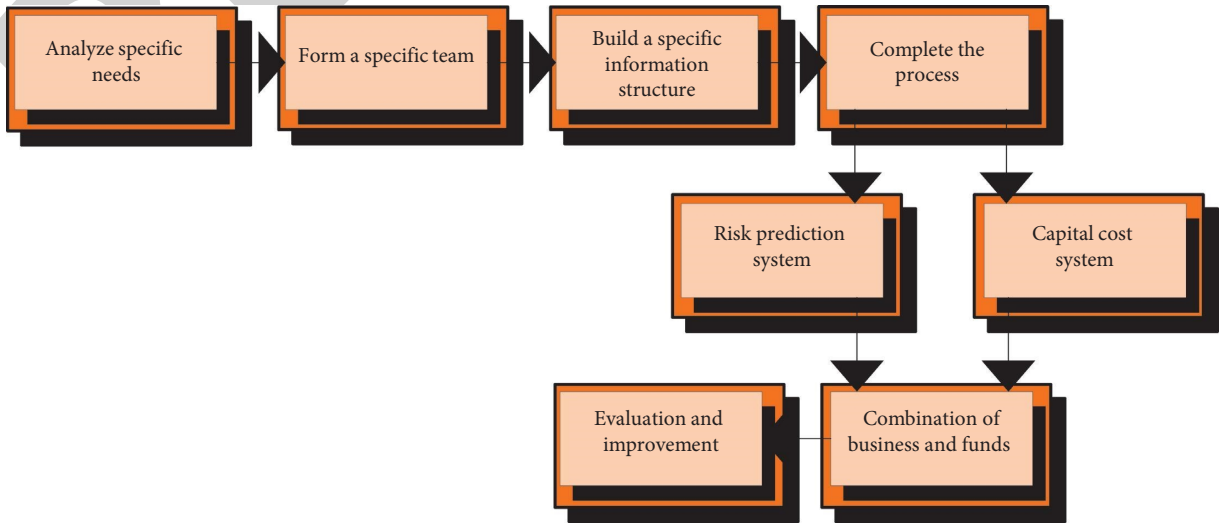

Figure 9: EEM structure.

networks. The simulation results show that the proposed economic management model can achieve efficient content retrieval and distribution and is more easily accessible to consumers and providers.

2.7. Enterprise Mobility Management (EMM). Mobile devices are blurring the line between work and personal life. Data show that 70% of the employees surveyed will use their smartphones or tablets to access the corporate network, and Small Office and Home Office (SOHO) has gradually become a new trend. Thus, mobile device management is challenging EMA [28].

As a fragment of enterprise mobility management (EMM), mobile device management might be the most widespread concern despite being a less critical factor. Indeed, a thorough understanding of EMM is the key to better managing mobile devices.

This section will take the EMM of ZIYA Information Company as an example to better explain the five key elements of EMM:

2.7.1. Mobile Device Management. Mobile device management manages the whole life cycle of mobile devices, such as system status, device information, call records, location analysis, and remote device inspection, to avoid mobile device failure.

2.7.2. Mobile Application Management. EMM-based unified application management can help access enterprise-sensitive data more securely. At the same time, mobile application management can manage the black-and-white list and forced installation of remote mobile application devices in combination with application policies.

2.7.3. Mobile Content Management (MCM). The enterprise shared files are protected through containerization or security sandbox technology. It can isolate, monitor, and control the distribution and access of sensitive information, prevent data from being transmitted, copied, and embezzled, and start an automatic protection mechanism for confidential files. In case of device loss or employee turnover, the administrator can remotely erase the device through the management background. Most enterprises prioritize mobile device security, especially in specific application scenarios, so MCM is essential for EMM.

2.7.4. Report Management. Report management realizes the statistics of application reports, equipment reports, policy reports, flow reports, and user reports. Meanwhile, it can display these statistic data in various forms, such as graphics, tables, and line charts, which can be exported in PDF, HTML, and Excel to facilitate management and control.

2.7.5. Security management. Security management secures enterprise mobile devices through data encryption, access authorization, shared devices, application packaging and control, device locking, and other measures. The specific functions are as follows:

Terminal security: if the device is lost or the Subscriber Identity Module (SIM) card is replaced by others, employees on the ZIYA self-service platform can easily set a password remotely to lock the device to prevent privacy disclosure. At the same time, they can remotely erase the data on the device and protect information security. Compliance management will notify the administrator immediately via e-mail or short message service (SMS) upon any user's operation violation.

Application security: It provides unified internal application release and management. Combined with the application strategy, the remote mobile device applications can be subjected to security management, such as application authentication, application function restriction, application time fence, black-and-white list, forced installation, and uninstallation of remote applications. Thereby, it ensures enterprise application security.

Transmission security: It establishes an encrypted transmission tunnel. It adopts a high-strength private one-machine-one-encryption algorithm to provide application-level address extension for enterprise applications, transmit personal, and enterprise applications separately, and ensure data transmission security.

Data security provides a safe sandbox container for enterprise applications to distinguish personal data and enterprise data in employee equipment. Also, it provides security protection against copy, screen capture, and data security watermark to ensure the local security of enterprise data in an all-around way.

Internet behavior security regulates employees' Internet behavior and restricts their accessible websites, protocols, and downloadable contents through a secure browser. Besides, it can configure browser home page and bookmarks and establish an enterprise's sensitive thesaurus. When sensitive words are input, users will be prompted to delete them. For smartphone-specific and SIM card-specific devices, Internet behavior security supports the binding of the cardholder. It can lock the mobile phone and SIM card after the employee changes the card privately.

A single function cannot meet the management needs of enterprises in the comprehensive management of enterprise mobile devices. With a more thorough understanding of the security and management of mobile devices, mobile applications, and data information, the devices can be better managed.

In the result part, a financial enterprise in a city is selected as the research object. The enterprise's annual OI is predicted using the proposed financial management model. The enterprise information, such as personnel, project type, and quantity, is used as the input as the prediction basis. Then, the predicted OI is compared with the enterprise's actual annual OI. Second, the enterprise's internal position and personnel deployment in the past year are estimated to verify the model's performance.

3. Actual Experimental Results and Analysis

3.1. Comparison between Annual OI Forecast and Actual Value. This section investigates some local enterprises' recruitment situations and position requirements. Then, the proposed EEM model predicts the enterprise annual OI based on enterprise funds, costs, and operations. The actual annual OI and the predicted value are compared to judge the feasibility and suitability of the proposed model. Table 5 calculates the specific results, and Figure 10 compares the outcomes. Subjective indexes can be both subjective and objective. Specifically, subjectivity refers to the individual judgment differences during the formation and measurement of subjective indexes, but it does not simply mean the measurement results come from subjective feelings. Surely, subjective indexes are designed, proposed, and measured by people with different features. Meanwhile, the subjective index conceptual design and measurement are inevitably affected by personal subjective factors. Such affection is reflected in index-mapping content and the index value deviations, which are consistent with the characteristics of the objective index.

Figure 10 suggests that the enterprise annual OI has continuously grown in the past six years, with a significant growth rate (GR) from 2018 to 2020. Noticeably, during 2015–2017, the predicted value was lower than the actual value. Presumably, at that time, the enterprise branches did not inform the headquarters of the sales situation timely. Therefore, in the headquarters-based prediction, the sales quota of the branches was not included in the calculation, resulting in a much lesser predicted value than the actual value. The largest error occurred in 2017, with a difference of 90,000 RMB. The smallest error occurred in 2015, with a deviation of 21,000 RMB. In 2018–2020, the predicted value was higher than the actual value; the maximum error occurred in 2019, with a difference of 2.762 million RMB; the minimum error occurred in 2018, with a deviation of 122,000 RMB. The model can predict the enterprise sales quota with high accuracy. However, in recent years, the sales quota of each enterprise has been growing steadily. If the sales quota drops suddenly, the model error might increase in the sales quota prediction, but the model can show the errors in time. Accordingly, enterprises can optimize and improve the sales strategy to avoid deficits.

On the other hand, Figure 10 implies that the predicted and actual growth trend is similar, indicating that the error is relatively small. Even if the maximum error reaches 2.762 million RMB, it is acceptably tiny compared with the overall 53.471 million RMB income. The error rate is only 276.2/5347.1 ≈ 5.1%. Therefore, the proposed DBT-based integrated EEM model can provide new ideas for EMA strategies.

3.2. Enterprise's HR Structure. When an enterprise reaches a certain scale, its internal positions will be divided into various types and levels. Whether a large-scale enterprise can carry out reasonable job planning for internal personnel will affect its smooth operation and management. Such factors include level, type, and the number of positions. In this section, the economic management model will be used to predict the type and number of different employees according to the enterprise type and size. The results will be compared with the actual number of employees to infer whether the inference of the model is reasonable and correct and further judge the rationality of the model. Figure 11 manifests the results.

Table 5: Comparison between predicted OI and actual OI (data unit: 10,000 RMB).

	Comparison items	
Year	Predicted value	Actual value
2015	306.8	308.9
2016	389.7	397.4
2017	901.8	910.8
2018	1859.7	1847.5
2019	3697.7	3421.5
2020	5449.8	5347.1

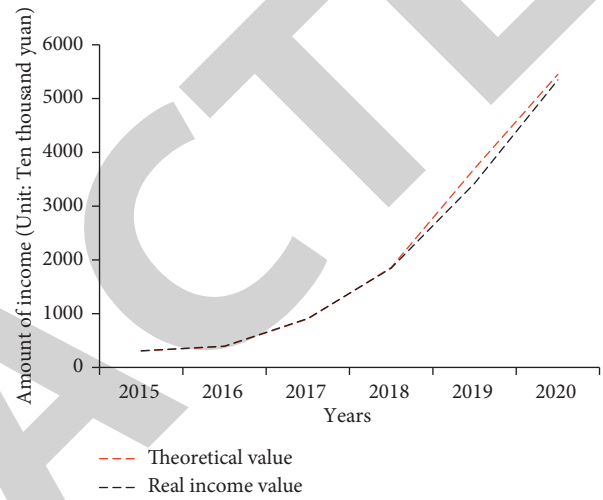

Figure 10: Comparison between predicted OI and actual OI.

The personnel allocation of four different enterprise organizations is forecasted, respectively, and the forecasted positions are operation strategy, sales development, and internal specification. It can be seen from the bar chart in Figure 11 that the predicted number of job deployments is very close to the actual number of employees in the enterprise.

In Figure 11(a), the minimum error is one person, and the maximum error is two. In Figure 11(b), the minimum error is two people, and the maximum error is six people. In Figure 11(c), the minimum error is one person, and the maximum error is eight persons. In Figure 11(d), the minimum error is one person, and the maximum error is two. Figure 11(c) is the primary organization with a large population base; thus, a two-people deviation in Figure 11(c) only has a tiny overall impact on the enterprise HR structure. By comparison, Figure 11(d) is a branch organization with a small population base, but the primary organization can allocate its personnel. Therefore, a two-people error still will not significantly impact its HR structure. Overall, the errors are within the acceptable range. Moreover, the predicted

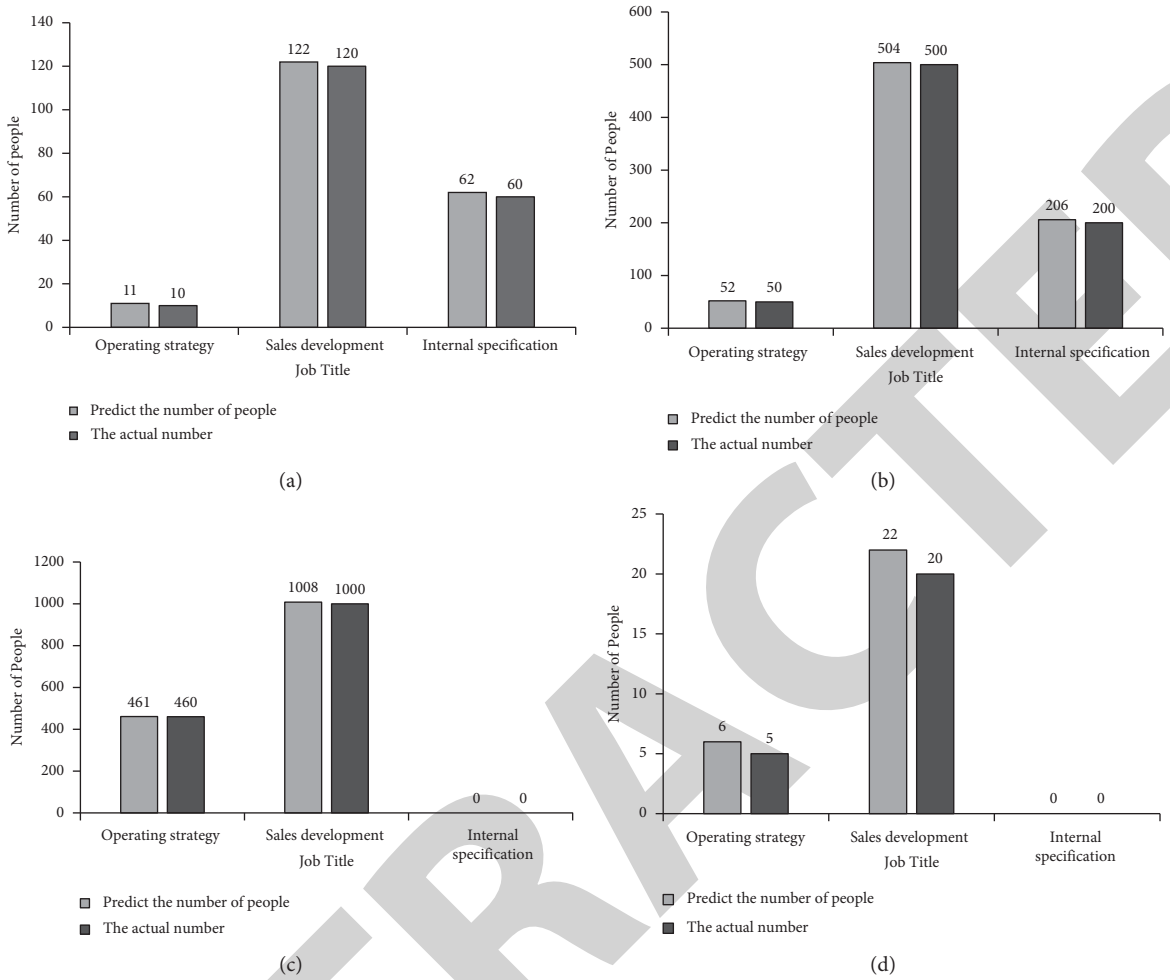

Figure 11: Comparison between the predicted number of positions and the actual number of positions ((a) data of level-2 enterprise organization, (b) data of level-1 enterprise organization, (c) data of level-1 enterprise branch office, and (d) data of level-2 enterprise branch office).

number of positions by the proposed integrated economic management model is higher than the actual number. Probably, it is because the proposed integrated economic management model is an open prediction method. Nevertheless, the performance of the proposed model is suitable, ensuring high accuracy for the deployment and calculation of the number of positions and personnel in the enterprise. The proposed model can apply well to innovative EEM. It can provide references for enterprise development by modifying the recruitment conditions timely and customizing recruitment strategies.

4. Conclusion

The recent years mark the emergence, evolution, and optimization of BDT and economic globalization, bringing new challenges and opportunities to financial enterprises. At the same time, the BDE has helped financial enterprises further digitalize economic management to adapt to the volatile economic environment. Therefore, the EEM model must be innovated through new technological means, such as BDT. As such, enterprises can gain a firm foothold in the fierce business competition and seek better development. To this end, this paper studies the innovation of EEM. Firstly, it studies and expounds on the BDT and EEM and integrates the two, and analyzes the influence of BDE on EEM. Following the hierarchical classification of the EEM, this paper explores the EEM innovation to provide the basis for pinpointing EMA. As a result, an integrated economic management model is proposed for a financial enterprise. Subsequently, the proposed model calculates the enterprise annual OI in the past six years based on historical data. The results imply that the proposed model shows a small error and can accurately predict the OI and cost data. Further, the proposed model estimates the position deployment in the four dimensions of the enterprise HR structure and compares the results with the actual number. Therefore, the proposed BDT-based integrated economic management model can broaden the EMA vision and provide theoretical bases for enterprise innovation. Lastly, some deficiencies are summarized, and the research prospect is envisioned. There are many objective laws in today's market economy. These laws aim to raise market economy proportion, maximize enterprise economic benefits, and optimize industrial

clusters. These problems need to be gradually excavated. In view of this, the research and analysis on the objective economic law under the background of market economy visions a broad development prospect. The data analysis department holds detailed data and materials. Thus, they can conduct targeted research and analysis on the data content beneath the surface, excavate the hidden feature, and replace the perceptual development knowledge with rational knowledge. Furthermore, these analyses can sublime the understanding of objective economic laws and illustrate the enterprise development status and its internal relationship. On the one hand, enterprise managers and relevant departments can understand enterprise economic behaviors and enterprise development status and direction to improve EMA. On the other hand, full play should be given the data analysis in scientific enterprise operation, management, and decision-making. After analyzing the model errors causes, this paper believes that the following factors: the main development direction of the local city; professional types of local universities; and local natural factors are the most likely to deviate the model estimation. In the follow-up research, the model will be improved in these regards.

Data Availability

The labeled dataset used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declares no competing interests.

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