# Study on the Necessity of Applying Human Resource Accounting in Modern Enterprises in the Digital Age and Optimization Strategies

#### Meiyuan Xia

School of Management Engineering and Business, Hebei University of Engineering, Handan, Hebei, China

Abstract: In the digital age, the application of Human Resource Accounting (HRA) in holds significant practical enterprises significance. As a new branch of accounting, HRA has garnered widespread attention from both the academic and practical accounting communities in recent years. This paper first reviews and analyzes the significance and necessity of applying HRA, followed by an exposition on the current application status and challenges faced by HRA in modern enterprises. Subsequently, corresponding optimization strategies are proposed to provide insights and references for relevant academic research in the field of Human Resource Accounting.

Keywords: Digital Age; Human Resource Accounting; Modern Enterprises; Optimization Strategies

#### 1. Introduction

With the advent of the digital age, enterprises are facing unprecedented competitive pressure and business challenges. The profound changes brought about by digital transformation not only involve the production and marketing models of enterprises but also deeply impact their internal management and operational methods. In this context, human resource management also encounters new opportunities and challenges.

Human resource is one of the most important assets of an enterprise, and strengthening the management and utilization of human resources is of paramount significance for its development. In the digital context, the application of human resource accounting has emerged as a new management tool, which measures, evaluates, and manages the human resources of enterprises as crucial assets. Compared to traditional human resource management, the application of human resource accounting not only helps enterprises

better understand and grasp the costs, value, and benefits of human resources but also enhances the efficiency and quality of decision-making. However, in current practice, the dissemination and depth of application of human resource accounting remain relatively limited. To better grasp the opportunities and challenges of human resource management in the digital context, this paper aims to explore the necessity of applying human resource accounting in the digital context and propose corresponding research questions and approaches. By analyzing the current status and trends of human resource accounting application, this paper aims to provide references and insights for enterprise practices and theoretical research, thereby promoting innovation and development in human resource management.

### 2. Analysis of the Necessity of Applying Human Resource Accounting in Modern Enterprises in the Digital Age

## 2.1 The Significance of Applying Human Resource Accounting in Modern Enterprises in the Digital Age

Human Resource Accounting refers to a management tool that applies principles and methods of financial accounting to measure, evaluate, manage, make decisions about, and report on enterprise human resources. It utilizes accounting principles and methods to digitally record and analyze relevant data regarding an enterprise's human resources, including employee salaries, benefits, training, labor costs, etc. By quantifying and analyzing human resources, Human Resource Accounting can provide decision support and management advice to enterprise managers, helping them better understand the dynamic changes and trends in human resources, improve the efficiency and quality of human resource management, and promote sustainable development of the enterprise.

#### (1)Theoretical Significance

Human Resource Accounting, as a branch of accounting, provides a new perspective and theoretical support to the theoretical framework of accounting, further refining the theoretical framework of accounting and enriching its theoretical system. In comparison to traditional financial accounting, which primarily focuses on the financial status and economic performance of enterprises, Human Resource Accounting pays more attention to the management and operation of human resources, providing more and comprehensive accurate accounting information, thus offering stronger support for managerial decision-making. Additionally, Human Resource Accounting advocates for the human-centric accounting concept, marking a transition in accounting from solely economic operations to a human-oriented management philosophy. By applying Human Resource Accounting, enterprises can better focus on employee development and growth, cultivate a humanized corporate culture, and achieve mutual development between employees and the enterprise. Its application expands the horizon of human-centric accounting research, providing robust theoretical support for enriching and developing the concepts and methods of human-centric accounting.

#### (2)Practical Significance

In the context of digitalization, enterprise management faces increasingly complex and diversified challenges and opportunities. The application of Human Resource Accounting can help enterprise managers better understand the value and role of human resources within the company. It aids enterprises in comprehending the current status and trends of their human resources, and more accurately assessing the costs and benefits associated with them. This, in facilitates the formulation implementation of more scientific and effective human resource management strategies and policies, which can enhance the efficiency of human resource utilization and reduce employee turnover rates, thereby providing a more solid foundation for the sustainable development of the enterprise. Additionally, Human Resource Accounting focuses on the management of human resources within the enterprise, including issues related to employee rights and benefits. Therefore, the application of Human Resource

Accounting can help enterprises better protect employee rights and benefits and promote the realization of corporate social responsibility.

### 2.2 The Research Necessity of Applying Human Resource Accounting in Modern Enterprises in the Digital Age

(1)Enhancing the Scientific and Precision of Human Resource Management

Modern enterprises face various changes and complexities regarding employee qualifications, skills, and experiences. Implementing Human Resource Accounting enables enterprise managers to emphasize the efficiency of human resource investments<sup>[1]</sup>, helping companies better understand employee contributions and value. This aids in formulating more precise and scientific compensation and benefits policies, thereby increasing employee satisfaction and ultimately enhancing loyalty, enterprise performance and competitiveness.

(2)Improving the Scientific and Accuracy of Strategic Decision-Making

Modern enterprises must tackle challenges such as market changes, business expansion, and mergers and acquisitions. Human Resource Accounting, through data-driven methods, allows for the analysis and evaluation of human resources, providing data support that helps enterprises make more scientific and effective strategic decisions, thus boosting market competitiveness and profitability.

(3)Promoting Digital Transformation and Talent Development

With the acceleration of digital transformation, enterprises need to continuously update and upgrade technological equipment and software tools to better adapt to the demands and changes of the digital age. Simultaneously, companies must recruit and train talents with digital skills and expertise in Human Resource Accounting to improve the application and management level of Human Resource Accounting in the digital age.

### 3. The Current Situation and Challenges of Applying Human Resource Accounting in Modern Enterprises in the Digital Age

## 3.1 The Current Situation of Applying Human Resource Accounting in Modern Enterprises in the Digital Age

(1)Widespread Application of Digital Technology

With the application of technologies such as artificial intelligence and big data, the level of intelligence in the application of Human Resource Accounting in modern enterprises continues to increase. Shared information technology facilitates the efficient and low-cost flow of effective information, optimizing the allocation of social economic and information resources<sup>[2]</sup>. This allows for the recording and management of various internal and external management data of enterprises through information systems. Digital technology enables comprehensive and real-time monitoring, analysis, management of human and including employee resource-related data, compensation, benefits, training, and labor costs. (2)Digital Transformation of Human Resource Management

As digital transformation progresses, enterprise human resource management is also moving towards digitalization. More and companies are adopting digital technologies to achieve comprehensive management and analysis of human resources, thereby better understanding the return on investment, risks, and cost-effectiveness of human resources. Digital transformation offers extensive space and opportunities for the application of Human Resource Accounting, allowing enterprises to more accurately grasp the status and trends of human resources, better leverage the potential of human resources, help formulate more scientific and effective human resource management and improve decision-making strategies, efficiency and quality.

(3)Continuous Improvement of Systematic Management Levels

The application of Human Resource Accounting enables enterprises to systematically manage human resources, encompassing various aspects such as recruitment, training, evaluation, and incentives. This comprehensive approach helps enterprises better understand and manage human resources, thereby enhancing overall competitiveness.

## **3.2** Challenges Faced by Modern Enterprises in Applying Human Resource Accounting in the Digital Age

(1)Rapid Technological Updates and High Application Costs

Continuous technological updates and changes pose a significant challenge to the application of Human Resource Accounting in the digital age.

With the development of technology, new digital technologies emerge constantly, requiring enterprises to continuously learn and adapt to new technologies while maintaining and updating existing ones. The rapid pace of technological change may gradually increase the application costs of digital technology for some enterprises, requiring significant time and effort for technology updates and maintenance. Additionally, technological updates and changes may render existing human resource accounting applications unable to adapt to the new technological environment, thus affecting enterprise development.

(2) Difficulty Ensuring Data Quality

Data quality refers to the characteristics of accuracy, completeness, consistency, timeliness, reliability, and usability of data. The application of Human Resource Accounting in the digital age requires a large amount of data support, including data from internal enterprise systems as personnel, compensation, performance management, as well as external sources such as labor markets, economic environments, and legal policies. The quality of obtained data directly affects the accuracy and reliability of decision-making by enterprises. However, the sources and quality of data are often difficult to ensure, leading to issues such as incomplete data and data errors. Therefore, ensuring data quality is an important challenge for the application of Human Resource Accounting in the digital age.

(3)Privacy and Security Issues Require Urgent Attention

With the application of digital technology, data involved in Human Resource Accounting applications may include important information such as employee privacy and business secrets. This poses a new challenge for the application of Human Resource Accounting in the digital age data privacy and security issues. Currently, many enterprises possess large amounts of employee data, including sensitive information such as personal identity, salary, and social insurance. If this data is leaked, tampered with, or misused, it could cause significant losses to both employees and enterprises. Therefore, ensuring data security and privacy has become one of the important challenges faced by the application of Human Resource Accounting in the digital age.

(4)Low Matching Degree of Professional Talents The existing research teams in Human Resource

Accounting have obvious shortcomings, lacking high-level research teams and talents, which may result in relatively one-sided research that fails to interpret the rich connotations of Human Resource Accounting<sup>[3]</sup>. Human Resource Accounting is an interdisciplinary subject that requires a foundation in accounting and financial management, as well as knowledge in fields such as human resource management, behavioral science, and information technology. Therefore, enterprises need to cultivate a team of talents with digital thinking and expertise in human promote resource management to development of Human Resource Accounting applications in the digital age. However, there are bottlenecks in talent cultivation in enterprises currently, which is also one of the challenges faced by the application of Human Resource Accounting in the digital age.

### 4. Strategies for Optimizing the Application of Human Resources Accounting in the Digital Era

### 4.1 Formulating a Strategic Digital Plan to Address Technological Changes

During the digital transformation process, companies must prioritize technology updates and maintenance to ensure the smooth operation of human resources accounting applications. This is crucial for effectively reducing the costs and risks associated with digital technology, thereby enhancing operational efficiency and competitiveness. Establishing partnerships with technology firms is also an effective approach for enhancing a company's digital capabilities. These firms possess technological expertise and practical experience, enabling them to provide technical support and services to companies. Collaborating with technology firms facilitates the sharing of technological advancements and experiences, thereby expediting implementation and adoption of digital human resources accounting applications.

## 4.2 Ensuring Data Quality to Maintain the Effectiveness of Human Resources Accounting Applications

Firstly, companies should establish data management systems encompassing data collection, classification, storage, updating, and cleansing processes to ensure data accuracy and consistency. By defining standards and procedures for data collection, storage, and management, and enhancing data monitoring and evaluation, companies can guarantee data quality and reliability. Secondly, employing data mining and analysis techniques enables companies to uncover the latent value of data, thereby enhancing data utilization rates and value. Effective data sharing and collaboration mechanisms are essential for modern enterprises to strengthen data credibility and availability. Collaborating with other enterprises. organizations, and government agencies to share data resources facilitates the acquisition of additional insights and information, thereby enhancing data comprehensiveness and depth.

### **4.3 Establishing Data Management Policies to Safeguard Data Security**

Data security and privacy are prerequisites for using human resources accounting. To address data privacy and security concerns, companies must enhance data protection and management by implementing appropriate security measures to ensure data security and privacy. Measures such as encryption technology, access control technology, and data backup effectively safeguard data security. Additionally, companies should enhance employee awareness and training data security, establish comprehensive data management policies and standards, and ensure data legitimacy and authenticity to prevent data tampering or misuse. Furthermore, enhancing communication and cooperation with legal and regulatory authorities to establish compliant data management and application mechanisms ensures the legality and credibility of data applications, thereby providing robust support for the sustainable development of enterprises.

### **4.4 Enhancing Talent Development to Provide Support for Human Resources Accounting**

Companies should strengthen talent development efforts by conducting relevant training activities to cultivate a workforce with digital thinking and expertise in human Additionally, resources management<sup>[4]</sup>. companies should focus on nurturing research professionals teams and to foster interdisciplinary collaboration, break down disciplinary barriers, and enhance the overall quality and professionalism of human resources accounting researchers and practitioners. Moreover, governments should prioritize the establishment of high-level research institutions

in human resources accounting to attract outstanding talents, provide favorable research environments and conditions, cultivate high-level human resources accounting research talents, and enhance the research level and influence of human resources accounting in the country. This provides robust support for optimizing the application of human resources accounting in the digital era.

#### References

[1]Wu Changxin, Tan Mingliang. Necessity and Feasibility Analysis of Human Resource Accounting[J]. Management and Technology of Small and Medium-sized

- Enterprises, 2022(15): 56-58.
- [2]Wang Guifang. A Brief Analysis of the Transformation Trend of Accounting Information Concept in the Digital Era[J]. Metallurgical Finance and Accounting, 2023, 42(01): 52-54.
- [3]Wu Changxin. Problems and Countermeasures Analysis of Human Resource Accounting from the Perspective of Enterprise Management[J]. Management and Technology of Small and Medium-sized Enterprises, 2023(05): 130-132.
- [4]Wang Nuanying. The Impact of Digital Economy on Enterprise Finance[J]. Marketing World, 2022(19): 35-37.