

Analysis of innovative approaches to enterprise management models in the era of big data

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Keywords: Enterprises; Management mode; In the era of big data; Innovative approaches

Abstract: With the significant improvement of economic level, information technology is also flourishing in this context. Traditional enterprises face many challenges and pressures in the era of big data, and need to actively reform and innovate management models to better adapt to the trend of economic and social development. However, looking at the current situation of enterprise management, it is known that the adopted models lack effectiveness, and there is a shortage of talent in computer management using big data processing, resulting in the disconnection between enterprises and big data applications in the context of the big data era, which affects the quality of enterprise management. In this regard, this article analyzes the innovative ways of enterprise management models based on the big data era from multiple aspects, hoping to provide reference for relevant personnel.

1. Introduction

The Internet, the most prominent symbol of the current society, has covered many fields, providing great convenience for people's work and life. Among them, the Internet shows a rapid growth in data storage and applications in video monitoring, intelligent mobile device applications and other aspects, indicating that the era of big data is also coming in an all-round way. The enterprise management model has been impacted in the context of the big data era. How to better develop and utilize the business value of enterprises and innovate management models in the context of the big data era is an urgent task that enterprises need to complete. Enterprise managers should have a clear understanding of the commercial value of big data technology, fully utilize the various information contained in big data, drive the transformation of management models, and improve the level of enterprise management. In addition, managers should adopt practical and effective information management methods according to the actual needs of the enterprise, fully leverage the advantages of big data technology in the enterprise, promote the transformation of enterprise management models, optimize the core management structure of the enterprise, and promote the healthy development of the enterprise^[4].

2. The Current Situation of Enterprise Management in the Era of Big Data

2.1 Backward management philosophy

Undoubtedly, enterprises need to rely on data thinking to carry out various management work in the big data environment. However, currently, some enterprises have not established a strong data thinking in their actual work. Many managers lack basic knowledge of data science, statistics, and machine learning, and are not familiar with commonly used data analysis tools and methods. They still rely on traditional management models and empirical judgments, and cannot seize the opportunities of big data technology in a timely manner. Therefore, they are frequently hindered in applying big data technology^[1]. For example, some enterprises have not developed sound and comprehensive big data technology application plans based on their actual situation when carrying out management work. In addition to insufficient funding, a series of work such as personnel management, education, and training are also relatively weak. Although some enterprises have strengthened the construction of ERP systems or established OA systems in information management, they still lack awareness of applying big data technology to improve management efficiency and expand management systems in practical work.

2.2 Management constraints

If enterprises want to do a good job in management under the background of big data, they need to improve and perfect the form of enterprise management, and maximize the efficiency of enterprise management work. However, analyzing the overall operation of some enterprise management, it is found that most enterprises are detached from big data in their management forms, and some operating modes are still constrained. For example, some enterprises have not established a scientific and effective big data marketing center in their marketing, and have not conducted investigations, collected, organized, and analyzed information related to marketing in the early stage. The interaction mechanism is also lacking in sound and perfect. At the same time, some enterprises lack awareness of applying big data technology in administrative management, especially in identifying, analyzing, and solving problems, and still use traditional working methods for operations. In addition, big data technology needs to be combined with enterprise management networking and informatization. If not combined, it will inevitably not be able to play the advantageous role that big data should have. However, most enterprises have not implemented scientific and effective design for enterprise management networking and informatization, and some management systems have obvious fragmentation, making it difficult to form comprehensive service functions. Therefore, enterprises need to strengthen their investment in information technology, establish information integration platforms and analysis tools that adapt to the era of big data, and strengthen their emphasis on data quality management^[3].

2.3 Single management platform

Usually, enterprises need to rely on corresponding platforms to apply big data technology, and without platform support, everything is just empty talk. Although some companies are able to process relevant data on their own, there still exists a single management platform in practical work. For example, most enterprises are applying ERP systems. Although the system has strong resource integration functions, it has not formed a sound and complete big data module, so there are shortcomings in a series of work such as data collection, processing, and analysis. In addition, due to the relatively single enterprise management platform, it is difficult to strengthen the integration and integration of enterprise management when applying big data, and can only play the advantage

of big data in some fields, which cannot provide effective data reference for enterprise management.

3. Innovative Strategies for Enterprise Management Models in the Era of Big Data

3.1 Innovative Enterprise Management Philosophy

For modern enterprises, only by innovating management concepts can they better adapt to the needs of economic and social development, effectively promote enterprise management innovation and reform, and comprehensively improve the quality and level of enterprise management work. Especially for enterprise management and operators, it is necessary to continuously strengthen the systematic application of big data in enterprise management and fully leverage the advantages of big data. Enterprise management should establish a data-driven decision-making philosophy, use data analysis results as important decision-making basis, scientifically formulate data strategies, and establish a data decision-making team directly led by executives to ensure the implementation of big data applications ^[2]. In addition to strengthening the awareness of big data application, innovative enterprise management concepts also need to increase the integration of various management fields, content, and processes in practical work, build a scientific and effective big data management platform, and corresponding management and service centers. This center is solely responsible for enterprise big data management work, laying the foundation for better application of big data technology by enterprises, and further promoting the development of enterprise big data platform construction towards diversification and efficiency.

3.2 Optimizing Enterprise Management Forms

There are various types of data in the current economy and society, and the update speed is extremely fast. If enterprises want to survive stably in the era of big data, they need to have the ability to analyze and process data in real time. The most important thing is to extract data that is conducive to the development of enterprises from diverse and complex information, and on this basis, combine it with the actual development situation to face different types of market changes. Artificial intelligence is the most prominent symbol in the era of big data, and has become a driving force for promoting the reform and innovation of enterprise management models. While promoting the rapid development of enterprise economy, it continuously extends towards intelligence, digitization, and other directions. For example, at the World Intelligence Conference, domestic leaders in cloud recognition and cloud computing proposed using the "enterprise brain" as an effective way for artificial intelligence to assist in the efficient development of enterprises. This not only enhances the real-time data analysis ability of enterprises, but also promotes their position in future development. So enterprise managers need to pay attention to real-time data analysis capabilities to ensure stable development. In addition, enterprises also need to build an internal operating system that integrates intelligence and automation based on their actual situation, saving time for enterprise managers and providing important guarantees for internal decision-making.

At the same time, enterprises also need to strengthen their ability to integrate and process diverse data on the basis of their existing data processing capabilities, which is an important measure for enterprise reform and innovative management models. In the current era of information explosion, people have more ways to access information than ever before, and this is especially true for enterprises. Enterprise managers also need to regularly organize professional personnel to participate in technical training such as big data, strengthen the data processing ability of big data professionals, and lay a foundation for the sustainable development of the enterprise. In addition, enterprise managers need to optimize their internal systems based on actual situations, so that each employee can filter data, improve work efficiency, and enhance the quality of enterprise

management. Undoubtedly, the form of enterprise management has undergone significant changes compared to the past in the context of big data. Only by adapting to the concept and technology of big data can we better adapt to social development trends, lay the foundation for enterprise reform and innovation, and maximize management efficiency.

3.3 Improving the Enterprise Management Platform

When innovating management models, enterprises should consider improving and perfecting management platforms as one of the important measures, especially integrating management platforms with big data environments, and continuously strengthening the systematic, integrated, and comprehensive nature of enterprise management platforms⁴. If you want to achieve the above goals, enterprises need to effectively integrate existing information management platforms when applying big data technology. For example, enterprises can set up separate big data modules in the EPR system to enhance the collection, analysis, and organization of various information for the enterprise. For example, when applying rapid computerization, enterprises can integrate big data technology with cloud computing technology to establish their own cloud accounting platform. This platform not only collects and analyzes internal data of the enterprise, but also collects and analyzes external available data, continuously improving the breadth and depth of data collection and analysis. In addition, effective integration with various management platforms is necessary to improve and perfect the enterprise management platform. In this process, a separate central management system can be established to comprehensively apply big data technology.

4. Conclusion

In short, we must adhere to keeping up with the times and apply technologies such as big data and cloud computing to various management activities in enterprises. We also need to use these advanced technologies to collect, organize, and analyze the data information generated by management activities. Based on the feedback results obtained, we can analyze the shortcomings and shortcomings of enterprise management, and achieve innovative and upgraded enterprise management models and improve management efficiency and benefits through continuous optimization and improvement⁵. Only in this way can we effectively solve the problems of uneven resource allocation and low management efficiency in current enterprise management, and enable enterprises to occupy a place in the increasingly competitive market, which has important practical significance for the long-term stable development of enterprises.

References

- [1] Zhao Yu. *Research on the Innovation Path of Enterprise Management Models in the Era of Big Data* [J]. *Industrial Innovation Research*, 2024 (05): 163-165
- [2] Liu Bing. *Research on Enterprise Management Innovation Models in the Context of Big Data Era* [J]. *Guangdong Economics*, 2024 (05): 66-68
- [3] Zhou Zhao, Huang Bingbing. *Analysis of Innovation and Development of Enterprise Management Models in the Context of Big Data Era* [J]. *Modern Business*, 2023 (24): 83-86. DOI: 10.14097/j.cnki.5392/2023.24.021
- [4] Wang Qiong. *Innovation of Enterprise Management Models in the Era of Big Data* [J]. *Quality and Market*, 2023 (15): 28-30
- [5] An Chunming, Ma Mengyao. *Innovative Exploration of Enterprise Management Models in the Era of Big Data* [J]. *Enterprise Technology and Development*, 2022 (12): 169-171