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The Current Situation and Countermeasures of Chinese Enterprise Management under Big Data

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Abstract: With the rapid development of science and technology, big data is becoming an important resource for enterprise management. The purpose of this paper is to analyse the current situation of Chinese enterprise management under big data, conduct cause analysis, and propose corresponding countermeasures. By reviewing and analysing relevant literature, we find that in the era of big data, Chinese enterprises face challenges in data acquisition, data processing and data application, data security privacy and protection. Then, we analyse the causes from four aspects: data dispersion and fragmentation, data quality issues, data privacy and security issues, and technology and talent shortage. Finally, in order to make full use of the opportunities that big data brings to enterprises, Chinese enterprises need to establish a sound data strategy, strengthen data security and protection, build a data-driven decision-making system, strengthen data sharing and cooperation, continuously innovate and optimise their business models, strengthen data governance, broaden the field of data applications, and cultivate high-quality data analytics talents. These countermeasures will help Chinese enterprises better cope with the challenges posed by the era of big data and achieve sustained innovation and development.

Keywords: Big Data; Chinese Enterprises; Management Status Quo; Countermeasures.

1. Introduction

The arrival of the big data era has brought great opportunities and challenges to Chinese enterprise management. The rapid development of big data provides enterprises with massive data resources and more information support for decision-making and operation. However, at the same time, enterprises also face many problems such as data acquisition, data processing, data application, data security and privacy protection. This paper will focus on analyzing the current situation of Chinese enterprise management under the background of big data and put forward corresponding countermeasures.

2. The Current Situation of Chinese Enterprise Management under Big Data

Difficulty in data acquisition. Due to the huge amount of data, it becomes more difficult to obtain various types of data. Enterprises need to obtain data from multiple channels and need to clean and organise the data for subsequent analysis and application. Chinese enterprises have problems in data acquisition such as single data source, low data quality and data silos.

Data processing challenges. Big data contains a large amount of unstructured data, such as images, videos, voice, etc., which are relatively complex to process. In addition, the speed of data processing is also a challenge, because big data processing requires powerful computing and storage capabilities, and traditional data processing methods can no longer meet the demand. Big data puts higher demands on the processing capabilities of enterprises. Chinese enterprises suffer from high data storage costs, slow data processing speed and poor data analysis capabilities in data processing.

Data application bottlenecks. Despite the huge potential of big data, many enterprises still have certain difficulties in practical application. On the one hand, enterprises need to have the relevant technology and talents for data analysis and application; on the other hand, they also need to establish a perfect data management system and mechanism to ensure the quality and effectiveness of data. Although Chinese enterprises have a large amount of data, there are bottlenecks in data application. These include the lack of effective data analysis models, the lack of suitable data application scenarios and insufficient data application capabilities.

Data security and privacy protection. In the era of big data, data security and privacy protection have become urgent issues for Chinese enterprises. Enterprises face the risk of data leakage, data theft and data privacy leakage. The application of big data cannot be separated from the sharing and exchange of data, yet data security has become one of the most important factors restricting the development of big data. Enterprises need to strengthen their data protection measures, including data encryption, access control, security auditing, etc., to ensure data security and privacy protection.

3. Analysis of the Causes of the Current Situation of Chinese Enterprise Management under Big Data

In the era of big data, the reasons for the problems of enterprise management can be attributed to the following in-depth analyses.

Data dispersion and fragmentation. With the rapid development of information technology, the data generated internally and externally by enterprises has grown exponentially. However, this data is often dispersed across different systems, departments and platforms, creating a fragmented data environment. This has led to difficulties in obtaining comprehensive data information in real time, affecting the accuracy and timeliness of decision-making.

Data quality issues. In the era of big data, data quality has become an important challenge. Due to the diversity of data sources and the complexity of the data processing process,

enterprises often encounter data quality problems, such as missing data, inconsistency, and inaccuracy, when collecting, cleaning, and integrating data. This makes it difficult for enterprises to rely on reliable and high-quality data when conducting analyses and making decisions.

Data privacy and security issues. In the era of big data, data privacy and security issues are becoming more prominent. Because enterprises need to handle a large amount of sensitive data, including personal information of customers and employees, once these data are leaked or misused, it will cause serious damage to the reputation and credibility of the enterprise. In addition, threats such as hacking and data leakage make business management riskier.

Technology and talent shortage. The rapid development of big data technology brings great opportunities to enterprise management, but it also brings challenges. Enterprises need to invest huge sums of money to buy and maintain big data platforms and train professionals who can process and analyse big data. However, the reality is that the supply of big data technology and professionals is relatively insufficient, and many enterprises have shortcomings in technology and talent, which limits the development and innovation of enterprise management.

4. Countermeasures to Deal with Enterprise Management in the Era of Big Data

In response to the challenges and opportunities of the big data era, Chinese enterprise management can take the following countermeasures.

Establish a sound data strategy. Enterprises should formulate a clear data strategy, define the goals of data collection, analysis and use, reasonably plan data resources and technology inputs, and clarify the principles and processes of data governance.

Strengthen data security protection. With the development of big data, enterprises face data leakage and privacy issues. Therefore, enterprises need to strengthen data security technology and management measures, establish a sound data security protection system, and ensure data integrity and confidentiality. Enterprises need to strengthen data security awareness, establish a sound data security management system, and take appropriate technical measures to ensure data security. At the same time, enterprises should focus on user privacy protection, not abuse user data, and use user data in a legal and compliant manner.

Build a data-driven decision-making system. Through data analysis and mining, enterprises can gain an in-depth understanding of market demand, consumer preferences and other information, thus providing a scientific basis for decision-making. Enterprises should strengthen collaboration with data analysis teams to build a data-driven decision-making system and improve the accuracy and efficiency of decision-making.

Strengthen data sharing and cooperation. In the era of big data, enterprises can share and cooperate with each other through data sharing to achieve complementary resources and advantages. Enterprises should actively participate in the development of industry data standards and the open sharing of data to promote the collaborative development of data within the industry and enhance overall competitiveness.

Continuous innovation and optimisation of business models. Big data provides more opportunities for enterprise innovation. Enterprises can optimise product design and marketing strategies through data analysis and mining, realise refined operations and personalised services, and enhance user experience and enterprise competitiveness.

Strengthen data governance. Chinese enterprises need to strengthen the management and control of data and establish a perfect data governance system. This includes developing specifications for data collection, processing and use to ensure the quality and reliability of data.

Broaden data application areas. Chinese companies should actively broaden the field of data application, not only limited to marketing and customer relationship management. Big data can be applied to production management, supply chain optimisation, intelligent manufacturing and other areas to improve business efficiency.

Cultivate high-quality data analysis talents. Chinese enterprises need to strengthen the cultivation of big data analysis capabilities and introduce and cultivate high-quality data analysis talents. Through training and talent introduction, improve enterprises' data analysis capabilities and better utilise big data. Provide relevant training and development opportunities to stimulate employees' data thinking and innovation.

In conclusion, Chinese enterprises in the era of big data should strengthen the collection, analysis and use of data, improve data governance and security protection mechanisms, cultivate data analysis talents, build a data-driven decision-making system, strengthen data sharing and cooperation, and continue to innovate and optimise their business models in order to adapt to and lead the development of the big data era.

5. Conclusion

In the era of big data, Chinese enterprise management faces challenges in data acquisition, data processing, data application, data security and privacy protection. In order to make full use of the opportunities that big data brings to enterprises, Chinese enterprises need to establish a sound data strategy, strengthen data security protection, build a data-driven decision-making system, strengthen data sharing and cooperation, continuously innovate and optimise their business models, strengthen data governance, broaden the field of data application, and cultivate high-quality data analytics talents. These countermeasures will help Chinese enterprises better cope with the challenges brought by the big data era and achieve continuous innovation and development.

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