

# **Innovation of Enterprise Management Mode** in the Era of Big Data

Yong Zhang<sup>1</sup> and Junyi Shi<sup>2(⊠)</sup>

School of Management, Guizhou University, Guiyang 550025, China
Accounting and Business Management, De Montfort University, Leicester L1 9BH, UK

**Abstract.** With the rapid development of Internet technology, the advent of the era of big data and began to penetrate into all walks of life in society, and more and more in the enterprise management mode to play a positive role. After entering the new century, the huge data and changeable market environment have formed a new situation of economic development, which puts forward higher requirements for enterprise management. Under the influence of big data, various advanced technologies have improved the informatization level of enterprise management. It has become the default consensus of all walks of life to use various information technologies to innovate enterprise management mode. As the era of big data has a certain impact on the traditional management mode of enterprises, the traditional management mode gradually shows its shortcomings. Therefore, only by conforming to the trend of the development of the times and innovating the enterprise management mode, can we make full use of the advantages brought by the era of big data and quickly help enterprises identify massive information. Each industry should strengthen its own reform and make continuous innovation, so as to make greater contribution to the society. Based on the reality, this paper first gives a brief overview of the concept of the era of big data, then discusses the problems existing in the management mode of enterprises in the era of big data, and finally puts forward effective strategies for the innovation of enterprise management mode in the era of big data, so as to create more favorable conditions for the development of enterprises.

**Keywords:** Big data era · Enterprise management mode · Innovation research

#### 1 Introduction

At this stage, Internet technology has achieved rapid development and wide popularization. At the same time, big data technology based on the background of modern information also shows a vigorous trend, showing an explosive trend in various fields. Therefore, we are currently facing the impact of the era of big data [1]. Since the reform and opening up, China has been using the traditional enterprise management mode. However, under the current development background, if enterprises want to achieve greater success, they should consciously reform the management system. Innovation cannot meet the development needs of the era of big data. Therefore, although enterprise

management is facing the reform of traditional mode, it also meets new opportunities of innovation management mode. As enterprise managers, they should have the courage to seize the opportunities and meet the challenges brought by the times. If enterprises want to ensure the pace of stable development, they should make full use of the advanced technology in the era of big data, promote the innovation of management mode, and provide internal support power for enterprise development.

First of all, big data is a new concept derived from the development of the times. It was first put forward by Macintosh, a silicon company in the United States, to describe the massive data generated in the era of information and knowledge explosion. The concept of big data technology is gradually extended from the concept of big data technology, which is used to extract from the high-efficiency data again to improve the efficiency of the whole database information utilization. Secondly, McKinsey information consulting company of the United States believes that big data is an indispensable factor of production in all walks of life. It uses conventional software tools to extract, manage and process the content that appears in a specific time, and comprehensively express the integrity [2-5]. Finally, according to the treatment of the life cycle of big data, it is usually divided into big data collection and preprocessing, big data retention and management, big data calculation methods and systems, big data mining and extraction, big data influence calculation, big data security and confidentiality. The emergence of big data technology optimizes the processing mode of massive information and improves the speed and efficiency of data utilization. China's enterprises have not fully adapted to the changes in the era of big data, and they are still at a loss in many cases.

## 2 Analyze the Current Situation and Existing Problems of Enterprise Management in the Era of Big Data

### 2.1 Enterprise Managers Ignore the Application of Big Data

The era of big data brings huge amounts of business information, including the speculation of economic development trend of all walks of life and the importance of extraction and application. However, it is obvious that the enterprise managers have not started from the overall situation consciousness, and have not found the invisible business information in the big data information, so they have ignored the problems in the era of big data. Most enterprise managers in our country think that big data era is just the complexity and diversification of data. They can only simply process and summarize the data in this case. They have not found what kind of role and value will be produced to the enterprise in the actual application process. Some enterprises even think that the massive business information contained in the era of big data has not come from financial statements and enterprise profit and loss statements. This kind of short-sighted enterprise managers' simple vision hinders enterprises from launching an impact to a higher direction and higher status. They only use big data to expand access to information, and lack of attention to the hidden value behind the era of big data [6].

### 2.2 The Intelligent and Automatic Level of Enterprise Management is not High Enough

The advanced technologies used in the era of big data include data preservation, data sorting and data collection. However, with the rapid development of Internet information technology, a variety of new technologies are gradually applied in various industries, such as cloud computing technology, which has been integrated into the social enterprise industry. The intellectualization and automation of enterprise management is the comprehensive application of various advanced technologies and tools in the era of big data. Under the background that Chinese enterprises are not familiar with, Gartner Group has proposed the definition of business intelligence in the last century. The core of big data era is to provide the latest management methods and basis for enterprises with the help of advantageous resources in the development process of the times. As the core content, it is involved in various advanced industries, including finance, mobile, Internet and other mobile e-commerce fields. However, the enterprise automation and intelligent management has not been widely popularized. Therefore, in the face of the development characteristics in the era of big data, enterprises cannot make effective adjustments, resulting in problems in the operation process.

### 2.3 The Scientific Concept of Big Data Era Has not Been Established

According to the current situation of social development, the arrival of the era of big data has shown a massive growth trend for the processing capacity of enterprise data. Although there are many types of enterprise management data, mainly including pure digital text structured data and semi-structured and fully structured data mode, these data types composed by most industry enterprises cannot adopt unified processing mode [7–10]. According to the current semi-structured processing mode in enterprises, the data processed by enterprises has accounted for more than 80%, and there is no effective management mode to improve. The problem of data integration in the era of big data is that the system platform constitutes different information systems, and it is difficult to truly realize data sharing in various business modules. Therefore, enterprises do not establish a scientific concept of the era of big data, which affects the work of all aspects of the enterprise, as well as the problem of safe storage of enterprise data, which is also the lack of current enterprise management. If the network hacker divulges the confidential information of enterprise management, it will cause a catastrophic threat to the enterprise.

### 3 Effective Strategies for Innovating Enterprise Management Mode in the Era of Big Data

### 3.1 Establish Enterprise Operation Decision-Making Mechanism Based on Big Data

Under the background that all walks of life in the whole society are facing the influence of big data technology, banning the traditional enterprise management mode has become the inevitable trend of the development of the times. Only by taking effective measures and implementing innovative enterprise management mode, is the key to win the development of enterprises at this stage. To understand the disadvantages of traditional management, enterprises should establish a set of business decision-making process suitable for the era of big data, so that the enterprise's decision-making can have an objective positioning. Specifically, it is to use Internet technology to obtain a large number of reference information [11], and arrange enterprise professionals to classify and screen the information in the information. As the main reference information of enterprise decision-making and operation, only by ensuring the scientific and efficient decision-making process, can we better meet the consumption and management form in the era of big data.

### 3.2 Enterprises Introduce and Cultivate Big Data Talents

China is in the background of big data era development. If we want to complete the exploration and innovation of enterprise management mode, we need to supplement the fresh blood of enterprises and introduce big data talents. Therefore, as an enterprise manager, he is not only responsible for the processing and collection of various data of the company, but also for the dynamic prediction of the development of social industry in the market. It is necessary to introduce big data talents instead of traditional thinking to treat the changing society. In addition, for a large number of employees of the enterprise, regular training and assessment of big data era and big data technology is not enough. It is not enough to only introduce big data talents, but also improve the processing ability of big data for all employees. Enterprises can select well-known scholars and experts in the industry according to their own conditions and qualifications to popularize the awareness of the era of big data in the form of lectures, and strengthen the exchange and learning of personnel, and make self coping strategies.

### 3.3 Improve the Hidden Business Value of Managers in Data

The impact on the development of enterprises caused by the era of big data is inevitable, and the enterprise management mode will be reflected in the process of reform and development. The effective use of big data for enterprises to achieve higher benefits is a positive significance. If we want to make big data technology work for us, we must deeply understand the connotation, characteristics and significance of big data [12–14]. On the one hand, it is necessary to make use of the value of big data for decision-making and operation in enterprise management to ensure the implementation of decision-making is scientific, reasonable and objective. On the other hand, in the process of developing business intelligence, enterprises need to consider effective communication with decision makers, and look at the problems encountered in the construction of large-scale data from all aspects and angles, so as to analyze the large-scale data for the smooth construction of enterprises the system makes effective reference.

### 3.4 Using the Social Networks of Employees

As an important framework of enterprise management mode in the era of big data, the social network of enterprise employees is of great significance, which cannot be ignored.

From the perspective of current enterprise utilization rate, the lack of social network level of employees makes enterprise management in a decentralized mode. Enterprises should be good at using all available resources in the era of big data, which will not only greatly improve the overall and social benefits of the enterprise, but also help to maintain the passion of the employees themselves, identify with the corporate culture, and have good satisfaction and loyalty [15–17].

### 4 Conclusion

To sum up, China's enterprises are facing the stage of rapid expansion and development of big data, which affects all sectors of the society, and ushers in new opportunities for enterprise development while causing great impact. Therefore, in the face of this new situation, enterprises should consciously innovate the management mode, improve and improve the application of big data knowledge in enterprise management, so as to make effective reference value for promoting the sustainable development of enterprises. In the era of big data, the problems in enterprise management should be solved in time, and the management system should be optimized to provide the basis for the economic benefits and social values in the development of enterprises.

**Acknowledgements.** Guizhou Provincial Education Department - "The Technology Integration and Demonstration of the Integrated Development of Chimonobambusa Industry in Jinsoshan of Guizhou Province" (Contract No.: Guizhou Eductaion Contract [2019]026).

### References

- 1. Yu, Y.Y., Duan, Y.L.: Research on enterprise management mode innovation in the era of big data. Technol. Innov. Manage. **37**(3), 302–307 (2016)
- 2. Yang, H.M., Yue, X.G.: On the application strategies of organizational behavior in enterprise management. Malays. E-Commer. J. 3(1), 24–25 (2019)
- 3. Xu, D.Y.: Research on entrepreneurial ability of emerging technology enterprises. Malays. E-Commer. J. 3(1), 01–09 (2019)
- Tao, S.: Evaluation of technology innovation in Hubei Province. Eng. Heritage J. 2(2), 09–10 (2018)
- 5. Qian, S.H.: Research on enterprise management mode innovation in the era of big data. Cont. Bridge Vision **12**, 42–43 (2016)
- Li, X.Z.: Research on innovation of enterprise management mode in the era of big data. South. Agric. Mach. 48(6), 157 (2017)
- Wang, H., Zhang, X.M., An, L.R.: Research on the influence of knowledge base and relationship network on innovation performance. Acta Inform. Malays. 2(2), 01–03 (2018)
- 8. Gian, S.H., Kasim, S., Hassan, R., et al.: Online activity duration management system for manufacturing company. Acta Electron. Malays. 3(2), 01–08 (2019)
- 9. Xu, D.Y.: Research on supply chain management strategy of longtang electric engineering Co. Ltd. Acta Electron. Malays. **3**(1), 10–13 (2019)
- 10. Liu, F.: Research on the innovation of enterprise management mode under the environment of big data. Mod. Enterp. Cult. **26**, 125–126 (2017)

- 11. Ma, L.: Analysis of enterprise management mode innovation in the era of big data. J. Tianjin Vocat. Coll. 11, 80–82107 (2014)
- 12. Liu, J.: Analysis of e-commerce enterprise management mode under the background of big data era. Bus. Econ. Res. 5, 99–101 (2017)
- Qiu, Q.Y.: A brief analysis of sino-us trade relations under the new era. Malays. E-Commer. J. 2(1), 06–08 (2018)
- 14. Chen, Y.X.: Analysis on the efficiency of financial subsidies for vocational training of new technology workers in Jiangsu. Malays. E-Commer. J. **2**(1), 13–15 (2018)
- 15. Li, G.S., Wang, X.L.: Audit research on Financial Sharing Service Mode in the era of big data. Friends Account. 19, 123–126 (2016)
- 16. Kartika, M., Melati, H.A., Ratih, Y.: The development of corak insang weaving craft creative economy in Pontianak city. Malays. E-Commer. J. 3(2), 27–29 (2019)
- 17. Lahafi, F., Muchsin, A., Semaun, S.: Development of creative industries training towards sharia economic empowerment in Bilalangnge community, Parepare City, South Sulawesi. Malays. E-Commer. J. **3**(2), 33–35 (2019)