Research on Innovation of Enterprise Management Mode in the Era of Big Data

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Abstract: In today's society, with the rapid development of information technology, we gradually entered the era of big data, which has brought big challenges to the development of enterprises, but also infuses new vitality and vitality for the development and management of the company. If an enterprise wants to take the upper hand in this data war, it must change its current management model and actively explore innovation. Therefore, this paper introduces its concepts and basic characteristics from the perspective of big data, analyzes the severe challenges that companies face in the context of massive data, and discusses how companies can innovate in management models.

1. Introduction

With the constantly development of China's scientific and technological level and the rapid development of information technology, massive amounts of data have become the most valuable asset. Today, various kinds of data infiltrate our lives in the extremely rapid dissemination of information. At the same time, big data have begun to affect the development of all aspects of life, impacting the management model of enterprises and causing a certain crisis for enterprises. At this time, business managers should recognize the current situation, follow the trend of the era of big data, explore new paths with other managers, seek new management models, actively respond to this change, and make the company invincible.

2. The Concept and Basic Characteristics of "Big Data"

Big data is actually a collection of huge amounts of data. McKinsey & Co. has published a report that specifically analyzes the application of important technologies in big data. In this report, it briefly defines big data: “Data has become an indispensable part of any industry today. "The description of big data in Wikipedia is: "There is no way to use regular data analysis tools to acquire, manage, and analyze data in a limited amount of time." Generally speaking, "big data" is in fact a large amount of data that is different from the traditional IT technology and database back-end processing. It involved in people's lives at all times and becomes a necessity for daily life. For example, when we shop at the Vipshop, Amazon, and Dangdang sites, we can sort and sort the information in various different commodities according to their credit or price. This is actually the application of big data in life.

Big data is often accompanied by us. We will use data-related tools every day. Of course, big data are more widely used in the commercial field. For instance, the background of the Amazon mall will analyze the user’s buying preferences, purchases and other specific information based on the data generated by the viewer or shopper browsing, collecting, and photographing the product information on the web page, and then recommend products which users are satisfied with. This is the application of big data in the business field.

Specifically, big data has four basic characteristics:

The first is the massive increase in big data. Every day, there are various types of data that are generated from different parts of the world. It is sometimes difficult to sort out the contents in a large quantity and in a short period of time. Together, they form a huge database.

The second is the diversity of broad data types. The sources of data are varied, and the format and types of data are increasingly diversified with discrete sources. Data are not only structured data that were limited in the past, but it has also added many unstructured data types.
Thirdly, the processing speed is quite fast. The corresponding high-speed data generation requires the high-speed processing of the huge amounts of data generated by the technicians during this period of time. This means that considerable data can be processed in real time. This puts extreme demands on people's ability to process data. It is equally a challenge.

The fourth is big data have a low value density. The number of big data is huge. The value of information is mixed, and high-value information and low-value information are mixed together. Therefore, it is very important to extract information that is valuable to the company from a huge database. For example, taking video as an example, when police are grabbing prisoners, they need to retrieve a large number of surveillance videos, and crime often occurs within a few seconds, which require the extraction of valuable videos.

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3. The Impact and Challenges of the Big Data Era on the Company

In the big data era, the high speed acquisition and the effective application of data have a profound influence on the development of enterprises. The application of big data as a weapon of competition for enterprises requires the development of new thinking logic of business managers, the depth research of value information of substantial data used for business management. The correct decisions that are consistent with the company's future development shall be formulated to inject continuous vitality into the company's development. However, the application system of big data is still in the construction phase at the moment. Many technologies have not yet reached the mature standards, which require companies to explore and solve deeply. The main issues at this stage are to make enterprise managers aware of the potential value of big data, to obtain information flow in the era of ever-changing information ensuring real-time processing and analyzing to find out their potential valuable information for enterprises, and to effectively applying these valuable information, which are the issues and challenges faced by companies in the era of big data.

Although the current society is in a period of massive data and the data information is circulating at high-speed among the masses and is widely applied. However, only a few companies truly recognize the value of big data and apply it in the management of business operations. Some enterprise managers still follow their traditional thinking mode, believing that big data is only purely data information with no practical significance. They do not have a deep awareness of the value of big data and the benefits it brings to enterprises, which leads to the disregard of the benefits of them again and again. Perhaps in such a short period of time, companies bears no loss or inadequacy, but in the long run companies will inevitably be swamped in the tide of the big data era, disappearing without a trace. The reason is that companies have not keep pace with the times and one step behind leads to a backward step. Therefore, the significance of data for business development should be realized if it wants to survive in this data warfare.

After business managers realize the value of data, what they need to do is manage and apply it. Under the increasingly fast pace of economic globalization, the environment in which the company is located is becoming ever more severe. The internal and external environments are faced with different degrees of transformation. The ever-changing environmental changes have brought about big pressure on the daily operations of companies. Enterprises is faced with massive data information, including customer demand data, production planning data, employee management data and market change data, which are required to be processed. These data not only exist in traditional information channels, but also in pictures, news and videos and so forth. These enormous data information increases the workload of the company and adds a load to the operation of the companies. At this time, the company should consider how to obtain more relevant data. It is a huge challenge to select valuable information for the management and operation of company and make use of them in order to make timely and correct decisions based on the information and changes in
the external environment in the data.

After obtaining the data, the company should regard these data as the main body to comprehensively analyze various factors that affect the development of the company, refine the data and filter out information that is beneficial to the company so that the enterprise managers can make more accurate decisions. This type of method is more scientific and accurate than the previous traditional decisions based on operational experience. It can accurately predict the market risks faced by the company and the next step made by the competitors, through which the most objective decisions can be made.

4. The Innovation Measures of Enterprise Management Model

For an enterprise to innovate its current management model, the first thing to do is to break the traditional thinking mode and management concept, update the management mode, and keep pace with the times, and drive all employees to change the traditional thinking and penetrate it into the company's various corner. The second is to apply the results of data analysis to the decisions made by business managers, not just to view the data as numbers, but to recognize its important values and make more accurate decisions based on accurate data. Finally, the analysis of data requires the mutual assistance of various departments. For example, the sales department takes out information from their sales data, and the production department takes out the information they get from production data, etc. Only when the information of each department is integrated and integrated can it be fully realized. Make use of the value of big data.

There are many kinds of data and there are various kinds of sources. At this time, the information obtained cannot rely on the data platform established by the company. Instead, it should establish partnerships with data platforms of other companies. Companies are faced with massive amounts of data to information, including customer demand data, production planning data, employee management data, and market movement data, which need to be processed, such as the production of cosmetics. An enterprise can obtain user data information by developing a WeChat public number, pushing product information for a WeChat user, or conducting application measures such as trials and questionnaire surveys.

In the context of big data, the processing of data is no longer merely a tabulation of data, drawing charts to analyze data trends and data descriptions, etc., but based on the integration of various aspects of the data, comprehensive analysis of data with Information that is valuable to them. This requires companies to put forward higher requirements for staff, cultivate professional standards, and have various talents in marketing, enterprise operation management, product research and development. These talents can attach excessive importance to the data and refine the data to provide them with more valuable information.

5. Conclusion

In the era of big data, enterprises should seize this opportunity to actively cultivate large data talents, enrich the data platform to control data flow in real time, analyze data in real time, provide a solid data foundation for enterprise decision-making, and enhance the competitiveness of enterprises.

References
