Innovation of Business Management Model Based on Big Data

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Abstract. With the development of network technology and the advent of data and information era, China's business administration in the face of modern increasingly complex diversification of market subjects and market order is increasingly complex, it needs to require the industry and commerce departments in the performance of functions, service market subjects and other aspects to make unremitting efforts. Today, with the rapid development of Internet economy, the business administration mode is studied based on big data technology. The working mode and mode of the business administration department are analyzed through data statistics and investigation, and the current situation and problems of the service of the business administration department are analyzed and summarized and prospected.

Keywords: Big Data, Enterprise Development, Business Administration, Industry and Commerce Department

1. Introduction

Generally speaking, business management mainly refers to the use of scientific management methods, based on the knowledge of economics and management to manage the enterprise's operation and internal behavior. Business administration covers a wide range, including cost management, operation management and marketing management. At present, there are mainly the following problems in the construction of business administration informatization. One is the low utilization rate of the system; Second, information sharing is not high; Finally, the degree of information integration is low. These problems have seriously hindered the healthy development of enterprises. Therefore, enterprises must introduce advanced management concepts and management means, and constantly innovate the development mode of business administration informatization, so as to improve the level of management informatization [1-2].

With the rapid development of information technology, the era of global information economy has come, and information technology has emerged with its amazing power. It affects the allocation of social resources and people's values, working style and life style. In terms of organizational management, the influence of information technology has evolved from a low-level reduction of work burden and improvement of work efficiency to a complete change of the entire management mode that promotes the organization from business process, organizational structure to strategic decision-making [3]. How to make full use of information technology to transform traditional organizations into information organizations, how to use information technology to change the organization management
mode, and how to create and improve the core competitiveness of organizations have become an important topic of management theory and various organizations research at home and abroad. At present, the operation system and working mechanism of China's traditional management departments and functional service institutions are mostly formed and established under the planned economy system [4]. Due to various reasons, some deep-seated problems have not solved, the service content of the functional organization does not reach the designated position, problems as well as the service efficiency is not high still, service management in our country there are big problems: not only functions offside, malposition and absence, crisscross of power and responsibility, bloated organization and low efficiency, increase the management cost, but at the same time, because of a lack of internal motivation and external constraints, the problem such as buck passing and quarrel, work hard to achieve, the realization of the error and distortion [5] the implementation of the time. Objectively speaking, the low performance management level of some functional institutions can not meet the requirements of China's economic and social development, so it has become inevitable to find more scientific and effective business management mode and mechanism. Big data, also known as massive data, is mainly extracted from data communication in social networks, transaction data of e-commerce websites, webpage visit records and other data. Since the concept of big data was first proposed in the name of enterprises, it has been applied in various industries and places. Foreign studies have clearly pointed out that the major changes brought by big data to enterprise management, especially the changes in thinking mode, require the use of all data and have a strong complexity. Ma Yun once said that human beings have gradually entered the DT era from the IT era. Therefore, in the competition of many industries, how to make effective use of big data is the key to the competition, and the same is true in the field of enterprise management. The industrial and commercial sectors actively adapt to the needs of the development of the market economy, actively cultivate various types of markets, and actively cultivate and develop the non-public sector as a supplement to and effective reserve force of the public sector. By the end of the 1990s, according to statistics, a total of 5.822 million state-owned enterprises and collective enterprises had been registered nationwide, including 140,000 newly developed private enterprises. The number of foreign-invested enterprises has broken through, reaching 80,000. Meanwhile, the number of individual businesses has also broken through with a rapid development momentum, increasing from 100,000 at the end of the 1990s to 15.34 million, an increase of 150 times. In the third decade of reform and opening up, the total number of market players in China kept rising and the structure of market players kept improving. The 16th National Congress of the Communist Party of China made it clear that to uphold and improve the basic socialist economic system, we must unswervingly develop and expand the non-public sector of the economy, and guide, support and encourage it. In order to adapt to the new situation of rapid development of Internet economy, industry and commerce departments actively change the service development mode, actively guide the development of industrial manufacturing industry, high-tech industry and modern service industry, continuously increase the support for small and micro enterprises, optimize the main body structure of the market, and further optimize the industrial structure [6].

This article is based on large data exploration on the mode of business management innovation research, through the way such as books, documents, access to relevant information about the subject, finishing analysis, next the paper expounds the relevant data and the concept of business management, on the basis of this puts forward feasible business management mode innovation method based on large data. Analyze its feasibility through data.

2. Concepts Related to Innovation of Business Management Model Based on Big Data

2.1 Large Data
There is no standardized definition of how big data is defined in the academic world. But there are some similarities between several famous ideas. The changes in different industries also reveal the basic characteristics of some big data: large capacity, fast speed, high complexity and wide data
sources.

2.2 Big Data and Traditional Data
As an emerging data source, big data is not the collection or storage of traditional or existing data, but the opening of a new way of data acquisition and extensive and detailed data collection. In fact, the design of large data sources is not close to reality. Many large data sources are not friendly in design, while most traditional data sources consider this problem in design. Big data may not have enough value corresponding to its massive scale, so the analysis of big data, although very difficult, does not guarantee that the work will be rewarding.

2.3 Features of Big Data
(1) Large scale and massive;
(2) Various forms;
(3) Rapid data generation The process of production, acquisition, processing and analysis is constantly shortened and the efficiency is constantly improved, which also promotes the formation of high-speed data stream.
(4) Higher value created.

2.4 Business Administration
The administrative department for industry and commerce is the department in charge of the market economy and assumes the important function of maintaining the market order. In the early days of its establishment, the industry and Commerce Department embodied the "management" color of the all-powerful government under the condition of planned economy, and all the things that should not be managed should be managed. This extensive management mode reflects the government's strict control over the microeconomic level, restricting market transactions and economic freedom. However, with the gradual development of the market economy, this mode is likely to cause the "offside" of the government functions, and has been unable to meet the needs of the development of the Times. Only the service-oriented business management model can meet the requirements of market economy equality, freedom and order. Therefore, the connotation of management and service should be scientifically grasped to position the functions of industry and commerce, and service efficiency should be continuously improved to make the industry and Commerce Department adapt to the needs of the development of market economy [7].

The basic functions of the industry and Commerce Department can be divided into two categories: public service function and market supervision function, which complement each other in their functions [8]. The functions of public service are embodied in: to be responsible for the registration, supervision and administration of all kinds of market entities, to undertake the relevant responsibilities for the reform of the industrial and commercial registration system, and to provide services, supervision and administration for their business activities; To guide the development of the advertising industry. Embodies the market regulatory functions: be responsible for the investigation and in accordance with the law to ban unlicensed business, specification and maintenance of all kinds of commodities trading management order of the market, market supervision and management, online trade in goods and services, supervision and management of trademark and advertising, to protect the trademark, and investigate and deal with the violation of trademark and advertising; To be responsible for the supervision and administration of direct selling enterprises and direct sellers, investigate and punish illegal pyramid selling and illegal direct selling cases according to law, and investigate and punish economic illegal behaviors such as unfair competition, smuggling and commercial bribery[9-10].
3. Survey on Innovation of Business Management Model Based on Big Data

3.1 Survey Method
(1) Literature research method. Refer to the paper literature and electronic data literature collected in the school library, study the literature in the related fields of business administration and market subject development, understand the research status quo of China's business administration service and management service mode at home and abroad, and enhance the scientific and logical nature of the paper.
(2) Questionnaire method. "Questionnaire on the status quo of Business Management mode" was designed and distributed simultaneously on the Internet, mobile phone and the field in the form of questionnaires. The questionnaire includes the respondents' attitude evaluation to the offline service of business administration, their cognition degree to the online service platform of business administration, their suggestions to improve the service of business administration.

3.2 Survey Objectives
(1) Comparison of main indicators of business systems in different regions;
(2) Development of newly registered enterprises;
(3) Questionnaire survey of business administration mode.

4. Analysis of Practice Results of Innovation of Business Management Mode Based on Big Data

4.1 State Administration for Industry and Commerce Report on the Economic Situation of a Certain Year
Table 1. Comparison of Main Indicators of Business System in Different Regions in a Certain Year

|                                | China | Singapore | Hong Kong, China | U.S.A |
|--------------------------------|-------|-----------|------------------|-------|
| Business convenience ranking   | 90    | 1         | 3                | 7     |
| Ranking of start-up enterprises| 128   | 6         | 8                | 46    |
| Frontier distance index of start-up enterprises | 77.43 | 96.48 | 96.38 | 91.22 |
| Procedures (quantity)          | 11    | 3         | 3                | 6     |
| Time (days)                    | 31.4  | 2.5       | 2.5              | 5.6   |
| Cost (as% of revenue)          | 0.9   | 0.6       | 1.4              | 1.2   |
| Minimum capital requirement (USD) | 0     | 0         | 0                | 0     |

As table 1 shows, China has risen from 96th to 90th place in 189 statistical samples. With the introduction of various measures for the reform of the commercial system, the operating environment of Chinese enterprises has been significantly improved, capital vitality has been effectively stimulated, and market entities have developed rapidly. As an important part of the market, enterprises play an important role. Their development is more stable and long-term than that of individual businesses, and they are more representative in responding to the commercial reform system. This paper focuses on the analysis of the development situation of enterprises.
4.2 Development of Newly Registered Enterprises

Table 2. Development of Newly Registered Enterprises in China

| Enterprise type                  | Number       | Year on year growth rate | Total capital (USD 10000) | Year on year growth rate |
|----------------------------------|--------------|--------------------------|----------------------------|--------------------------|
| Enterprise                       | Total        | 57.9%                    | 1144230894                | 85.98%                   |
|                                  | Company      | 68.43%                   | 1050314696                | 140.56%                  |
| Enterprise with domestic funding | Total        | 58.56%                   | 1085703263                | 90.32%                   |
|                                  | Private      | 61.23%                   | 907771101                 | 123.12%                  |
|                                  | Company      | 69.38%                   | 992724017                 | 159.68%                  |
| Foreign enterprise               | Total        | 10.58%                   | 9502381                   | 31.02%                   |
|                                  | Company      | 6.88%                    | 9353090                   | 5.77%                    |

As shown in Table 2, since the reform of the commercial registration system, 2.22 million new enterprises have been registered nationwide, up by 58% year-on-year. The registered capital was 11.44 trillion yuan, up 85.98% year on year. The proportion of newly added enterprises in the total number of newly added market entities continues to rise, from 21.15% in the same period last year to 29.20%, up by 8.05%. The number of newly registered private enterprises reached 21.125 million, an increase of 61.23 percent over the previous year. The registered capital of new private enterprises was 907 trillion yuan, an increase of 123.12% over the previous year. Last year, there were 21,700 newly registered foreign-invested enterprises, up 10.58% year-on-year, and the registered capital of newly registered foreign-invested enterprises was 95.024 billion US dollars, up 31.02% year-on-year.

4.3 Questionnaire survey analysis

![Figure 1](image-url)

**Figure 1. Investigation on the Deficiencies of Business Window Service**

This paper investigates the shortcomings of industrial and commercial services. The survey results are shown in Figure 1. Only 17.5% of respondents are very satisfied with the 1:3 service of industrial and commercial Windows. "Low service efficiency" and "poor service attitude" account for the largest...
proportion (45.4% and 39.76%, respectively). This reflects to a certain extent that there is still a large room for improvement after the window service of the industry and Commerce Department.

![Survey results]

**Figure 2.** Schematic Diagram of Problems Existing in Online Service Platform of Industrial and Commercial Departments

To sum up, according to the figure 2 shows the shortage of the online business service platform for industry and commerce is mainly displays in: the top-level design ability and level remains to be further improved, further raising the unified construction, information sharing and business collaboration level needs further ascension, information remains to be further strengthen team construction, information security situation is still grim, etc.

5. Conclusion
The development of big data technology plays an important role in the progress of modern society and the modernization of enterprises. Especially in the human resource management of modern enterprises, the application of big data technology makes human resource management more fair and just, and plays a positive role in improving the core competitiveness of enterprises. At the same time, big data technology also creates a more active and healthy competitive working environment for enterprise employees, effectively solves the problem of high staff turnover rate, and greatly improves employees' trust, sense of belonging and loyalty to the enterprise. For modern enterprises, winning the loyalty of employees and conquering the competitiveness of the market are of great practical significance for the long-term development of enterprises. At present, the management and service mode of the industry and Commerce Department to the market subject can be summarized as "network pipe network" and "credit network". "Network management network" refers to the improvement of the network information construction of industrial and commercial departments. By the Ministry of Commerce and industry to gradually promote the management of the network commodities trading network...
supervision information platform for the construction of the information through the network and publicity of credit information of market main body, and eventually establish a national integration, the function is all ready, upper and lower linkage network supervision information platform, laid a solid foundation for better services in the network economy.

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