

The Power of Big Date

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Abstract

Massive data, industry changes, in fact, today's big data has long been related to people's lives, such as going out in the morning, open navigation after you can see which road is not congested, which road is more convenient; A midday takeout can open the app, and the system will recommend the most recent and most acclaimed restaurants; open the shopping site at night, and the home page will automatically pop up products that have recently been watched or purchased, all of which are the embodiment of big data. Big data can be said to be everywhere, unconsciously we have been trapped in the big data encirclement. Big data is changing the way we live, work and even think. So what kind of existence is big data? What magic has changed our world and what kind of opportunity it will bring to the development of Central Plains. Nowadays, big data has become the mainstream processing tool in various industries, so it is particularly important to study these problems.

Keywords

Big date;Thinking change;Change in business model;Innovation.

1. The concept of big data

In the 2008 issue of Science magazine, big data was defined as "representing progress in the human cognitive process, and the size of the data set is not accessible and managed using current technologies, methods, and theories over a tolerable period of time." The more influential Gartner also defines big data, which is a high capacity, high rate of generation, a wide variety of information values, and requires a new form of processing to ensure that judgment is made. Insight finding and processing optimization. This definition is not only a large scale of data, but also more important how to obtain useful time-dependent information from these rapidly dynamically generated data streams or blocks. Baidu Encyclopedia defines big data as: big data, or huge amount of data, that is, the amount of data involved is so large that it cannot be retrieved and managed within a reasonable period of time through current mainstream software tools. Process and collate information that has become a more active purpose for business decisions. Big data scientist Rauser refers to a simple definition: big data is a huge amount of data that exceeds the processing power of any computer.

2. Application Status of Big Data

Although there is no uniform conclusion on the characteristics of big data, it is not the most important for the study of big data. How to use big data is the key. In fact, the study of big data is also for the better application of big data, so domestic and foreign research and application of big data have been attached great importance. In fact, the research and application of big data is already on the Internet. Business intelligence, consulting and service, medical services, retail, finance, communications and other industries have emerged, and generated enormous social value and industrial space. According to statistics from the Ministry of Industry and Information Technology, by the end of November 2017, there had been 1.14 billion mobile phones, of which 1.11 billion were wideband connected to the Internet, and the monthly traffic per person was 2.29G. under this data, the monthly data flow was 2.553 billion gigabytes. This is a very large figure. This data brings us a lot of convenience in life and work. It is also a huge change in our life caused by mobile phone traffic. Only in the current stage of development, the scope of application of big data technology is found in enterprise production and

government management, especially in e-commerce, traffic management, medical security and so on. In the field of e-commerce, because of the application of big data, its operation mode has changed to a certain extent. Today's e-commerce platforms mostly use data to analyze consumer demand, predict future sales situations, and then make enterprises have more basis to follow in their business decisions, so that enterprises can obtain greater economic benefits. Can also improve the competitiveness of enterprises to a certain extent. Such as the personalized recommendation in the process of Taobao shopping, advertising delivery system, is based on the data obtained when consumers often search and buy products, and then use big data to analyze consumer preferences, and then carry out related advertising recommendations. In addition, big data is also widely used in urban transportation and construction. Nowadays, "smart city" has been actively promoted and promoted in many cities. It uses big data technology to help manage the city. Make the management of the whole city more intelligent, scientific, standardized. For example, in the traffic system, through the real-time monitoring and uploading of the electronic camera at each intersection, the road condition information can be analyzed accurately, and the congestion situation can be displayed in real time at the nearby intersection. It can also provide a more rapid and convenient route for the driver. The application of big data in pharmaceutical R & D and business model in medical field is mainly focused on the research of life science and the business strategy of pharmaceutical company. Through the information processing of the medical and health data, the patients' psychology and physiology are more smooth, and the more suitable drugs can be found. In addition, the application of big data is also reflected in the tracking and analysis of side effects of drugs. In the past, most of the methods used to track the side effects of drugs were clinical trials. Since the emergence of big data, the samples collected have been greatly expanded to avoid the disadvantages of traditional methods, which makes the analysis of side effects of drugs more simple in operation. At the same time, in drug research, we can use big data to analyze the demand trend of the broad masses of people for medical supplies, so that relevant enterprises can start from the needs of the market and formulate a scientific and reasonable production plan. Make the development of enterprises more smooth. In addition, in the medical field, big data can effectively store, process, query and analyze the relevant medical information.

3. The main characteristics of big data

3.1 Large scale

Large-scale massive data can also be called "huge quantity". It is predicted that by 2020, everyone will have 5200 gigabytes of data, followed by how to solve the problem of data storage and management.

3.2 Diversity of big data sources

Different channels and methods of obtaining data in different departments and industries will lead to heterogeneity of data and increase the difficulty of data processing.

3.3 Big data features high density data and low density value

The value of data is implicit, which brings us a problem, that is, how do we judge and evaluate the value of big data, and then there is data analysis and data mining. The goal is to mine the hidden value of the data.

3.4 Big data have time and space characteristics

Data is related not only to space, but also to time. In many applications, such as environmental monitoring, emergency relief, traffic management and so on, the related data change with time. When the data changes, the old data is replaced by the new data, the system becomes another transient, the old data no longer exists. Therefore, it is impossible to analyze the history of data changes, let alone predict future trends. However, many applications in many application fields need perfect time series analysis, which can efficiently answer all kinds of questions related to time. With the rapid progress of storage and efficient technology, At present, the storage and efficient processing of large capacity temporal data has the necessary material conditions, and it is possible to analyze and process spatial

information. With satellite big data, we can see the ground at an altitude of tens of thousands of kilometers, and with high-resolution satellites, we can even see the change of a tree on the ground, the change of a factory or the pollution process of a river, etc.

3.5 Big data has multidimensional characteristics

Just like a city, it has its own three-dimensional coordinates in terms of geographical location, but at the same time, the administrative significance of a city, the number of population and GDP can all be classified as the attributes of a city. Big data is visual, it contains objects, procedures, events in the spatial, temporal, semantic and other aspects of the relationship.

3.6 Big data updates are fast and must be timely

In the era of big data, as its core, prediction analysis has been widely used in business and society. As more and more data are recorded and arranged, prediction analysis has become a key technology in all fields. With the Internet of things, the Internet is developing, and the amount of data is expanding. When the volume of data is up to a certain amount, the data is connected. It is to analyze and predict the data, so as to reach the goal of reaching the instruction. Think about it. If you analyze the process for 6 hours, your opponent needs only 5 minutes, and the gap can come down, the gap can be imagined. So, only to ensure that the latest data can be quickly obtained, the large data will have the value and significance of the application.

4. How Henan will enter the big data era

In October 2016, Henan Province was approved to build a national big data comprehensive experimental area, becoming one of the second batch of approved provinces after Guizhou. As a large economic province located in the hinterland of the Central Plains, what kind of opportunities will such a national character sign bring? We can analyze from three aspects: thinking change, business model change and management change.

4.1 Thinking change

Society cares about big data, in fact, because big data is not only a resource, but also an asset and even a capital. As far as resources are concerned, it is a kind of factor of production put into production and bring value to production. For example, in agricultural production, big data is used to support the whole process to achieve the goal of improving output and improving quality, which is its input as a resource; the income brought by big data itself is the attribute of its assets; Baidu, Ali, Tencent and other big data investment formed by the formation of the big data industry, the property of its capital is increasingly expanded. Big data has changed our way of thinking, from the thought of causality in series to the parallel thinking of relation. Many enterprises have been aware of the need to transform from extensive operation to fine operation. There is a core point in fine operation, that is, data management. Many of the previous decisions were made on the head, and rapid economic growth overshadowed their shortcomings. But now we have reached the stock age, which means that the present operation must be refined, and the decision must be scientific through market research, argumentation, data analysis and so on, so as to improve the competitiveness of enterprises.

4.2 Business model change

China's e-commerce share now accounts for 42 percent of the world, with mobile payments amounting to \$790 billion, or 11 times that of the United States. It can be said that China's business model has undergone a fundamental change. Regardless of

The e-commerce industry has become one of the most intensive industries in Henan Province in the past two years. As a traditional inland province, Henan Province is becoming an important factor in attracting e-commerce enterprises because of its unique location, industrial advantages and the industry of e-commerce industry, and many traditional industries in Henan Province. It is also popular in e-commerce transactions. Judging from the development situation of cross-border e-commerce businesses in Henan Province, according to customs statistics for the whole of 2017, the number of cross-border e-commerce imports and exports supervised in the whole year of 2017

reached 11.39 billion yuan, and from January to April this year, it reached 4.05 billion yuan. Compared with the same period last year, there has been a relatively large increase, especially the share of the net purchase bonded tax model, which accounts for about 24.4 percent of the country's value. In January 2018, Alibaba Group released the China Digital Economic Development report, which is based on e-commerce, new retail, payment, logistics, big data and employment index. All-around shows the digital economy of all provinces in 2017 vitality, Henan Province ranked eighth. At the same time, the latest cloud statistics show that Beijing, Guangdong, Shanghai, Zhejiang, Jiangsu, Shandong, Fujian, Sichuan, Hubei, and Henan have become "China's cloud creation provinces" in 2017 because they are good at making use of cloud technology to enjoy the "innovation dividend". The report also disclosed the results of e-commerce employment in various provinces or cities. The number of transactional jobs (excluding logistics, e-commerce services and other supported employment) created directly by the Ali platform for Henan Province reached 360000, at the same time. The new "species" and new occupations derived from the e-commerce industry chain have been expanding and creating more employment patterns. Therefore, in the development of big data, the change of business model will inevitably bring about the change of employment situation, grasp the tide of transformation of business model, combine it closely with people-oriented, protect employment, benefit the people, It is not only necessary to expand the aggregate demand, expand consumption around improving people's livelihood, but also rely on innovation to promote the transformation of old and new kinetic energy and structural optimization and upgrading. And the executive meeting of the State Council to create more new jobs and foster new employment growth.

4.3 Management change

At present, our country has entered the development stage of wisdom, intelligence and Internet. Governments at all levels have pushed forward the strategy of intelligent city. One of the important tasks is to make use of innovative technology such as big data, cloud computing and so on, to carry out the intelligent construction of government affairs service in depth. The purpose of the construction of the digital city public information integration service platform is to break the previous situation of vertical management of various government departments, lack of data connectivity, and integrate various government departments and services to build a city-wide big data service system. Greatly improve the efficiency of government services, but also to provide the public all-directional, personalized, lifelong public information services. Henan Province is one of the second batch of national big data comprehensive experimental areas. In June 2017, Henan Provincial Communications Administration, Development and Reform Commission issued the "Henan Province Cloud Computing and big data 13th Five-Year Plan", which clarified the innovation of the system and mechanism. Open data sharing, key technology research and development, innovation and application in key areas, industrial agglomeration. At present, Henan prefectures and counties are stepping up the construction of public information fusion platform to promote the release of open value of data sharing.

At present, the use of big data to transform government functions, innovate government administration services, and enhance governance capabilities is a major focus of local government work. Many governments have also mentioned in their government work reports the requirements of "developing the digital economy", "prospering the city with wisdom," familiarizing with new ideas, new technologies, new business models, improving the professional thinking, professionalism, and methods of cadres in government systems. " In order to continuously improve the level of work, improve work efficiency, better public service. Just as on November 27, 2017, the regulations (draft) on Poverty Alleviation and Development of Henan Province were submitted to the 32nd session of the Twelfth National people's Congress standing Committee for second deliberation. It is reported that the newly amended regulations (draft) have been proposed. Henan will build the precision poverty alleviation big data management platform, through the construction public information fusion service platform, popularizes the implementation with the data transformation public management, uses the data to improve the decision-making efficiency and the decision-making quality, constructs the relation between the government and the public with the data. Through the

open sharing of data, it is realized to guide the economic society to collect and develop and utilize the data actively in the course of operation, to develop and apply to promote the development of big data, and to promote social innovation with the development of big data.

5. Summary

The future society will be a computational society and an intelligent society. As long as Henan Province focuses on introducing big data core business patterns and related industries to create a big data industrial development agglomeration area, Using big data to solve the problems of economic structure adjustment and industrial transformation and upgrading, to improve the automation level, make big data become an important carrier to promote the construction of national big data comprehensive experimental area in Henan province.

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