Research of Big Data Driven Media Industry to Enhance the Effectiveness of Human Resource Management

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Abstract: Data type and amount in human society is growing in amazing speed which is caused by emerging new services such as cloud computing, internet of things and social network, the era of big data has come. Data has been fundamental resource from simple dealing object, and how to manage and utilize big data better has attracted much attention. First, this paper discusses the concept of big data, and then analyze the large data key elements in the media industry, human resource management, data analysis type, data analysis models, and new technologies. This can effectively improve the efficiency of human resource management in media industry.

1. INTRODUCTION

With blogs, social networks, location-based services LBS as representative's emerging of new ways to disseminate information, and the rise of cloud computing and Internet technology, the data is increasing at an unprecedented speed and cumulative, big data era has come. In the past two years, the term "big data" is more and more attention [1-3], but the media talk about big data rarely mention the influence of it on their own. In February 2012, The New York times published The Big Data Age (The Age of Big Data) "article, lists many cases shows that the impact of big data multiple departments to the society, but not to talk about journalism, and how will be affected the entire media industry. Aggression of big data trend the implications for the media industry [4-6], the existing domestic scholars to think about this question, the Chinese people's university professor Peng Lan in the article of the social media, mobile terminals, big data, factors influencing the news production of new technology, from the perspective of news production of technical factors on big data to analyze the influence of the media industry, think the data will become the news "bonanza" with the core resources.

At present, mobile Internet, social applications, such as big data technology wave fierce hit, accelerating drives the enterprise human resources management informationization [7-10]. So, how to effectively meet the tide, how to value oriented, sorting, analysis, and find the key information analysis, to improve human resources management benefits, is each managers are faced with the problem. Macro view software house, President Mr. In "enterprise human resources management and information communication conference" published on the data analysis of the optimization of human resource management and promote "the wonderful lecture, with human resource value types,

data analysis, model as the core, combined with the actual cases and application of new technology, to share how to through the establishment of human resource database, complete the comprehensive statistical analysis, using data to talk, really promote transformation and upgrading of enterprise human resources management, and support the enterprise strategic development.

In 2015, according to Gartner forecasts, big data analysis of product and service market will be as high as $3.7 trillion, so large data is given to illustrate the application of all walks of life will strengthen data, management and analysis. Deloitte Talent management consultant Bersin analysis is pointed out that the market potential of big data in the field of human resources is bigger, the so-called Talent analysis (Talent Analytics), thus for enterprise human resources management, how to make use of the data is the need to think about. Google has to set up a human resource management by data mining engineers, psychologists and MBA human analysis group, Google all human resources decisions are based on the results of the data and analysis, this is everybody often say not tool management, countless according to the meaning of difficult decisions [11-14]. So when it comes to enterprise human resources management, we first need to consider in the current big data under the background of how to develop human resources data collection and analysis.

2. THE BASIC CONCEPT OF BIG DATA

"Big data" concept first originated in 80 s, but is really hot in May 2011 the McKinsey global institute published a special report "big data: the next the forefront of innovation, competition and productivity". Computer, Internet, social media, smart phones, the Internet of things appeared, communication technology and Internet technology, communication technology constantly, various in form of "electronic storage" with geometric progression growth data, the number of big, already can't calculate, can only estimate.

It is generally believed that humans now produces about 150% of the amount of data is from a year.

Big data source mainly include such aspects: first, the media data, especially the Internet, social media data, including people browse the web digital records, etc.; second, of all kinds enterprise production, sales, management and so on data; third, the government department data; fourth, the Internet of things, all kinds of sensor data, and not connected to a variety of camera data; fifth, the data of retained, including individual, family, text and audio and video data. However, huge amounts of data produced by the several aspects can't call it the big data, one of the features of large data is the integrity of the data and comprehensive; the second characteristic is the openness and public data, complete, integrated big data must be produced in an open, public network environment; the third characteristics of big data is the data of dynamic and timely. Big data also include huge amount of data processing technology, with the amount of data into a geometric progression growth, processing the data's technology will leap to ascend, "algorithm" will be more smart, efficient, not only the hardware and software upgrades, human understanding of data also continued to deepen. Data volume expansion is not equal to a company or organization have owned and the prospect of using big data, the depth of the ability of data excavation and relevant construction to its untried with large data.

"Big data" is not just a concept, is actually a description of a state of society. In the era of big data, data become important social resources and production data, how to open, collection, preservation, maintenance, management, integration, analysis, Shared data, is a joint project of the, enterprise, government, through the analysis, data mining can acquire new knowledge, can create value, study, work, production, investment, finance, management cannot leave the data, everybody to collect data, using data, the management of society, business need to use more advanced technology to deal with huge data. Who owns the data, master data, data and application integration and who is occupying the important status in the society.

Big data era, is a new era of individuals, groups, enterprises, social organizations, social activities produce large amounts of data, all kinds of storage equipment, all kinds of data warehouse, the cloud server holds the massive amounts of data extraction, transformation, integration, on-line analysis, data mining and so on become the norm. Big data era is impact to all walks of life, for everyone is a challenge. The forefront of the news media as information communication industry, the impact and challenges it faces is obvious.

3. THE KEY ELEMENTS OF BIG DATA IN THE MEDIA INDUSTRY FOR THE HUMAN RESOURCES MANAGEMENT

For large data in the application of human resource management, the key is not absolute data with more, but the richness of information and continuity. Some may think enterprise personnel don't have much, human resources data is not enough to "big", so think of enterprise human resources data analysis has no value, can need not do the

data analysis, but it is not the case. The big data analysis of human resources mainly has three key elements: first, to all don't sampling, that is no longer as before survey sampling mode, but to all the data, the data of all employees, as fully as possible; second, we must do not cause and effect, we are in the analysis and application data correlation, not causation, want to consider the relevant relationship of regularity, that is not necessarily lead to B when A leads to B, but A 80% May lead to B, to such related factors; Third, we should not absolute precision, efficiency when we do the data analysis, a lot of data to be more focused on the effect, not absolutely accurate and absolute precision, such as daily application used in average age, 28.1 and 28.2 May have no absolute difference, this time tend to be more focused on the effect. Therefore, for human resources data, we first need to consider is the abundance of the data, relevance, comprehensive, so that when doing the data analysis will be able to make the analysis of the associated elements.

4. THE MEDIA INDUSTRY HUMAN RESOURCES DATA ANALYSIS TYPE

For media enterprise human resources management data construction, common human resources data types mainly include the following three:

For the first, factual data. It can be divided into the individual level, organization level, post level. Individual level data have personnel quantity and structure, educational background, age, gender, family background, work experience, skills, talents, etc., in terms of individual these data are often the only or not often change the static data, while age will change over time, but each point is a constant. This kind of factual data, in the enterprise human resources management often referred to as personnel file information, it is also the most basic of human resources information data, is the foundation of most of the analysis. So the first thing to realize comprehensive digitization of the personnel file management, the staff using a valuable analysis of these data.

Second, dynamic data. Such data is often change, is produced in the process of human resources business process to the dynamic nature of the data. Such as recruitment business, we plan to recruit 20 employees, but the process may receive 500 resumes, interviewing 50 people, in the process of data analysis will reflect the recruiting effectiveness and efficiency.

Third, the integrated data. This data is often obtained by calculation, analysis, mining, is a comprehensive reorganization, comprehensive data correlation arithmetic, such as the personnel rate, per capita, per capita wage, etc.

5. THE MEDIA INDUSTRY HUMAN RESOURCES DATA ANALYSIS MODEL

Based on the data analysis of human resources value realization, the human resources data analysis model can also be divided into three types. The first category is the foundation information data analysis, this is the most basic, the most, the most comprehensive data analysis, from beginning to end, or understand as always want to do, the analysis of the moment to do this kind of data are often

dynamic change. The second category is the business process data analysis, namely in the business process analysis of process data, in order to observe how the vitality of human resources. The third class is a benefit performance data analysis, that is, the top surface analysis, is based on the former two types of data result or state to benefit efficiency of integrated analysis. This business model is related to investment, conversion, output three phases, it is a fusion, inclusive and progressive relationship.

When it comes to basic information and data analysis, we must first understand the total amount of a variety of human resource companies, and secondly to understand the flow of all kinds of personnel changes, while more staff to carry out structural analysis, master position, age, education, gender HR ratio, etc., a clear understanding of all types of construction needs, different industries, different enterprises personnel structure is different, and therefore processed and analyzed according to the actual needs of enterprises. Through the analysis of the total personnel, structure and staff turnover, may provide direct evidence for human resource planning. Specific business process, first of all we need to do is change the total analyzed; secondly on the basis of the total amount of the analysis carried out in the post index, again we need to do job distribution index analysis, the proportion of total management and the proportion accounted for junior staff to see if the ratio of human resource management in line with the industry, reflecting the level of management, management capacity and the number of value creation personnel; another age index analysis needs to be done, different industry needs is not the same age, such as the IT industry, the average age is generally not more than 30 years, while traditional companies over 40 years of age will not be a problem, these are the analysis we need to do, and even include regional staff category index, staff gender index, the ratio of human resources, employee turnover analysis.

The second category is the function of business data analysis, mainly on the performance of conventional, recruitment, training, analysis of business results, quality of service functions, the analysis states. Such as recruitment management, reasonable selection to help companies recruit evaluation of rapid detection of problems, targeted to optimize the recruitment process, recruitment channel selection and recruitment sectors designed to ensure fast and accurate to provide personnel for the organization. Conventional analysis included the recruitment channels recruiting, recruiting efficiency, quality assessment in three areas of recruitment, which channels outstanding results; recruitment efficiency meets the needs of the business sector, whether for duty within the specified time; the results of the work of the staff after entry, status the effect of how, whether the requirements of the business sector. These are the terms of the HR needs analysis, recruitment channels, can be divided into job sites, search, and other types of internal referral, in terms of the number of resumes, interview a few, offer conversion rate analysis of the effect of various channels, consider how enhance the effect, which will affect the human resource decisions. For recruitment efficiency can usually be analyzed recruitment cycle, duty cycle, so as to work out the effect of recruitment feedback and contributions to the business sector. Evaluation of the

quality of recruitment, recruitment process need to analyze all relevant data, feedback out how effective recruitment, recruitment effect of tracking employee best to end the trial period, reflecting the quality of work and hiring staff status, this is the recruitment of quality assessment The real value.

These analyzes can make use of information systems, the use of the system will automatically record the results of operations data, with these results it can extract data for analysis. Such remuneration control, business processes payroll data, to a number of months left, you can access through the system dynamically, unlike in the past year, wages subordinate units to obtain a second-year report to see whether excess, but that time has no meaning; in addition to the analysis of the salary structure, you can use the system to do some analysis models, such as Grand e-HR system based on some combination of the user's needs and consulting company analysis model, a lot of pre-analysis model, these analysis model can analyze the different levels, different types of staff salary structure, so you can do better wages adjusted for comparison. Another example is the recruitment of management, you can use the system for recruitment channels, recruitment effect, recruiting quality analysis, and even what kind of salary levels, and we expect the average of the monthly salary for new employees should be achieved, these need to develop and optimize business strategy through data.

The third category is the benefit the effectiveness of data analysis, analysis that the human cost of inputs for output after the conducted-benefit analysis can be divided into explicit, implicit benefit analysis in two ways. Direct sales growth is the dominant revenue or profit growth, hidden income is the most practical to bring in sales and profit growth, enhance employee satisfaction, and even affect the long-term development of enterprises. For these models in terms of analysis, often in conjunction with the integration of data and business data for analysis of human resources, such as sales growth, the data sales and profit growth in personnel changes, or per capita sales growth, profit growth per capita and so on, these are the dominant benefit analysis. For hidden benefit analysis, is how we can to promote and enhance staff satisfaction by improving the quality, and thus enhance customer satisfaction reached, which requires doing data analysis or human resource management is designed to do, give full consideration enhance employee engagement for the driving force of the model, which is often associated with job responsibilities, enterprise management, work environment, salary levels and employee career development paths associated with these can be obtained through data analysis. Google has done an analysis of human resource data model, the model analysis obtained by the need for managers, what kind of person suitable for managers to be able to play a positive role in the efficiency of the work, these are not the seat of your pants come . So for the satisfaction and employee engagement to enhance analysis in terms of, you can have a variety of ways, such as in business data, basic data form the basis for a variety of algorithms to determine the correlation factors go; In addition, employee surveys can be done by a variety of survey data analysis; former employees as well as for analysis of the causes, do not leave the same day the investigation, may lag some understanding of the real reasons for departure were

analyzed, have helped to improve employee satisfaction. For the leadership decision-making, the leader in enterprise business development plan to do when the status quo often need to know the human resources, key personnel, labor costs, etc., then the dynamic data analysis can be a good guide decision-making, the value of human resource management and more well reflected. Therefore human resources data analysis model into a comprehensive analysis of the information, the process of data analysis business functions, as well as to reflect the value of human resources employee satisfaction, and efficiency performance data analysis.

6. NEW TECHNOLOGY APPLICATION OF THE MEDIA INDUSTRY HUMAN RESOURCES MANAGE-MENT INFORMATION

The current new vocabulary in IT technologies are many, "cloud computing", "big data", "social" and "mobile applications", etc., then the human resource management, we believe that the current need to focus on big data and mobile applications, which will be applied to the fastest human resource management, but also relatively easy to output results. Big Data, as mentioned earlier, not to middleweight great, as long as employees have the necessary information to meet the required analysis can be. Mobile applications, mobile applications by providing human resources services to employees, leadership and timely and accurate service, such as e-HR Grand launch mobile applications, mobile covers attendance, leave application, statistical analysis, employee inquiries, contacts inquiry my team, my salary, I data and so on. Mobile attendance, GPS for field staff through direct access to the job site whether employees arrive, when arrived at the scene and a long time working in the field and other information, you can always consult the leadership at all levels of analysis of various types of data, to facilitate timely scientific decisions. Also you can check all kinds of ways, including employee information, including communication anytime, anywhere through mobile applications. So for the leadership level, real-time view of mobile applications can use the data, make full use of them.

To this end, we should first establish a human resources information management system that will contain static data, business processes and human resource information in data integration, different people get different applications through the system, access to different the analysis of the data, get different results, which will effect the decision-making and overall human resources management has greatly improved. Based on this state at the same time, you can make a reasonable framework for human resource optimization, the new model to establish a human resource management as shown in the system architecture, this architecture is more emphasis on data analysis and integration, clear responsibilities and the value of output.

CONCLUSION

First, this paper discusses the concept and sources of big data, and then analyze the large data key elements in the media industry, human resource management, data analysis type, data analysis models, and new technologies. At the same time, this paper pointed out the important role of large data-driven media industry on human resources management, it is not only the media industry can well manage all human resources data, but also effectively improve the efficiency of management of human resources.

CONFLICT OF INTEREST

The author confirms that this article content has no conflict of interest.

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