

Management Science and Engineering ISSN 1913-0341 Vol.3 No.2 2009
Canadian Research & Development Center of Sciences and Cultures
E-mail: mse@cscanada.org; caooc@hotmail.com Http://www.cscanada.org

## Research on Technology Development of Human Resource Management Information System

### FAN Wei<sup>1</sup>

**Abstract**: With the development of internet technology and enterprise management of information technology in depth, the future of human resources in information technology will be showed the following characteristics: (1) software development will become a platform and model; (2) full participatory approach will tend to diversify based on the Internet and new 3G technology; (3) integrated applications based on SOA framework; (4) group collaboration based on workflow technology; (5) business intelligence based on human resources strategy will be applied deeply in enterprise.

Key words: Internet Technology; Human Resources Management; eHR

#### 1. BACKGROUND

Rapid development of science and technology, especially the usage of Internet and computer technology, has brought outstanding changes to our economy, society and culture. Space is no longer any obstacle since earth is more and more like a village. We have entered knowledge economic era entirely. In such an era, being confronted with new challenges of knowledge economy, the huge value knowledge has brought to enterprise, and the pressure of enterprise development, process reorganization and management change, employees or enterprise human resources as knowledge creators and users have now taken the place of equipment and capital, and become the value of enterprise or organizations. Enterprise higher class has focused on manpower cost now. From the perspective of human resource, how to change the visible manpower cost to invisible one is the problem all the enterprise are faced with, for any failure in this change will lead to sunk cost with lower profits, or even disasters to enterprise.

It is out of question that manpower cost is the most important cost of many enterprises, especially knowledge industry and service industry, in which manpower cost could cover 70-80% and with a high flexibility. The flexibility is reflected in the job setting of enterprise organization (including staff preparation, job responsibility, man-job matching degree), salary structure, roster schedule, KPI etc. Every tiny item could combine into a huge number. If the manpower cost flexibility could be adjusted to 5-10%, it may produce 5-10% profits, which is much higher than other cost. Thus, it is very important to enhance human resources management.

<sup>&</sup>lt;sup>1</sup>(1988 -), Male, Business School, Hunan Agricultural University, China Research on Technology Development of Human Resource Management Information System E-mail fuxiao50419@163.com

<sup>\*</sup> Received 19 March 2009; accepted 14 May 2009

Rapid development of science and technology has brought a revolution for management work. For human resources management, the past receptive and experienced style will be changed to scientific, professional and technique one. The emergence of her will take human resources management to a new experience.

## 2. DEVELOPMENT OF HUMAN RESOURCE MANAGEMENT INFORMATION TECHNOLOGY

Human resource management information technology has a long history. In 1980s, with the usage of computer in management, human resource management was firstly used to handle the most complicated work, which was mainly salary calculation at that time. For timely and accurate salary sending out, HR has to master the staff change, time, KPI and salary information of the internal organization. Meanwhile, they also have to offer salary policy and incentive scheme which are in accordance with organization development, which will be a huge work for large organization. Moreover, financial management standardization also plays an important role in salary information technology. In this phase, development of computer technology and electronic watch is the key technology to human resource management information technology.

With the development of computer technology, 1990s has come to the Internet era. Human resource management software based on C/S structure occurred with the usage of C/S structure in enterprise. This kind of software mainly focused on the basic document, salary calculation and name list of small enterprise.

In the end of 1990s, Chinese science and technology, as long as Chinese enterprises, developed very fast. At this moment, Internet's usage cost is decreasing, which changes C/S structure to B/S one. Due to the requirement of human resource management, human resource management requires more stable and effective platform.

## 3. DEVELOPMENT TREND OF HUMAN RECOURSE MANAGEMENT INFORMATION TECHNOLOGY

With the further development and usage of Internet in enterprise management, human resource management information technology in the future will be developed in the following trends:

### 3.1 Platform and Modeling of Software Operation development

With the further development of human resources management, customers of different industries and scales have different requirements. It is very important to find out how to meet different personal requirements. In such time, software with platform and modeling could have enough flexibility to meet customers' requirements. Human resources management information technology will finally form a industrial eco chain, in which different consultant and software manufactures will combine together to offer service to enterprise. All these require software to have a stable and expanding platform.

### 3.2 Various Participation of Internet and New 3G Technology

According to IDC, in the end of 2007, altogether 45% of employers are in mobile. In 2008, this rate has lifted to 2/3. With the increase of floating employers, there are more requirements of mobile business application. Development of 3G technology will bring further participation of human resource management application, which will change the previous pure eHR management to a participating

process. Staff could connect to human resource management system to get required service through mobile technology at any time.

## 3.3 Centralized Application of SOA Based Human Resource Management Information System

Human resource management system is not a separate system. With the combination of enterprise IT, company information requires accurate human resource information. Thus, human resource management system needs to be connected with external system. SOA is a good choice to solve system combination application. SOA (service-oriented architecture) refers to an independent software system structure which is aimed to meet the requirements based on Internet environment to finish special tasks through connection. SOA is a model connecting different application services through links and agreements between these services. Links, defined in an objective way, should be independent from hardware platform, operation system and program language. This enables services built in this system could communicate in a uniformed way. By using SOA, human resource management could offer individual service.

### 3.4 Cooperation Work Based on Work Flow Technology

After building the basic human resources management data, what should do next is to manage the process. We could rapidly finish all kinds of complicated human resource management work through human resource management cooperation. Work flow technology is a core technology of human resource work, through which could achieve inter-company or inter-department cooperation rapidly. It could also formalize the work process.

# 3.5 Further Application Based on Business Intelligence Human Resource Management

In such a business environment, the market competition is very fierce. It requires human resource management system building not only support business process, but also could get analysis deciding information including staff, manpower cost, staff change and manpower supply channel. What's more, analysis result should be used to daily business to enhance enterprise profit. However, traditional business system are for separate work handling, thus could not be used in multi-layered analysis and calculation. In this way, business intelligence application emerged. It is an independent system which could get customer data and business data from traditional business and build a multi-layered analysis system, and divert the data to useful business information.

#### 4. CONCLUSION

To conclude, human resource management information technology should not meet the requirement of human resource department work, but also could build the complete human resource management focusing on decisive support. EHR, as an important enterprise management tool, will push the change of Chinese enterprise human resource management, release creativity and innovation of human resource management, and help enterprise to achieve human technology to offer more challenge for enterprise to realize more rapid developing speed, higher performance target and stronger competitive advantages.

#### REFERENCES

Deshler, ZENG Xiangquan. (2007,1). Human Resource Management [M]. People's University Press.

## FAN Wei/Management Science and Engineering Vol.3 No.2 2009 34-37

- SUN Zonghu, WANG Ruiyong. (2006,11). *Human Resource Management Process Designing and Work Standard* [M]. People Post Press.
- MENG Qingwei. (2007,4). *Human Resource Management General Tool* [M]. Tsinghua University Press.