

Research on Human Resource Management System Based on Internet of Things Technology

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Abstract: *At present, with the arrival of the information age, the era of big data and artificial intelligence gradually set foot on the stage of history. With the development of the Internet of Things and the arrival of the era of big data, enterprises have been equipped with the ability to master and process large amounts of data. In the context of big data environment, by analyzing the relationship between big data and the six modules of human resource management, and combining with the workplace changes in the epidemic era in the future, some guidance is given to telecommuting.*

Keywords: *The Internet of Things, human resource management*

1. Internet of Things Technology

Smart Internet of things (AIoT) is the concept of rise in 2018, refers to the system real-time sensor to collect all kinds of information through all kinds of information (usually in monitoring, interactive, connection situation), on the edge of the terminal equipment, domain or cloud center by machine learning to intelligent data analysis, including positioning, alignment, forecasting, scheduling, etc.

2. The Current Situation and Limitations of Human Resources

At present, the human resource management of enterprises mostly uses human for real-time monitoring and management, the lack of science and technology, the accuracy of human resource management is low, and the human management is too time-consuming. Especially at present, with the development of economic globalization and the arrival of the post-epidemic era, cross-personnel mobility and telecommuting are becoming more and more common. It is also crucial to understand the working efficiency and working state of these employees who lack manual management, which requires the introduction of technology, namely the Internet of Things technology.

3. Human Resource Management System and the Internet of Things

3.1. Human Resource Planning and the Internet of Things

First of all, the enterprise should specify a reasonable human resource management planning strategy, and make clear the five personalities and quality model characteristics of the employees in the required positions as well as the required number of employees.

Through the data mining technology of the Internet of Things, the number of employees and the amount of tasks that can be carried by each work device can be accurately detected. Especially for production positions, the annual, monthly and daily workload can be accurately detected, and the labor rules of positions can be formulated according to the mined information, so as to minimize the energy consumption of working equipment and avoid energy and body loss of employees. The rules are as follows: such as time rules, organization rules, post rules, cooperation rules, etc., so as to scientifically establish the quota standard and post staff norms, as well as scientifically establish the completion deadline.

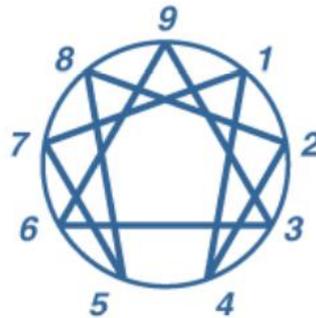
Through the Internet of things about jobs in the machinery, equipment and office space can accommodate the number of employees and quality types, can for the enterprise to make scientific materials required for the job as well as commodity purchase plan and the different qualities of different employees needed into prediction, to complete the job analysis and job description and

specification formulate reasonable scientific position.

3.2. Talent Recruitment System and the Internet of Things

And the realization of the process information through the Internet links with big data technology to complete to applicant information collection, thus accurate complete a physiological characteristics, psychological characteristics and interests as well as personality characteristics match, clear the staff's ability quality model framework, with the help of the Internet information system transfer information to the hiring company, to persons involved post match. Analyze the information of high-performing employees found by the Internet of Things and summarize their characteristics to provide basis for future recruitment.

Choose the position that can develop the employee's potential, Selection of feedback information in the Internet of things in the most cheerful personality traits and job requirements, explore the employees' happiness and jobs as well as the correlation of the personality characteristics, observe the key factors of employees happy, for the future of the same post recruitment provides positive significance, the maximum play to the potential of employees.



- 1. perfect
- 2. helpful
- 3. Achievement-type active
- 4. self-type
- 5. rational type
- 6. Question
- 7. active
- 8. leader-type
- 9. peaceful-type

Figure 1: The Enneagram system

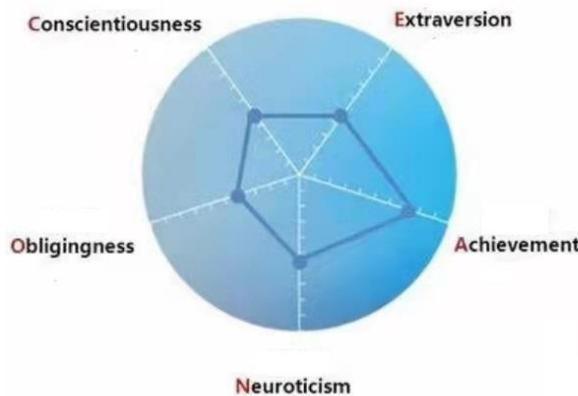


Figure 2: The Big Five Personality Traits

Using the combination of the personality and nine personality tests to analyze the personality of employees, using the Enneagram theory to analyze the employee's most important behavior and virtue, predict the behavior of employees in the company, the deep-seated ideas behind the staff and predict the behavior of employees. The more extroverted people are arranged in the positions where they need to deal with others, while the introverted people are arranged in the positions where they avoid communicating with others. For the personality type of pursuing omniscient, we should give full play

to its characteristics, so as to make it develop into professionals. As for the main characteristic personality of pursuing achievement, we should give full play to its desire of pursuing achievement.

3.3. Training and Development

Through the Internet of Things technology to observe the completion degree and participation of the training project staff, as well as the physical state of the staff, attention, mood, mental concentration and other indicators to observe the learning efficiency of individual staff and the overall learning level of the staff, so as to complete the evaluation of the training teachers and training staff.

Observe the difference of work efficiency and work quality before and after the training project through the data, so as to conduct scientific statistics on the efficiency and effect of the training project.

The statistics of the situation of the staff after training will also help to determine the training program in the future.

3.4. Performance Management

At present, many enterprises have realized the management of punching in, but this method has some disadvantages, some employees just punch in in a hurry and then leave their posts, and even some enterprises use manual supervision to carry out doorpost management. To stop cheating in such, can use the Internet of things technology of the processing of files as well as machinery and equipment needed by employees IoT interconnection, to clarify each employee in the work time and work efficiency and the size of the workload and quality, without the artificial can be easily and accurately grasp the work situation of the employees. In addition, it can also to a large extent prevent employees from replacing the work, or superior employees squeeze the improper behavior of subordinate employees, in order to achieve the purpose of scientific measurement of employees' contributions, so as to truly and accurately complete the statistical work of employee performance management.

According to the performance appraisal of benchmarking management, information of various mood scales and task completion scales of benchmarking employees can be collected, and the information reflected by them can be analyzed. Compared with other ordinary employees, similarities and differences can be observed, so as to find out the causes of high performance and motivate other employees.

3.5. Salary Management

According to the Internet of Things technology, the actual man-hours of employees are counted more scientifically, so as to provide help for human resource managers to calculate the average man-hours and the overall efficiency of employees. Comparing the average working hours with the standard working hours, comparing the changing trend of the working hours of the employees in the production department of the enterprise, and analyzing the causes of the change, so as to master the rules of scientific work and the position of the enterprise in the industry, so as to conduct the bonus distribution. In addition, according to the psychological and physiological information of employees from the Internet of Things, the human resource management department should take reasonable measures to motivate employees.

Timely find the fatigue degree and working state of employees and give timely warning to avoid fatigue work. And can carry on the external monitoring to the working environment, grasps the workplace air and the temperature and the humidity in the appropriate range.

3.6. Employee Relationship Management

Timely sense employees' psychological state, mood and satisfaction through Internet of Things technology. Through the Internet of Things technology, it can reveal the real emotions concealed for the purpose of social etiquette in the communication between people, improve the understanding of the real thoughts of employees, so as to improve employee satisfaction and deal with some contradictions and communication conflicts in a timely and good manner.

Alarm mechanisms for extreme emotions, such as hatred and anger, to avoid office hazards. Provide timely psychological guidance to employees who are with negative emotions. If the circumstances are

serious, redundancy measures are ought to be taken to prevent extreme and unethical incidents.

3.7. Employee Career Development Plan

When its staff in the recruitment of character values for judging an employee's leadership, and in the process of forecasting the possible arrival of management level, digging, accordingly achieve the employee's career planning, keep high performance and high potential employees, so as to promote the staff's loyalty and the building of enterprise culture and even form a wonderful Corporate brand.

3.8. Telecommuting and Internet of Things

The supervision of telecommuting behavior is realized through the Internet of Things technology. Including the starting time of the office, the total time needed for the office and the employee's work efficiency should be achieved, etc., to achieve the completion of telecommuting.

Increased liaison mechanisms for telecommuters, enabling corporate headquarters to coordinate the physical and mental health and work tasks of their employees in a timely and effective manner.

4. Limitations of the Application of Iot Technology

The technology cost of the Internet of Things network is high, so it is necessary to choose the most suitable Internet of Things network center for the enterprise, so as to realize the collection of information on items. And the maintenance cost of the Internet of Things is high. Therefore, high-tech enterprises and some enterprises that need to collect machine information should be the first to use the Internet of Things technology at present, and these enterprises will be more comfortable with the operation of the Internet of Things technology.

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