

The Mechanism of Digital Human Resource Management on Employee Performance and Organizational Commitment

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Abstract

Digital human resource management can optimize recruitment, training, performance appraisal and other links. It improves the human resource management process through automation and intelligence. This method can effectively improve employees' work efficiency and organizational commitment. Digital means can track and analyze employee behavior and performance in real time. Through data analysis, managers can accurately identify management problems. At the same time, data can also provide a scientific basis for decision-making. Companies can enhance employee participation by building an employee interaction platform. This helps to improve employees' sense of belonging and identity. Digital human resource management can not only achieve precise management, but also improve employee satisfaction and organizational cohesion. For enterprises, digital human resource management is of great significance. It can significantly improve the management efficiency of enterprises.

Keywords

Digital Human Resource Management, Employee Performance, Organizational Commitment, Management Efficiency, Intelligent Management

1. Introduction

With the rapid development of digital technology, enterprise management models are shifting towards intelligence and automation. As an important part of enterprise digital transformation, digital human resource management has become a key means to improve management efficiency and competitiveness.

Enterprises can improve work efficiency through intelligent recruitment, performance analysis and employee interaction platforms [1]. At the same time, these tools can also enhance organizational cohesion. However, how to effectively use digital means to improve employee performance and organizational commitment is still a major challenge in practice. Studying its mechanism of action has important practical significance.

1.1 The Connotation of Digital Human Resource Management

Digital human resource management is a management model that uses advanced digital technology and information technology. It can comprehensively optimize all aspects of human resource management. By integrating data analysis, intelligent algorithms and automation tools, digital human resource management makes processes such as recruitment, training, performance and salary accounting more intelligent and efficient. The core of this management model is to empower traditional human resource management with information technology. It realizes scientific decision-making driven by data. For example, enterprises can evaluate employee performance and training feedback through big data analysis technology. This can more accurately understand employees' work performance and development needs. Automated management processes can achieve real-time monitoring and dynamic adjustment of human resources. This makes management more flexible and efficient.

Digital human resource management has three significant characteristics: automation, dataization and intelligence. Automation is reflected in recruitment, performance appraisal and training management, and can respond quickly and automatically assign tasks. Dataization relies on the human resource management information system (HRMIS) to collect and summarize data in real time and establish a complete talent file and performance record. Intelligence uses artificial intelligence technology for data analysis and decision support, such as optimizing recruitment strategies and training plans through predictive analysis.

1.2 Main Technical Means of Digital Human Resource Management

The implementation of digital human resource management depends on the comprehensive application of multiple advanced technologies and management tools. The human resource management information system (HRMIS) is the basic support platform. It integrates functions such as recruitment, salary, performance appraisal and employee file management. The HRMIS system can uniformly manage human resource data and improve operational efficiency. It not only simplifies daily transactional work, but also improves the accuracy and reliability of data processing. In employee management, big data analysis and performance management platforms play an important role. Managers can evaluate

employee performance, training effects and career development paths through data analysis. These platforms are usually combined with data visualization tools to convert performance indicators into intuitive charts and reports. This helps managers conduct scientific evaluations and strategic adjustments. Employee self-service platforms and mobile office systems can enhance employee autonomy and satisfaction. Employees can complete leave, attendance, training registration, and performance feedback online through these platforms. This reduces the cumbersome processes in personnel management. Mobile office systems break the limitations of time and space. Employees can access work tasks and management resources anytime and anywhere. This greatly improves the flexibility and responsiveness of work.

1.3 Development Status of Digital Human Resource Management

With the rapid development of information technology, digital human resource management has been widely used around the world. Many well-known companies (such as Google and Amazon) have established a complete digital human resource management system. They use artificial intelligence and big data technologies to achieve comprehensive digitalization of recruitment, performance evaluation, and career development. In these companies, the HRMIS system is deeply integrated with the performance platform to form an automated recruitment and dynamic assessment mechanism. This significantly improves the efficiency of enterprise management. Under the wave of digital transformation, more and more companies are beginning to explore new paths for digital human resource management. Some companies integrate modules such as attendance, performance analysis, and training management by building an integrated management platform. This achieves data sharing and collaborative management.

However, there are still some challenges in implementing digital human resource management. For example: data security risks, too fast technology updates, low employee acceptance of digital management, etc. When promoting digital management, companies need to consider their own culture and employee quality. Only by formulating scientific and reasonable management measures can the effectiveness and sustainability of digital transformation be ensured.

2. The Mechanism of Digital Human Resource Management on Employee Performance

2.1 Theoretical Basis for Digital Management to Improve Employee Performance

Digital human resource management effectively improves employee performance by optimizing management processes and improving data utilization. Resource-based theory believes that the core competitiveness of an enterprise comes from its unique resources and capabilities [2,3]. As an efficient management resource, digital technology can improve the scientificity and flexibility of human resource management. Data-driven and automated operations can improve management efficiency and decision-making accuracy. These improvements directly improve employee performance and enhance the overall competitiveness of the organization. Social exchange theory points out that the support and resources provided by the enterprise are closely related to the work input and performance of employees. In the context of digital management, enterprises reduce the operational burden of employees by providing intelligent management tools and self-service platforms. This significantly improves employee job satisfaction.

2.2 Specific Practices of Digital Human Resource Management

Digital recruitment and employee matching optimization are the basic practices of digital human resource management. Enterprises use big data analysis and artificial intelligence algorithms to achieve accurate matching of talent needs and job requirements. During the recruitment process, the system can automatically screen resumes and conduct preliminary interviews [4]. This accurate matching reduces the recruitment error rate and helps to quickly find suitable talents. Ultimately, it drives the overall performance of the team to improve.

The intelligent training system helps employees quickly master job skills through data analysis and learning path planning. Enterprises establish online training platforms and skill improvement modules, and employees can choose to train courses according to their own development needs. The system can also adjust the training content in real time through performance tracking and training effect analysis. This ensures the pertinence and effectiveness of training. The intelligent training system not only improves the professional ability of employees, but also enhances their continuous motivation for career development.

The real-time and precise performance appraisal of employees is a key link in digital human resource management. Through the online assessment platform, managers can track employees' work progress and task completion in real time. These data-based performance records can automatically generate analysis reports, providing a scientific basis for performance interviews and promotion assessments. Real-time assessment allows managers to discover performance problems in a timely manner and quickly adjust incentive mechanisms. This effectively improves employees' work enthusiasm and efficiency.

2.3 Mechanism Analysis

Digital human resource management achieves precise performance management by improving employees' skill levels and enhancing their job competency. Digital training and skill management systems can continuously track employees' ability improvement trajectories [5]. This makes the training content more in line with job requirements. By providing an autonomous learning platform and real-time feedback mechanism, employees can continuously improve their comprehensive quality and maintain a good job competence.

Real-time data feedback mechanism is one of the key elements of digital management to improve performance. Through the online management platform, employees can view their personal performance data and goal completion at any time. This transparent and timely feedback method can not only motivate employees to improve themselves, but also enable employees to adjust their work strategies in time according to feedback. This significantly improves work efficiency and quality.

The optimized performance evaluation system can effectively promote employee self-management. The digital management platform uses data analysis and intelligent algorithms to establish a multi-dimensional performance appraisal model. This improves the objectivity and fairness of the appraisal. Employees can formulate personal growth plans based on the appraisal results to enhance their autonomy, initiative and sense of responsibility.

3. The Mechanism of Digital Human Resource Management on Organizational Commitment

3.1 Composition and Influencing Factors of Organizational Commitment

Organizational commitment reflects employees' loyalty to the company and their willingness to serve for a long time. It consists of three main parts:

Affective commitment refers to employees' voluntary stay in the organization due to emotional attachment. This commitment is manifested in a high degree of identification with corporate culture, values and team atmosphere. Digital human resource management enhances emotional commitment by enhancing employee interaction and participation. When employees feel a sense of belonging to the organization, their work engagement will be significantly improved.

Continuous commitment stems from employees' consideration of realistic factors such as economic benefits and social status. Digital management works through salary management systems and career development platforms. It provides employees with economic and career security, thereby enhancing continuous commitment. Mobile self-service platforms allow employees to understand salary structures and promotion paths at any time. This makes employees feel the stability and long-term vitality of corporate development and reduces the tendency to leave.

Normative commitment reflects employees' recognition of organizational responsibilities and obligations. It is mainly driven by moral constraints and social expectations. Digital human resource management promotes employee self-discipline and compliance through intelligent attendance and work monitoring systems. Online training platforms spread corporate culture and professional ethics. This enhances employees' awareness and execution of organizational responsibilities and forms a high level of normative commitment.

3.2 The Role of Digital Human Resource Management in Promoting Organizational Commitment

Digital human resource management enhances a sense of belonging and professional identity by establishing an employee interaction platform. In a digital environment, employees can participate in team projects and corporate cultural activities through an intelligent collaboration platform. This high degree of interaction deepens employees' emotional dependence on the organization. Regularly publishing digital announcements of corporate achievements and team honors can significantly enhance employees' sense of organizational identity and belonging [6].

Digital management improves work transparency and fairness. This enhances employees' trust in the organization. During the performance management process, employees can clearly understand the assessment indicators and evaluation criteria. This avoids a decline in work enthusiasm due to unfair assessment. The digital feedback mechanism allows employees to view performance improvement suggestions at any time. This transparent and open evaluation system greatly enhances the credibility of the organization.

The digital platform strengthens employees' psychological contracts through a personalized care mechanism. The human resource management system collects employees' career preferences and development needs. Then it recommends appropriate training courses and career paths for employees. This care mechanism not only improves employee satisfaction, but also deepens their emotional connection with the organization. Customized incentives, such as online reward points and real-time praise, also enhance employees' sense of achievement in the organization.

3.3 Case Analysis: Digital Transformation of Human Resources in a Technology Company

A technology company faced problems such as talent loss and low employee satisfaction during its rapid development. Traditional human resource management methods are difficult to adapt to market changes. The company urgently needs to improve employee commitment and performance through digital means. The company introduced a digital performance appraisal system and an employee interaction platform. Online appraisals combined with real-time feedback improve the transparency and fairness of evaluations. Management publishes project progress and corporate cultural activities information through interactive platforms. This enhances employees' sense of organizational identity. The intelligent salary management system allows employees to understand salary changes and promotion plans in real time. This strengthens employees' confidence in the long-term development of the company.

Digital transformation has brought significant results: employee satisfaction has increased by 30%, employee turnover has decreased by 20%, platform interaction frequency has increased, and team collaboration efficiency has significantly improved. As shown in Table 1, these data fully demonstrate the positive impact of digital management.

Table 1. Comparison of Key Indicators before and after the Company's Digital Transformation

Indicator	Before transformation	After transformation	Growth rate
Employee satisfaction	60%	78%	+30%
Employee turnover rate	15%	12%	-20%
Frequency of team collaboration (times/week)	5	8	+60%
Online training participation rate	50%	85%	+70%

By implementing digital human resource management, the company has significantly improved employees' sense of belonging and commitment. The high interactivity of the digital platform has effectively strengthened employees' sense of professional identity. The real-time salary management system has significantly improved employees' level of continuous commitment. The organic combination of online cultural promotion and training programs has promoted the coordinated development of emotional commitment and normative commitment. Based on accurate data analysis and real-time feedback mechanisms, the company has achieved a dual improvement in performance levels and organizational commitment. These measures have jointly built a virtuous cycle of digital management ecosystem.

4. Comprehensive Analysis of the Dual Effects of Digital Human Resource Management on Performance and Commitment

4.1 Synergy Model

Digital human resource management effectively improves employee performance by optimizing management efficiency and improving employee experience. In the performance management process, digital tools can track employee performance in real time. These tools provide accurate assessment data and improvement suggestions to help employees clearly understand their strengths and weaknesses. Data-driven management methods improve employees' work enthusiasm and goal orientation. As performance improves, employees' trust in corporate management also increases significantly. This trust translates into a stronger sense of organizational belonging at the psychological level. Digital management allows employees to feel the company's emphasis on career development, thereby generating emotional dependence and long-term commitment. Enhanced organizational commitment can continuously consolidate employee performance. When employees identify with corporate culture and management models, their work engagement will be significantly improved. Digital management gives employees a sense of accomplishment and professional identity through personalized incentives and real-time feedback. This two-way incentive effect further promotes performance improvement.

4.2 Analysis of Influencing Factors

Organizational culture has a key impact on the implementation effect of digital management. An open and inclusive culture can improve employees' acceptance of digital changes. Such an environment encourages employees to actively participate in the application of digital tools. Conservative and traditional culture may lead to employees' resistance to new technologies, affecting management effectiveness. Employees' personal characteristics are also an important influencing factor. Innovative and adaptable employees are more likely to accept digital management. They usually show high flexibility and autonomy. For conservative employees, digital management may cause resistance. This will affect the stability of performance. The support of management is crucial. The degree of managers' understanding of digital tools directly affects employee acceptance. Leadership needs to actively guide and train employees. It is necessary to help employees improve their digital skills and form a consistent management consensus.

4.3 Model Construction: Performance and Commitment Two-way Promotion Mechanism

The digital feedback mechanism is an important support for two-way promotion. The system generates accurate data reports through real-time monitoring. These reports can identify performance weaknesses and provide improvement suggestions. Instant feedback improves work improvement efficiency and reduces performance pressure. Digital management has significant long-term effects. Employees gain career growth through continuous use of digital platforms. This helps to cultivate the habit of self-management and continuous learning. The company's long-term investment in the digital performance system closely combines personal development with organizational goals. This management approach enhances employees' confidence in the organization. It promotes both personal growth and organizational stability. Ultimately achieve a win-win situation of employee loyalty and corporate development.

5. Conclusion

Digital human resource management is a key way to achieve modern enterprise management. It works by optimizing multiple key links. These links include recruitment, training, performance appraisal and employee interaction. These optimizations have effectively improved employee work performance. At the same time, it has also improved the degree of organizational commitment. Under the digital management model, employee performance and organizational commitment form a two-way promotion relationship. This relationship is manifested in the continuous improvement of management efficiency. At the same time, it has also brought about a significant increase in employee satisfaction. Enterprises achieve continuous improvement by establishing a dynamic feedback mechanism. At the same time, a long-term impact mechanism is built to support employee development. With the help of these digital means, employees are more proactive in their career development. This initiative further enhances employees' sense of identity

with the company. At the same time, it also strengthens employees' sense of loyalty. In specific management practices, enterprises need to pay attention to two key points. On the one hand, they should continue to promote the innovation of digital tools. On the other hand, they should focus on maintaining humanistic care. Only by balancing these two aspects can we promote the scientific development of digital human resource management. Ultimately, the continuous improvement of management level can be achieved.

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