KNOWLEDGE-BASED EMPLOYEE MANAGEMENT OF INTERNET ECOLOGICAL ENTERPRISES

WU YANFANG

(Asia Metropolitan University)

Abstract

China's industrial economy has entered a new normal of slower speed and better structure. The new economy represented by high-tech industries, new energy and "Internet plus" is quietly emerging, gradually becoming a key support force for China's economic transformation and upgrading, quality and efficiency improvement. Chinese Internet enterprises have also ushered in a once-in-a-lifetime opportunity for development, with remarkable achievements. At present, the key to industrial transformation and upgrading is to make technological progress and take "talents" as a foothold. They need to shoulder the responsibility of knowledge creation, application, value-added and rational allocation of resources. Preliminary research in the United States shows that knowledge-based employees make up 61 percent of the country's workforce. In China, knowledge-based employees control the level of wealth creation, but they are in short supply. Effective management of knowledge-based employees has always been one of the important research topics in human resource management. In the field of knowledge study, this study explore the Internet strategy of ecological model, the influence of the knowledge staff to the enterprise performance relationship, with the introduction of reflecting the knowledge staff motivation system as the intermediary variable, for Internet strategy driven by ecological model, the knowledge staff management and corporate performance study provides a new channel. In this study, 40 Internet ecological enterprises were selected. Through the collection of multiple data and the method of factor analysis, the overall ranking of the enterprises was conducted. This questionnaire was distributed to knowledge employees and enterprise managers of Internet ecological enterprises. 400 questionnaires were distributed and 360 were valid, with an effective recovery rate of 90.0%. The author mainly sent emails to the knowledge-based employees and managers of the Internet ecological enterprises to conduct a questionnaire survey with the consent of the enterprise. Firstly, based on literature review, this study defines the definition of knowledge-based employees, and adopts
questionnaires and in-depth interviews to investigate the management of knowledge-based employees in Internet ecological enterprises. Through the analysis of related concepts and components, the scale of management of knowledge-based employees in Internet ecological enterprises was developed. Through empirical analysis, it was verified that the scale of management of knowledge-based employees in Internet ecological enterprises had good reliability and validity. Based on the proposed research hypothesis, the paper designs and improves the measurement scale of knowledge-based employee management and related variables in the Internet ecological enterprise, and adopts the methods of correlation analysis, regression analysis and structural equation to conduct empirical analysis on the data, test and form the measurement scale of each concept, and verify the research hypothesis involved in the research model. Secondly, this study studies the intermediary relationship between employee management and ecological model and enterprise performance of the motivation system for knowledge-based employees in Internet ecological enterprises and proposes the hypothesis of the relationship between management of knowledge-based employees, ecological model and enterprise performance. Based on the research results of knowledge-based employee management in Internet ecological enterprises, this study studies the influencing factors of knowledge-based employee management on enterprise performance and the overall research objectives. This study put forward by regression analysis method to study the questionnaire data, the demonstration of the correlation index factor, the results show that the following phenomena: (1) From the H1 and H2 two hypothesis, the ecological pattern and knowledge staff management itself has played a positive role to the enterprise performance, ecological model and knowledge staff management has important influence on the result of the operation of the enterprise.

Keywords: Internet; Ecological Enterprise; Knowledge Staff Management; Motivation System

INTRODUCTION

The Ministry of Industry and Information Technology announced the operation of the Internet and related services in 2019. Data show that the revenue from Internet and related service enterprises above the designated size in China (hereinafter referred to as Internet enterprises) reached 1206.1 billion yuan, a year-on-year increase of 21.4%. It is not difficult to see that with the help of information technology and capital forces such as artificial intelligence, cloud computing, big data, and the support of various national policies, in 2019, China's Internet and related service industries will maintain a steady and relatively rapid growth trend. Revenue and profit maintained rapid growth, R & D investment increased rapidly, business models continued to innovate and expand, and the role of supporting the development of the digital economy continued to increase.
Background of Study

With the rapid development of the Internet economy, employees' knowledge is becoming more and more diversified and informatized (Abualoush, Obeidat, Tarhini, Masa'deh & Al-Badi, 2018; Chen, 2018; Chen, 2019; Ahbabi, Singh, Balasubramanian & Gaur, 2019; Crampton, 2019; Che, Wu, Wang & Yang, 2019; Feng, 2019). Market competition has also entered multi-directional competition at the level of production, marketing, and management, but the fundamental competition is still the competition of employees. As a carrier of corporate culture and philosophy, employees receive more attention, and knowledge-based employees are a hot issue in current corporate and academic research. In modern enterprises, knowledge plays an increasingly important role. Half a century ago, the West believed that knowledge was only a single, fragmentary information collectively, and this kind of knowledge limited the development of knowledge. As more scholars invest in the research of knowledge, especially as described by the management guru, mankind will usher in another industrial revolution after the 21st century. And this key factor is knowledge, which he described as a revolution in knowledge management. The current production factors are mainly composed of capital power, labor, and land. Knowledge should be a new and revolutionary new production factor. Knowledge management itself is a means of enterprise operation.

The business community believes that third-tier companies make products, second-tier companies make brands, and first-class companies make standards. The standard here refers to the corporate culture. To become bigger and stronger, an enterprise must build an excellent corporate culture. Corporate culture is a manifestation of team cohesion and a manifestation of corporate spirit. Only when the personal needs of the knowledge-based employees and the enterprise need to be organically unified, and the knowledge-based employees can clearly see their development prospects in the enterprise, will they have greater motivation to work hard for the enterprise (Sun, 2016; Hughes, McCulloch & Valdes, 2018; Ruan, 2018; Meng, 2019; Xiao, Xu, Lin & Yi, 2019; Wang, 2019).

1.1 Problem Statement

The Internet ecology is based on Internet technology and user value oriented. Through cross-border vertical industrial chain integration, horizontal user relationship circles are expanded, industrial boundaries in the industrialized era and the traditional business ecological model are subverted, and value reconstruction is achieved. The rapid development of the Internet has had a huge impact on industrial forms and enterprise development. Domestic Internet companies have realized the layout of ecological strategies by constructing ecological systems. Under the layout of the Internet ecological strategy, what will be tested in the future is not the ability of enterprises to go it alone, but the ability to collaborate with the entire ecosystem. Future market competition is more like competition between different business ecosystems. In traditional industries, the core of manufacturing is to create a flexible,
stable and elastic supply chain. Companies can produce products normally without problems in the supply chain. However, compared with the former two, there is still a significant gap in the evaluation of business ability and strategic thinking. Leading vendors in the traditional ICT market, Huawei, Inspur and Xinhua, have all entered the front runners. Inspur, Huawei and Alibaba Cloud and Tencent Cloud have very close market positions. It is foreseeable that in the next time, the above companies' competition around the new Internet market will further intensify, and it will certainly become one of the focus of market competition to win the support of more ecological players. For other new Internet players, this could mean more opportunities.

Figure 1-1 2018-2019 China's New Internet Market Scale and Growth Rate

Knowledge production in any form and aspect is guided by individuals or groups. The development of the knowledge economy has changed the development direction of the manufacturing industry, and knowledge has become a key factor in improving corporate performance and visibility. The development of modern enterprises also promotes knowledge research, and the two promote the connection between each other, providing a virtuous circle for knowledge research and enterprise development. Enterprises gain income by deepening organizational knowledge, attaching importance to knowledge management, and transforming the results into information products, production products, service products, and so on. It is undeniable that knowledge plays a catalyst role in the industry.

1.2 Research Question

At present, in the context of global economic integration, enterprises must rely on independent innovation capabilities and independent core technologies to survive and develop well. It is difficult for an enterprise to survive and develop only by relying on national industrial support and protection. As the owner and user of scientific and
technological knowledge, knowledge-based employees have become an important target for all technological companies to compete for. The departure of knowledge employees with independent innovation capabilities and mastery of core technologies often causes fatal damage to the development of the company. From the perspective of management practices, the domestic business community has deeply recognized the decisive role of knowledge-based employees in the development of enterprises, but companies usually do not pay enough attention to the motivation and career development of knowledge-based employees. At the same time, theoretical perspectives on the management and training of knowledge-based employees have also emerged, and three incentive measures have been proposed, such as compensation, spirit, and emotion. Comprehensive analysis has resulted in theoretical approaches and effective approaches for the management mechanism of knowledge-based employees. In actual application, it is found that there are many contradictions with the actual situation. In practice, how to use theory to guide enterprises to carry out knowledge-based employee management has become the focus of enterprises with knowledge-based employees. The issues studied in this article:

1.3 Research Objectives

(1) Summarize the current status of the development of Internet ecological enterprises? The supply-side structural reforms of the real economy and the Internet transformation resonate in 2019. The challenges facing the development of the industry cannot be ignored, but the prospects remain broad. Internet ecological enterprises are accelerating the pace of traditional business transformation and upgrading, and new models such as smart retail, social e-commerce, e-sports, and short video are rapidly emerging. At the same time, the company turned its attention to the enterprise market, empowered the B-end by means of digital transformation and open service capabilities, and accelerated the development of industrial / industrial Internet business.

(2) What factors affect the development of Internet ecological enterprises? The Internet tide has grown stronger with the development of the times, and while it has brought convenience to our lives, many people have also crowded into the Internet tide. But in recent years, it is not difficult to find that the Internet has also ushered in the cold winter, and many large companies have begun to lay off employees. For the special group of knowledge-based employees, how to analyze the influencing factors and which factors affect the development of Internet ecological enterprises is one of the key issues of the study.
performance, and found that the core competence of the enterprise directly affects the corporate performance, and the core competence requires the continuous accumulation and integration of knowledge to form. With the further research of knowledge, more and more scholars realize that a single knowledge factor cannot express the relationship between knowledge and corporate performance well. On the other hand, the importance of the individual knowledge process ability contained in the knowledge ability is prominent. It expresses the ability of employees to use knowledge and can connect the relationship between knowledge-based employees and results.

(2) Sort out the influencing factors for the development of Internet ecological enterprises. This article reviews the existing literature at home and abroad to conduct a qualitative analysis of the research results of ecological models, knowledge-based employees, and corporate performance driven by Internet strategies, and then combines ecological model theory, knowledge-based employee management theory, and performance evaluation theory.

**Dependent Variable: Business Performance**

According to Peter Drucker, "if you cannot evaluate, you cannot manage." Performance management is the core of human resource management, and it is a comprehensive and systematic management of all elements in the performance realization process (Li & Chen, 2016; Lin, 2016; Hang, 2017; Huang, 2017; He & Lv, 2017; Imran, Ilyas, Aslam & Fatima, 2018; Ji, 2018; Li, 2018; Huang, 2019; Liu, 2019). Through formulating strategies, determining goals, and evaluating performance, in the continuous communication process, employees are encouraged to continuously improve performance levels, thereby achieving the strategic goals of the organization.

Corporate performance refers to the operating efficiency of the enterprise and the performance of the operators during a certain period of operation. The content of performance evaluation includes four aspects: profitability, operating ability, solvency and development ability. There are four methods of corporate performance evaluation: state capital performance evaluation system, DuPont financial analysis method, balanced scorecard, and EVA performance evaluation methods, but each method has its inherent flaws. DuPont's financial analysis system only analyzes the financial aspects and does not take into account the level of business management, nor integrates with the company's strategic planning and strategic management methods. The reorganization of institutions, the reduction of funds, the competition in business, the country's growing expectations and increasing requirements of enterprises, and the strong demands of all sectors of society for the transformation of corporate functions. It is necessary to improve the level of enterprise performance management in order to obtain national and public recognition, and to achieve better survival and development. How to make enterprises better adapt to the development and changes of the market economy and better serve the public, performance management is an
important link that cannot be ignored. However, the development of human resource management in China is relatively slow compared with developed countries. Performance management, as an important component, is relatively backward. How to do well in performance management is undoubtedly a challenging and meaningful subject for enterprises.

Knowledge-based Employee Management

The so-called employees refer to all employees at the enterprise and production site, including all existing employees such as supervisors, production employees, logistics personnel, process personnel, and quality personnel (Xu, 2016; Qian & Sun, 2017; Weng, Yang & Chen, 2018; Wang, 2019; Yu, 2019; Li, 2019; Lu, 2019; Ma, 2019; Su & Lin, 2019; Wang, Li & Guan, 2019; Wang, 2019). Employees at different levels and departments have different backgrounds, personalities, attitudes, and learning abilities, so the knowledge structure, levels, and levels of employees are different. Today's enterprises focus on exploring the potential of existing employees, including knowledge, motivation, and enthusiasm, so that they can exert a variety of work energy. This not only stimulates the enthusiasm of employees in the enterprise, but also increases the motivation of the work. The knowledge possessed by each link is interactive, manifested in the form of patents, information, skills, technology, and so on. Employees are the key elements in the production system and the biggest difficulty in production management. They are the key issues that the current academic and business circles focus on solving and researching. The enterprise revolves around the "employees" factor, and different enterprises have different management methods and schemes.

Previous Research on the Relationship with Business Performance

The first to define knowledge-based employees was Drucker (1999), an American scholar. He believed that knowledge-based employees are people who use their knowledge to carry out creative work. The products they produce are knowledge and ideas. From the perspective of the enterprise, knowledge employees are employees who use their knowledge and information that they have learned and mastered to create more value in the enterprise. Domestic scholars such as Xu Yaozong and Wang Xingcheng (2018) interpreted knowledge-based employees from the perspective of knowledge capital and human capital. They believe that knowledge-based employees are employees who increase the value of the company's knowledge capital through the production, creation, and use of knowledge and information. Yang Jie and Fang Liluo (2019) define jobs that require higher education, high quality of innovation, high degree of specialization, and products that are difficult to replicate as knowledge jobs, and those who engage in knowledge work are knowledge-based employees.
Ecological Model

The Internet ecosystem refers to a circle and a ring within the Internet. This system encloses consumers and forms a closed loop of consumer behavior. In an Internet ecosystem, consumer spending behaviors can be recorded by companies, where consumers come from, what words they search for, what products they browse, what products they buy, what reviews they give, and so on (Liu, 2018; Gu & Jin, 2018; Yang & Fan, 2018; Cai, Guan, Xiong, Wang & Zhang, 2019; Zhang, Jiang & Qiao, 2019; Lu, Yu & Wu, 2019; Tang, 2019). The accumulation of these data forms big data, which provides the basis and conditions for accurate marketing of enterprises.

Content, community, and e-commerce are the three core elements of the ecosystem. The Internet ecosystem is to use the Internet to improve the ecology of enterprises. All Internet-related elements in an enterprise belong to the Internet ecosystem. Specifically, it includes corporate PC Internet websites, mobile smart websites, mobile apps, WeChat platforms, OA office systems, terminal intelligent interactive machines, background big data, and online Internet training. These modules form a complete, benign and effective corporate Internet ecosystem.

Previous Research on the Relationship with Corporate Performance

The Internet can not only serve as the foundation and support for the development of the Internet industry, but it can also be used as a new technology for traditional production. And it can optimize the existing production relationship with the emergence of a platform, effectively promote the development and transformation of traditional industries, and provide new ideas and technical support for the transformation of traditional industries. Therefore, the content of the existing industry is redefined from the perspective of connotation, the production cost of the existing industry is reduced, and the informationization degree of the existing industry is improved. In the long run, the continuous development of the Internet can truly drive the existing industries to realize informatization. In the short term, the development of the Internet provides significant opportunities for the development and transformation of traditional industries. Specifically, the opportunities provided by the Internet for the development of traditional industries are mainly reflected in the following two aspects. First, the development of the Internet requires a large amount of investment in infrastructure and resources, and the production of these infrastructures and resources depends on the provision of traditional industries.

Motivation System

The concept of motivation in management refers to motivating employees 'work motivation, using various useful methods to motivate employees' work enthusiasm and creativity, allowing employees to work hard to complete the organization's mission goals, thereby achieving the organization's goals (Sun, 2016; Hughes, McCulloch & Valdes, 2018; Ruan, 2018; Liao, Chen & Hu, 2018; Xue, 2018; Meng,
2019; Xiao, Xu, Lin & Yi, 2019; Wang, 2019; Xie, Guan & Huan, 2019; Zhang, Song, Yang & Zhang, 2019). By designing appropriate reward forms and working environments, and using standardized reward and punishment measures to stimulate, guide, maintain and regulate the behavior of organizational members in order to most effectively achieve organizational and personal goals. Reasonable and effective motivation can ignite the work passion of employees, make them more motivated to work, and generate the desire to surpass themselves and others. How to mobilize employees' work enthusiasm and stimulate creativity at work is the highest-level goal of human resource development.

**Hypothesis**

H1: Correlation between ecological model and corporate performance

H1a: Ecological model is positively related to corporate performance

The ecological model has a significant effect on corporate performance, and its effect is positive.

H1b: Ecological model is not related to corporate performance

The ecological model has no significant effect on corporate performance, and its effect is irrelevant.

H1c: Ecological model is negatively correlated with corporate performance

Scale output value has a significant effect on corporate performance, and its effect is negative.

**METHODOLOGY**

**Research Design**

Empirical research pays attention to the universality of research objects, the objectivity of research questions and data, and the scientific of research conclusions. Therefore, the empirical research design of this article is as follows:

First, analyze the research objects. According to the research theme and the nature of the research question, the knowledge employees of Chinese Internet ecological enterprises are taken as the object of empirical research, and the approximate scope of research data collection is determined.

Second, select empirical samples. Positivism emphasizes the objectivity of the selected sample, so the selected empirical sample should be representative and universal. The samples selected in this article are all Chinese Internet ecological enterprises, and they are the pioneers of Internet enterprises. And they have the
objective requirements for public data needed to study the performance, ecological model, knowledge-based employee management, and motivation system relationships of China's Internet ecological enterprises. The collected data can effectively test the previous mechanism. Then, collect and organize the empirical sample data. Because China's Internet ecological enterprises have different ecological models, in order to reduce the variance caused by the inconsistent quantization units of the measured variables, to avoid problems such as insignificant results due to unscientific data processing processes, and to increase the validity and reliability of the research. This paper takes a logarithmic approach to the indicators of China's Internet ecological enterprise performance, ecological model, knowledge-based employee management, and motivation system.

Again, build a data analysis model. Based on the characteristics of the research problem, this paper chooses to build a regression equation model to study the impact mechanism of ecological model and knowledge-based employee management on Chinese Internet ecological enterprises. Firstly, it analyzes the direct impact mechanism of ecological model on the performance of Chinese Internet ecological enterprises, and then introduces knowledge-based employee management as a moderating variable to explore the moderating role of knowledge-based employee management in different Chinese Internet-based ecological enterprises on corporate performance.

Finally, analyze the data and draw empirical conclusions. Based on the above empirical results, combined with the meaning of the variables represented by the data and the relationship between the variables reflected, the specific and in-depth analysis of the results of knowledge-based employee management on corporate performance was focused. For the hypotheses that have not been verified, the reasons leading to the insignificant results are also analyzed in detail and in detail, and the corresponding research conclusions and management implications are drawn.

**Population/Sampling/Unit of Analysis**

This research selects 40 Internet ecological companies, and collects data from multiple sources, using factor analysis to rank the companies. Through the differences in rankings, the commonalities of the top-ranked companies are tapped to promote innovation and market activity. In the setting of the innovation efficiency index, it is divided into input and output indicators, considering the innovation resources and the materialized and economic values generated, which can serve as a reference for the optimization of innovation efficiency.

The design of this research questionnaire demonstrates through factor analysis that the factors of Chinese Internet eco-business employees are mainly based on literature methods, while referring to questionnaire scales in related research areas, and finally forming a complete questionnaire.
Instrumentation

This article introduces the design sections of questionnaires generally recognized by the academic community, which mainly include the following sections: The first section is the collection of basic information of the surveyed objects. The main contents include gender, age, education, working years, positions, and the status and scale of the Internet ecological company in the industry. The second section is the measurement of the knowledge employees' knowledge of Internet ecological enterprises. This article uses the knowledge factors obtained by factor exemplification as a guide to make a survey scale. The third section is the survey scale of the Internet ecological business ecological model. The fourth section is a survey scale for the motivation mechanism of knowledge-based employees. The fifth section is the enterprise performance scale, which mainly measures the key indicators of enterprise performance. The scale in this article adopts a five-point scale to measure, including very non-conforming, not very consistent, fair, relatively consistent, and very well in line with the five levels of evaluation criteria.

The knowledge sharing scale of this study mainly draws on the knowledge sharing scale designed by Ridder and Hooff (2004). The scale is suitable for describing the knowledge sharing status of people from different industries and cultural backgrounds, and has high reliability and validity, so it has been widely used at home and abroad. This research modifies and supplements the scale according to the research theme. The research scale finally designed is divided into two dimensions: knowledge contribution and knowledge acquisition. Knowledge contribution is composed of 4 finger title items, and knowledge acquisition is also composed of 4 finger title items. Each indicator adopts the 5-point Likert scale method to sort and collect the measurement indicators and requires the respondents to make subjective judgments on the items. The larger the number used for scoring, the higher the degree of recognition, and the lower the contrary. The total score of each scale is its average value.

In order to better fit the research on core competence in this article, based on the application of the core competence scale at home and abroad, the core competence scale designed by Hafeez and Chen Jianxun (2009) was adopted. The scale has high reliability and validity and has been widely used at home and abroad. Based on the core competence scale designed by Hafeez and Chen Jianxun and combined with the actual needs of this article, the core competence is divided into three dimensions: research and development capability, market development capability and strategic management capability. The R & D capability consists of 4 index headings, the market development capability consists of 4 index headings, and the strategic management capability consists of 2 index headings. Each indicator adopts the 5-point Likert scale method to sort and collect the measurement indicators and requires the subject to make subjective judgments on the items. The larger the number used for scoring, the higher the degree of recognition, and the lower the contrary. The total score of each scale is its average value.
In the past research on corporate performance, different scholars have adopted different measurement indicators on corporate performance. This research uses the enterprise performance scale designed by Dyer and Reeves, and based on the research direction of this article, the scale is rationally improved. Divide corporate performance into two dimensions: financial performance and innovation performance. Financial performance consists of six subtitled items, and innovation performance consists of three subtitled items. Each indicator adopts the 5-point Likert scale method to sort and collect the measurement indicators and requires the subject to make subjective judgments on the items. The larger the number used for scoring, the higher the degree of recognition, and the lower the contrary. The total score of each scale is its average value.

**Reliability Analysis**

Reliability is also called reliability, and generally refers to the credibility of the questionnaire. Reliability analysis is used to understand and analyze the stability and consistency of scale indicators. For the reliability of data, reliability analysis is generally performed on the data before it is used for analysis. The most commonly used reliability analysis method is Alpha reliability technology. In this paper, the reliability of the scale is tested by a combination of CITC value and internal consistency of α reliability. The method of measuring the CITC value is that when the CITC value of a finger item is less than 0.3 and deleting the finger item will increase the alpha value of the total table, then the finger item should be deleted. Cronbach’s α coefficient was created by Cronbach, and its reliability coefficient is between 0-1. The alpha coefficient is used to measure the reliability of internal consistency. The higher the alpha coefficient value, the better the internal consistency. A good scale, the alpha coefficient of its total scale is more than 0.8, the reliability is very good, between 0.7-0.8, which means that it is acceptable to modify the entry slightly. The alpha coefficient of its subscale is above 0.7, which means that the reliability is very good, and it is acceptable between 0.6-0.7. If the alpha coefficient of the total scale is below 0.8 and the alpha coefficient of the subscale is below 0.6, it means that the scale needs to be revised. This study adopted this standard to carry out reliability analysis on the total scale and the subscale.

Through the SPSS25.0 software running questionnaire data, the reliability analysis of the enterprise performance system is obtained. The results are shown in the table. From the data in the table, the alpha coefficient of the total table of the enterprise performance indicator system is 0.89, which is greater than 0.7. This indicates that the scale has a high internal consistency. At the same time, the CITC value is 0.290 <0.3, and deleting this item makes the total α value greater than the original total α value, so delete this item. The reliability of other indicators is very good and meets the reliability requirements.
Validity Analysis

Validity is also called validity. A good empirical analysis and research must be based on high efficiency. To make the validity of the scale better, the data of the scale must reflect the content of the measured object. The evaluation of validity is generally measured from two aspects: content validity and structural validity. From the perspective of content validity, because the scales of this study are all from mature scales at home and abroad and have been reasonably revised according to their own actual conditions, they have better content validity. From the perspective of structural validity, this section will use the exploratory factor method to analyze the structural validity of each variable. In the hypothesis testing study, the KMO value is evaluated. When the KMO value is greater than 0.9, it is very suitable. It is very suitable between 0.8-0.9, acceptable between 0.7-0.8, not very suitable between 0.6-0.7, very poor between 0.5-0.6, not suitable below 0.5. Therefore, KMO value greater than 0.7 indicates that it is suitable for factor analysis, and less than 0.5 indicates that it is not suitable for factor analysis. In the process of factor analysis, this study uses the principal component analysis method of SPSS25.0 software to extract common factors and uses the orthogonal rotation method of the maximum variance method to obtain the factor load matrix. The purpose is to reduce many variables to a few factors to make the scale more scientific.

(1) Validity analysis of ecological model targets

KMO is used to test the partial correlation between variables. Using SPSS25.0 software to conduct an exploratory analysis of the effective data, the test results of the ecological models KMO and Bartlett were obtained. The results are shown in Table 3-2. As can be seen from the table, the KMO value is 0.803, which is greater than 0.7, and Bartlett's Test reaches a significant level of 0.001, which meets the conditions for extracting common factors and is suitable for factor analysis.

Table 3-1 Reliability Test of Various Factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>Cronbach’s α Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecological model</td>
<td>17</td>
<td>0.871</td>
</tr>
<tr>
<td>Knowledge-based employee management</td>
<td>24</td>
<td>0.865</td>
</tr>
<tr>
<td>Incentives</td>
<td>16</td>
<td>0.882</td>
</tr>
<tr>
<td>Business Performance</td>
<td>10</td>
<td>0.899</td>
</tr>
</tbody>
</table>
Table 3-2 Validity Analysis of Ecological Model

<table>
<thead>
<tr>
<th>Take enough KMO sample measures</th>
<th>0.803</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test</td>
<td></td>
</tr>
<tr>
<td>Approximate chi-square</td>
<td>1430.92</td>
</tr>
<tr>
<td>df</td>
<td>78</td>
</tr>
<tr>
<td>Sig</td>
<td>0.000</td>
</tr>
</tbody>
</table>

(2) Validity analysis of knowledge-based employee management

KMO is used to test the partial correlation between variables. Using SPSS25.0 software to carry out an exploratory analysis of the effective data, the test results of knowledge-based employee management KMO and Bartlett were obtained. The results are shown in Table 3-3. As can be seen from the table, the KMO value is 0.834, which is greater than 0.7, and Bartlett's Test reaches a significant level of 0.001, which meets the conditions for extracting common factors and is suitable for factor analysis.

Table 3-3 Validity Analysis of Knowledge-based Employee Management

<table>
<thead>
<tr>
<th>Take enough KMO sample measures</th>
<th>0.834</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test</td>
<td></td>
</tr>
<tr>
<td>Approximate chi-square</td>
<td>1234.27</td>
</tr>
<tr>
<td>df</td>
<td>124</td>
</tr>
<tr>
<td>Sig</td>
<td>0.000</td>
</tr>
</tbody>
</table>

(3) Validity analysis of motivation system

KMO is used to test the partial correlation between variables. Using SPSS25.0 software to carry out an exploratory analysis of the effective data, the test results of enterprise performance KMO and Bartlett are obtained. The results are shown in the table. As you can see from the table, the KMO value is 0.824, which is greater than 0.7, and Bartlett's Test reaches a significant level of 0.001, which meets the conditions for extracting common factors and is suitable for factor analysis.

Table 3-4 Validity Analysis of the Motivation System

<table>
<thead>
<tr>
<th>Take enough KMO sample measures</th>
<th>0.824</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test</td>
<td></td>
</tr>
<tr>
<td>Approximate chi-square</td>
<td>1967.32</td>
</tr>
<tr>
<td>df</td>
<td>130</td>
</tr>
<tr>
<td>Sig</td>
<td>0.000</td>
</tr>
</tbody>
</table>

(4) Validity analysis of enterprise performance indicators

KMO is used to test the partial correlation between variables. Using SPSS25.0 software to carry out an exploratory analysis of the effective data, the test results of
enterprise performance KMO and Bartlett are obtained. The results are shown in the
table. As you can see from the table, the KMO value is 0.816, which is greater than
0.7, and Bartlett's Test reaches a significant level of 0.001, which meets the conditions
for extracting common factors and is suitable for factor analysis.

ANALYSIS

Profile of Respondents

The 21st century is an era of talent competition. The key to business survival and
development is talent. Talent competition has become a hot spot for competition
between countries and enterprises. As a category of talents, knowledge-based
employees are of great significance to the development and growth of enterprises and
play an increasingly important role. Especially for small and medium-sized
enterprises in China, due to their limited financial and material resources, it is
impossible to compare capital and strength with large enterprises. Therefore,
knowledge-based employees play a decisive role in the survival and development of
China's SMEs. However, due to the influence of many factors such as society, history
and itself, knowledge-based employees are often difficult to exert their talents in
China's SMEs. The turnover rate of knowledge-based employees is getting higher and
higher, causing some losses to the enterprise. In China's Internet ecological
enterprises, no matter how the enterprise retains talents, due to its own characteristics
and other reasons, knowledge-based employees cannot completely avoid the flow of
people. Therefore, in addition to improving the level of human resources management
and strengthening the construction of the system, enterprises should also take
precautions. Establish a brain drain prevention and control system in advance,
proactively face the consequences of employee turnover, and better manage
knowledge-based employees. This chapter will combine the previous empirical
research results for correlation and regression analysis to provide an argument for
how to strengthen the management of knowledge-based employees in China's Internet
ecosystem.

This survey questionnaire is distributed to knowledge-based employees and enterprise
managers of Internet ecological enterprises. A total of 400 questionnaires were
distributed, 360 valid questionnaires were received, and the effective recovery rate
was 90.0%. The author mainly sends questionnaire surveys to the knowledge-based
employees and managers of Internet ecological enterprises with the consent.

(1) Gender distribution

Among the survey samples, there were 192 males, accounting for 53.33%; females
were 168, accounting for 46.67%. As shown in Figure 4-1.
(2) Age distribution

In the survey sample, 57 people under the age of 25, accounting for 15.83%; 208 people between the age of 25-30, accounting for 57.78%; 68 people between the age of 31-35, accounting for 18.89%; 18 persons aged 36-40, accounting for 5.0%; 9 persons aged 40 or above, accounting for 2.50%.

(3) Distribution of enterprise nature

In the sample surveyed, there are 115 people whose affiliated enterprises are state-owned or state-holding enterprises, accounting for 31.95%; 202 persons whose affiliated enterprises are private or privately-held enterprises, accounting for 56.11%; 27 persons whose affiliated enterprises are foreign-owned or foreign-controlled enterprises, accounting for 7.50%, and the other 16 people, accounting for 4.44%. 
Research Objective 1 (R.O.1): The Impact of Ecological Models on Business Performance

Correlation analysis is mainly used to detect the uncertain relationship between various variables, and the main method is to examine the correlation between the various indicators and variables that are detected. Correlation mainly reflects whether there is a correlation between the two types of variables in the direction of change development and strength change, and the causal relationship between the variables cannot be determined. In order to explore the correlation between the scale indicators in the model in this study, it is necessary to introduce related correlation analysis methods.

Since the beginning of the 21st century, the Internet industry has grown rapidly, and China's industrial structure and economic model have undergone tremendous changes. The Internet economy has developed into a vital pillar industry in China. More and more companies are shifting their strategies to enhance their core competitiveness to their internal human resource management systems and human resources, and no longer rely solely on external sources. Obviously, human resources have become the core element of enterprise development. Human resources play a unique and irreplaceable role in the implementation of corporate strategy. For Internet innovative enterprises, paying attention to their limited tangible assets can help them survive, while intangible assets are the driving force for their development, while intangible asset carriers are knowledge-based employees within the enterprise. Therefore, for
Internet-based innovative enterprises, how to effectively guide and manage knowledge-based employee groups is the core of concern for the survival and development of enterprises.

**Results**

As can be seen from the table below, through the Pearson correlation analysis method, the correlation data of the four factors of the ecological model and the performance of the enterprise are obtained.

Table 4-1 Correlation Analysis Table between Ecological Model and Business Performance

<table>
<thead>
<tr>
<th>Performance</th>
<th>Service Level</th>
<th>Basic Condition</th>
<th>Technological Innovation Capability</th>
<th>Market Development Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update of R &amp; D technology</td>
<td>0.172**</td>
<td>0.392***</td>
<td>0.315**</td>
<td>0.204***</td>
</tr>
<tr>
<td>Improved management flexibility</td>
<td>0.017**</td>
<td>0.482***</td>
<td>0.029**</td>
<td>0.186***</td>
</tr>
<tr>
<td>Service quality improvement</td>
<td>0.395**</td>
<td>0.612***</td>
<td>0.548**</td>
<td>0.028***</td>
</tr>
<tr>
<td>Customization enhancement</td>
<td>0.432**</td>
<td>0.574***</td>
<td>-0.182**</td>
<td>-0.291</td>
</tr>
<tr>
<td>Speed of reaction to market changes</td>
<td>-0.382**</td>
<td>0.526***</td>
<td>0.315***</td>
<td>0.278***</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>Process Optimization</td>
<td>0.298</td>
<td>0.354</td>
<td>0.473***</td>
</tr>
<tr>
<td>Business revenue</td>
<td>0.027</td>
<td>0.018</td>
<td>0.497***</td>
<td>0.219***</td>
</tr>
<tr>
<td>Improved management</td>
<td>0.346</td>
<td>0.291</td>
<td>0.328***</td>
<td>0.476***</td>
</tr>
</tbody>
</table>
Hypotheses Supported/Not Supported

H1: Correlation between ecological model and corporate performance

H1a: Ecological model is positively related to corporate performance

The ecological model has a significant effect on corporate performance, and its effect is positive.

H1b: The ecological model is not related to corporate performance

Ecological models have no significant effect on corporate performance, and their effects are irrelevant.

H1c: Ecological model is negatively correlated with corporate performance

Scale output value has a significant effect on corporate performance, and its effect is negative.

CONCLUSION

In recent years, Internet information technology has been widely used in business management. More and more domestic and foreign companies want to improve business efficiency and promote business development by improving management models, especially strengthening human resource management (Liu & Liu, 2017; Lin, 2019; Liu, 2019; Shao, 2019; Shen, 2019; Wang, 2019; Shi, 2019). The core of an enterprise's human resource management is performance management. Therefore, strengthening the enterprise's performance management is the best way for an enterprise to improve its work efficiency. In the Internet era, the gap between companies is not only the size, the amount of funds, the difference in technology, but also the difference in management concepts. Only by establishing a scientific, perfect and effective management process can we enhance the competitiveness of enterprises. If enterprises want to realize the innovation of management mode and improvement of management process, they must strengthen the emphasis on Internet information technology and deepen the understanding of Internet human resources management by each member of the enterprise. In actual operation, enterprises should combine Internet application technology and management concepts, improve based on traditional performance management, and continuously communicate, feedback and improve every link of performance management in the work process. In the Internet application atmosphere, by continuously improving the quality of each employee, the performance management efficiency of the entire organization is improved. At the same time, enterprises should continuously learn from other companies' Internet human resource management related experience, and revise performance management in accordance with their own conditions to better realize the application of the Internet in human resource management. Regardless of the type of organization, employees
must be promoted. Career promotion is an effective way of self-realization, and the process of career development is a process in which individuals and the external environment effectively exchange and eventually merge into one. Organizations cannot provide permanent employment opportunities for employees, but they can accumulate their own professional capabilities. Employees' professional commitment, emotional commitment, and how much they get in return are the expression of professional value. Psychological satisfaction can stimulate employees to further work, continuously develop their own potential, and avoid loss of efficiency. Therefore, for knowledgeable employees, the organization must continue to meet the expectations of employees' growth and meet their lifelong career development. Establish a development ladder for employees to help them achieve their goals in life.

First, this article adopts the questionnaire survey method, surveys the model and surveys the data statistically. The key factors of employee knowledge were obtained, and the correlation analysis was made between the factors. As for the relationship hypothesis, this article adopts multiple regression analysis method. The model adopts overall multiple regression, knowledge-based employee management regression to corporate performance, ecological model to corporate performance regression, and employee knowledge based on knowledge process capability to corporate performance regression analysis (Sun, 2016; Tang, 2018; Imran, Ilyas, Aslam, & Fatima, 2018; Kuang, 2018; Kang, 2018; Lai, 2018; Wang, 2016). Through the analysis, the relationship between the factors is reflected, and the hypothesis is also proved. Finally, the article gives the empirical analysis conclusions and gives some related suggestions. This article provides a strong theoretical support for the management, performance improvement, and market competitiveness of knowledge-based employees in Chinese Internet companies.

Second, this research proposes to use regression analysis to study the questionnaire data and demonstrate the relationship between the index factors. The results show the following phenomena: 1. From the establishment of the two hypotheses H1 and H2, we can see that the ecological model and knowledge-based employee management itself affect business performance. It played a positive role, indicating that the ecological model and knowledge-based employee management have an important impact on the results of business operations (Feng, 2019; Guo, Guo, Meng & Tang, 2019; Jha, Pandey & Varkkey, 2019).

REFERENCES


Li, Y. L. (2018). *Returning to the management of the original source, the power staff's ability to improve 10 practices*. Beijing: China Electric Power Press.


Zhang, Y. X. (201) *Research on knowledge sharing and performance improvement of small and medium-sized enterprises under the background of mobile Internet*. Doctoral Paper, Shanxi University of Finance and Economics.


Zhou, Z. M. Analysis on the construction of financial internal control of software companies under the background of "Internet +". *Taxation*, 2019, 13 (30): 85-86.


