

The Performance of Knowledge Workers Based on Behavioral Perspective

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Abstract

After entering the knowledge economy era, competition and development of enterprises rely more on the use and transfer of knowledge and information. As the carrier of knowledge, knowledge workers are becoming more and more important. In this paper, based on the perspective of behavior performance, the author has analyzed the performance of knowledge workers, and put forward that the knowledgeable staff's performance should contain three components, namely, task performance, organizational citizenship behavior and counterproductive work behavior.

Keywords

Knowledge Workers, Performance, Counterproductive Work Behavior, Organizational Citizenship Behavior

1. Introduction

In the 21st century, the new economic development changes rapidly and there are many new management phenomena and management problems. The knowledgeable staff is one of them. The development of the new economy makes the competition among enterprises more intense, and the role of knowledge and information in enterprise competition is becoming more and more important. The creation of knowledge, use and appreciation, and reasonable allocation of resources finally all must depend on the carrier of knowledge—the knowledgeable staff to achieve. Unlike traditional workers, knowledge workers have a lot of their own characteristics, such as the pursuit of job autonomy, diversification and innovation. Moreover, the performance is difficult to measure and distinct. How to manage and use knowledge workers is of great significance for enterprises to gain competitive advantage.

In this paper, based on the behavior perspective, the author combined with relevant theory of performance,

using empirical method to analyse the performance structure of the knowledge-type employees, and put forward the knowledge staff's performance evaluation from three aspects: task performance (TP), organizational citizenship behavior (OCB), and counterproductive work behavior (CWB).

2. Review of the Literature

2.1. Knowledge Staff

"Knowledge workers" is put forward by the American scholar Druker, he put the knowledge staff is defined as "master and use symbols and concepts, and take use of knowledge and information to work" [1], he was actually refers to a manager or executive manager. Subsequently, the research on knowledge workers is gradually increasing. Canada's famous scholar Frances think: "knowledge workers are those who create wealth with the brain more than the hands of people, through their own originality, analysis, judgment, the integrated and design add value to the products" [2].

Dakota believes "everyone in processing data and ideas is a knowledge worker" [3]. Today, knowledge workers in fact have been extended to most white-collar workers. In the modern innovation activities, knowledgeable staff is considered to be the body of the creating and spreading and application of knowledge. They are an intelligence source of products and services and production process updates in the organization [4] [5].

2.2. The Evolution of the Concept of Performance

Performance is the core issue of human resources and is also one of the most intractable problems, the study it has a long history. Scholars and entrepreneurs have never arrested the pursuit of more effective methods of performance appraisal. In order to improve the performance of individual and team and organization, it is necessary in order to study what is the performance, it is composed of what, by what factors can influence and from what respect to improve performance.

Early people understanding of performance are achieved results as work or finish designated tasks. Bernardin, for example, it is pointed out that: "the performance should be defined as the result of the work", "performance is at a specific time period, the output record by a specific job function or activity" [6]. Seeing performance as a result of the work has its historical significance. However, due to the work results tend to be impersonal controllable factors, and a lot of job itself is hard to find suitable standard, so, since the 1960s, more and more scholars began to link performance and behavior itself, from the perspective of the behavior to predict and explain the performance.

Murphy puts it: "the performance is a synonym of behavior. It is a set of related to organizational goals behavior of people actually do" [7]. Campbell thinks: "performance than the consequences or results, but the act itself" [8]. The view that Performance is defined as behavior is becoming more and more attention by people and recognition, and in the 80 s after gradually become the mainstream of performance view. And performance behavior itself can be divided into two categories, one kind is such behavior directly related to results, outputs, objectives, this kind of behavior is clearly defined and a direct impact on task performance in organizational rewards and punishment system, they can be observed, be defined, be measured [9], can be obtained from job analysis. Another kind of behavior is not clearly stipulated in the organization rewards and punishment system, but indirect impact on organizational performance; they can be defined as the behavior performance. For example, in the late 20th century proposed organizational citizenship behavior (OCB) [10] [11], Prosocial Organizational Behavior (POB) [12] and Organizational spontaneity [13] and other etc. all belong to this.

In addition, from the matching direction of the behavior and organizational goals, behavior can also be divided into the behavior toward organizational goals and the behavior deviated organizational goals.

In recent years, counterproductive work behavior (CWB), deviant behavior, anti-social behavior and other concept be put forward is a reflection of this classification. Some scholars believe that complete performance should be made of three dimensions: task performance, organizational citizenship behavior and the CWB [14].

2.3. Organizational Citizenship Behavior

For the study of organizational citizenship behavior has a long history. Organ defined organizational citizenship behavior as: the employee's autonomous behavior. There is no direct or detailed provisions in the formal reward system, and can improve organizational performance in the whole [15]. From this definition, we can see, organizational citizenship behavior is a type of extra-role autonomous behavior, not in the punishment system and

can improve organizational performance. Then, the related research is expanding. Podsakoff *et al.* are systematically summarized about organizational citizenship behavior, found that organizational citizenship behavior already contains the performance behavior mentioned most behavior performance theory, its classification of task performance and relationship performance have a far-reaching influence [16]. In recent years, OCB has become the main focus of scholars studying the extra-role performance [17] [18].

Opinions vary on the study dimension of organizational citizenship behavior, and have the characteristics of different cultural background. So far, OCB feature dimension has been identified by as many as thirty, mainly in two-dimensional structure, the four-dimension structure, the five-dimension structure and the seven-dimensional structure [19]. For example, the western representative seven-dimensional structures consist of seven parts: sportsmanship; helping behavior; organizational loyalty; organizational obedience; individual initiative; civic virtue; self-development. Chinese research on dimensions of organizational citizenship behavior was first started by Taiwan scholar Lin Shuji, she thinks the characteristic dimension of OCB has six: organizational identification; assist colleagues; do not make trouble for profit; private and clear; devotion and obeying law; self-fulfillment [20]. Fan put forward four level ten dimension structures of the dimensions of organizational citizenship behavior under the Chinese culture [21].

Along with the deepening of research on organizational citizenship behavior, the research of the antecedent and consequence variables of organizational citizenship behavior has gradually become the mainstream. In addition, localization research of organizational citizenship behavior; collective organizational citizenship behavior research and negative effect research of organizational citizenship behavior also in gradually.

2.4. Counter Productive Work Behavior

Individual behavior according to its direction can be divided into the behavior of matching with organizational goals and the behavior of deviate from organizational goal, counterproductive work behavior which belongs to the latter. Counterproductive work behavior is widespread in the organization, and the study of this problem although older but not rich. Early in the end of the nineteenth century, Taylor had explored the sabotage behaviors in work practice [22]. However, until half a century later, the research about counterproductive work behavior began to show great potential. Robinson defines it as “a kind of premeditating behavior—the violation of the organization main rule that threat to the interests of the organization and members” [23]. Sackett pointed out that the CWB refers to from the Angle of organization, such as employees to act against the organization goals [24]. Hollinger had categorized counterproductive work behavior and researched its influencing factors and consequences [25] [26].

Hollinger divided counterproductive work behavior into two categories: bias in the production of behavior and the bias on property behavior [25] [26]. On this basis, according to severe/mild, organization point/interpersonal orientation in two dimensions, Robinson parted counterproductive work behavior into four types [23]. The current classification has been widely used in research. Gruys reference Robinson’s research and separated counterproductive work behavior into 11 categories [27]. Bowling believed the counterproductive work behavior based on task dependencies will be the research focus in the future [28]. With the advance of counterproductive work behavior research, its dimensions and types are constantly changing and increasingly rich.

To sum up, because of the knowledgeable staff’s work difficult to quantify, difficult to find a suitable output standard, forecast and evaluation of its performance should focus on behavior. The author thinks that the total performance of knowledge type staff should consist of three aspects of task performance. OCB, CWB, and has carried on exploratory research. The performance structure of knowledge workers is shown in **Figure 1**.

3. Research Methods

The questionnaire method was adopted in this paper and refers to the existing scale of maturity. Among them, task performance and OCB mainly refer to the Williams and Anderson’s role performance and organizational citizenship behavior scale [29], CWB reference Robinson and Bennett’s measurement scale [30].

Specific steps are as follows.

3.1. Scale Development

- 1) Using the behavioral anchored rating scale (BARS) and behavioral observation scale (BOS) and other

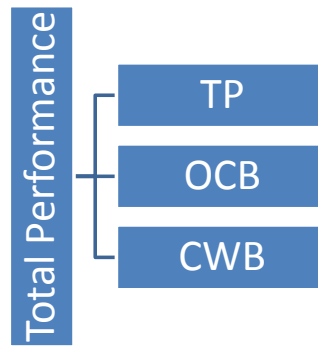


Figure 1. The performance structure of knowledge workers.

methods in the small scope of knowledge workers performance measurement, obtain the critical behavior performance indicators;

2) Semi-structured interview. On the basis of the preliminary survey, through the interview of enterprise, to the behavior of key performance indicators is realized, and make a preliminary sorting;

3) Reorganize. Through document research and business professionals, managers forum, all kinds of critical behavior were classify, merge or delete, reference to the existing mature scale, the semantic and the specific content of targeted refinement, which is more consistent with China staff's understanding.

3.2. Pre-Test and Revision

1) To test the above questionnaire on a small scale, obtain measure 72 samples;

2) Analyze the pilot test samples and found some project meaning is not clear or repeated statements, so further revision and readjust the questionnaire, to final project description is correct, balanced.

3.3. Formal Assessments

Select a sample of 6 organizations, including enterprises and research institutions such as schools. In specific sample selection according to the following criteria: 5 or more subordinate managers, professional and technical personnel, competent business personnel above. A total of 400 questionnaires, after deleting of them did not fill in the questionnaire as requested. Recycling effective questionnaires have 327 copies.

The following sample statistics: Male, 196, accounting for 60.0%; the female 131, accounting for 40.0%; aged between 25 and 45 years old; record of formal schooling are a bachelor degree or above.

4. Analysis and Discussion

According to the psychology requirement, test tools to be used (questionnaire) need to go through scientific, the test result is reliable, credible and effective. Reliability test of this study is mainly internal consistency and stability, the validity tests were used for the construct validity.

4.1. Reliability Test

The followings are reliability test consistency and stability of the questionnaire results. A questionnaire measuring result is not significant error because of the change of investigation time and investigators, when all is said the result is credible. This article uses the test-retest reliability and homogeneity reliability to the measurement result. Test results are reproduced below.

It can be seen from **Table 1** that the overall test-retest reliability of the questionnaire is 0.812, the overall alpha coefficient is 0.766, and each factor of reliability also was above 0.7.

Generally speaking, the reliability coefficient of 0.7 which is in line with the requirements of the psychology measurement, the overall reliability of the questionnaire and the factor reliability reaches more than 0.7, the test results show that the questionnaire has good stability and consistency, the result falls within the scope of ideal as a whole [31].

4.2. Validation Test

Validity tests the effectiveness of the questionnaire results. According to the research purpose is different. We can choose different inspection methods.

This paper is a study of the performance structure of knowledge workers, such problems are usually can use factor analysis to test, so this paper uses the structure validity to test the measuring result. Test results are shown in [Table 2](#).

4.3. Discussion

The measuring data were factorial analyzed by SPSS 20.0 software, and after the rotation of the factors it is obvious that the project loads in the correction factor and more than 0.50 of the standard. Explained variable of three factors is respectively 23.17%, 20.54% and 17.78%, total variance explained reached 61.49%. The consequence was entirely acceptable.

5. Conclusions

Since the 21st century, due to the rapid development of knowledge economy, knowledge, information and

Table 1. Reliability analysis-scale (ALPHA) of employee job performance.

Factor categories	Test-retest reliability	Homogeneity reliability
Total performance	0.812	0.766
Task performance	0.803	0.707
OCB	0.784	0.747
CWB	0.811	0.807

Table 2. Results of factor rotated on job performance (N = 327).

Factor 1 (TP)		Factor 2 (OCB)		Factor 3 (CWB)	
Project	Load value	Project	Load value	Project	Load value
Q1	0.73	Q1	0.77	Q1	0.80
Q2	0.74	Q2	0.78	Q2	0.76
Q3	0.71	Q3	0.74	Q3	0.77
Q4	0.68	Q4	0.68	Q4	0.66
Q5	0.70	Q5	0.81	Q5	0.74
Q6	0.66	Q6	0.79	Q6	0.71
Q7	0.67	Q7	0.75	Q7	0.64
		Q8	0.67	Q8	0.62
		Q9	0.83	Q9	0.83
		Q10	0.71	Q10	0.78
		Q11	0.73	Q11	0.59
		Q12	0.80	Q12	0.58
		Q13	0.74	Q13	0.79
		Q14	0.69	Q14	0.77
				Q15	0.85
				Q16	0.84
				Q17	0.73
				Q18	0.75
				Q19	0.69
Amount of variance explained	23.17%		20.54%		17.78%
The cumulative amount of explanation	23.17%		43.71		61.49%

learning have become more and more important for enterprises. The enterprises need knowledge workers who can learn knowledge, master knowledge, use knowledge and transfer knowledge. The research about this aspect also emerges in an endless stream. In the information age, knowledge workers have become the core human capital and the core competitiveness of the organization, occupy key positions in the organization and decide the future of the enterprise. How to develop and use them more effectively and improve their performance is the key task of the organization, which cannot be avoided. There is a lot of research for the performance structure, but it is restricted to the performance structure of knowledge workers. There is not much research in this field. This paper is all a matter of beneficial discussion.

All in all, in the paper the author made an exploratory research to the performance structure of knowledge workers—a key figure in the new economic era. CWB, this component, is entered into performance form and demonstration. Its practical applications are necessary and more practice has proved it.

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