



## Core knowledge-based staff performance structure and incentive mechanism theory frame establishment for new high-tech enterprise-based on SCP model analysis

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### ABSTRACT

knowledge-based staff high rate of resignation has become the bottleneck which prevent new high-tech enterprise's development. How to incentive core knowledge-based staff is becoming the key point for enterprises to solve this problem. First of all, this paper analyzes the features of core knowledge-based employees and their performance structure recognition in new high-tech enterprises including incentive cognition and etc. On the basis of the above-mentioned text, SCP model builds theory analysis frame from the following aspects: incentive factors' analysis dimension, individual and organization double incentive factors' mechanism of action and working performance. It provides theoretical foundation for deep discussion about incentive mechanism's effect on performance among new high-tech enterprise core knowledge-based staff.

**Key words:** new high-tech enterprise core knowledge-based staff, performance structure, incentive mechanism, SCP model

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### INTRODUCTION

With the knowledge-based economy development and increasing global competition, core knowledge-base staff, as the main carrier and inventor for knowledge, have become the strategic resource for new high-tech enterprises to provide innovative products and adapt to market change flexibly and fast. How to recognize core knowledge-based staff performance structure and form effective incentive mechanism have become the priority for human resource management in new high-tech enterprises. With practical significance, it is extremely necessary to research the relation and interaction between performance structure and incentive factors for promoting human resource management practice in new high-tech enterprises.

#### 1. The feature of core knowledge-based staff in new high-tech enterprises

New high-tech enterprises are knowledge-intensive and technology-intensive economic entity which are characterized by high input, high intelligence, high speed and high competition. Therefore, new high-tech enterprises innovation behavior, development activity and enterprise performance are depending on human resources and intelligence resources. These function and position lead that knowledge-based staff become the key factor in new high-tech enterprises. There is a big range of knowledge-based staff, mainly referring to a group who work through mental activity and increase work efficiency by specialized knowledge and technology. According to the difference of responsibility, knowledge-based staff are divided into technology, management and sales types knowledge-based staff by educational and industry union. Core knowledge-based staff refer who master enterprise's key technology or implicit valuable knowledge, or important clients network resources. Enterprise survival and development are intensively related to core knowledge-based staff[1]. Above all, core knowledge-based staff studied in this article are limited to main creators for new high-tech enterprise value and profit. These creators also master

key technology and valuable knowledge in new high-tech enterprise.

## 2. Performance structure for core knowledge-based staff in new high-tech enterprise

### 2.1 Performance concept

From the literal meaning, performance is the combination between performance and effect. Performance refers to achievement while effect refers to efficiency and result. According to the difference of studied subject, performance can be divided into organization, teamwork and individual performance. This paper will be focused on individual performance since the research is knowledge-based staff. Different people hold different views due to difference about study perspective and starting point. It is difficult to make an accurate and uniformed definition. Organization behavior simply defines performance as efficiency while management science holds that performance is the organization's expected outcome. It aims to achieve some target by different effective output. Performance represents how much target an individual has accomplished. The above researchers Armstrong and Baron (1998) point out that performance is a multi-foundation structure. The measure outcome will vary due to measure variable difference [2]. Peng Jianfeng (2003) points out that performance is the achievement and outcome resulted from people's activities. Zhang De (2004) holds that performance is the behavior which is related to organization target, observable and evaluative.

### 2.2 Performance structure concept for new high-tech enterprise core knowledge-based staff

Performance structure is the basis for studying core knowledge-based staff in new high-tech enterprise. Only clear recognition about performance structure concept can make accurate assessment on performance. Performance structure's importance on human resource management for core knowledge-based staff is decided by working feature of core knowledge-based staff in new high-tech enterprise. Performance structure of core knowledge-based staff are not easy and smoothly as imagine since they are characterized by high-grade, multi-layer, difficulties in monitor and assessment. The performance structure cognition on new high-tech enterprise should be studied in depth due to a lot of contingency factors.

Through basic cognition on performance structure meaning and analysis about domestic and abroad related research outcome, we can learn that performance contains multidisciplinary cross field concept which is merged by consequentialism, behavior theory, "behavior-outcome" as well as comprehensive theory. Hence, working and performance feature are undertaken as the main principle line and consequentialism, behavior theory, innovation study and other theory are considered as guide to study performance structure concept through combining particularity and typical character of core knowledge-based staff in new high-tech enterprises.

Based on the analysis of the above, core knowledge-based staff performance structure can be defined as a multidimensional and multi-layer complex structure in new high-tech enterprises. The performance structure is made up by behavior, process and outcome of core knowledge-based staff during the working. In the meanwhile, the core knowledge-based staff performance structure is comprehensive entity affected by individual factor, psychology factor, organization factor and other external contingency factors.

## 3. Cognition on core knowledge-based staff performance structure

### 3.1 Concept of core knowledge-based staff performance structure

In modern enterprise management, every enterprise is faced with a basic problem that how to provide incentive for organizational members' highly efficiency behavior. Motivate, as the basic frequently used concept, has been known by management. However, there is no common agreement about detailed definition among academic science. The original meaning of motive is to take action which comes from Latin language "movere". Motivate, as a psychological term, refers to continuous psychological process for stimulating people's motivation. In the scope of management, motivation is to make people active. The abroad researcher Herlinger (1973) thinks that motivation is a psychological change process which can not be detected or observed [3]. Pintrich and Schunk (1996) hold the view that motivation is individual internal psychological process or inner stimulation which is guided, stimulated and maintained by a goal or subject [4].

From the above definition for performance concept, there are following features about performance: first of all, motivation can meet individual expecting goal or outcome; secondly, motivation is a kind of psychological change process; thirdly, motivation is a society process to make individual affect by others. In new high-tech enterprise motivation management, motivation for core knowledge-based staff refers to a series of demand from core knowledge-based staff created by inner and external need and motivation and adjustment behavior for achieving self-demand. It also refers to achieve stated target in organization and meet himself goal. It is continuous motivation which finally becomes a closed circulation.

### *3.2 Motivation process of core knowledge-based staff in new high-tech enterprise*

Demand is the starting of motivation for core knowledge-based staff in new high-tech enterprises which is also the final goal for core knowledge-based staff achievement goal during the motivation. Hence, to take well care of inner and external demand for core knowledge-based staff in new high-tech enterprises has become the important basis. New high-tech enterprises should be definitely aware of core knowledge-based staff inner and external demand, so that they can design practical and effective motivation mechanism. The motivation for core knowledge-based staff mainly comes from accurate grasp for core knowledge-based staff inner and external demand. The inner factor is mainly subject to core knowledge-based staff individual recognition which seems like internal and invisible. It should be obtained by objective experience. External factor depends on external environment which will be controlled by the core knowledge-based staff. In general, the motivation for core knowledge-based staff is achieved by meeting their demand, stipulating their incentive to achieve enterprise goals which will produce specific psychological and society change process. The final goal is to achieve both enterprise target and staff self-achievement for mutual win situation.

### *3.3 Motivation factor recognition for core knowledge-based staff in new high-tech enterprises*

The motivation factor refers that can meet core knowledge-based staff demand, stimulate staff's working passion, positive attitude and diligence. Academic science and industry science have pay much attention to motivation factor which has formed relatively high reference value motivation indicator system. With the growing of knowledge times, the study on motivation factor for knowledge-based staff has become the heated topi for academic science. A lot of famous consulting companies such as McKinsey, AXA and Han Witt, have working on specific determination and quantitative research.

AXA consulting company tracked the record for 858 employees including 160 knowledge-based employees coming form USA, Australia and Japan then got the analysis outcome: reward, working type, promotion, colleague related and decision right rank the top 5 motivation factors.

Bharat and Galttovre (2000) point out award motivation, promotion motivation, training and dismissal are the keys motivation factors for research employees in new high-tech enterprises[5].

Yang Chunhua (2004) summarizes individual development, award, challenge, feeling of achievement and fairness as motivation factors for knowledge-based staff[6].

Though deep talk and questionnaires, Zhang shuxia, Fan Linjie and Wang Bing (2011) got the conclusion that motivation factors should include work motivation factor, external motivation factor and surrounding motivation factor. They also did detailed subdivision for each factor.

Stefan, Bogda and Malgorzata (2012) found the motivation factor through investigation can be concluded as interpersonal function, assignment, working emotion and environment, authorization, personal development and award[7].

We can see that different researchers keep different view and cognition about motivation factors through above domestic and abroad research analysis. However, there is some common feature regarding motivation factor recognition. Therefore, motivation factor recognition for core knowledge-based staff should also be established in special enterprise situation.

## **4. Theory analysis frame establishment which is Based on SCP model**

SCP (structure -Conduct-Performance), a complete industry analysis frame, is founded by Harward Scherer who combined with Mason (1939) and Bain(1959) opinion in 1970. SCP probes market structure with overall view. Enterprise behavior in the market is determined by market structure while enterprise operation performance is decided by enterprise behavior in the market. Our researcher deepen the study into securities market ( Wang cong, Duan xijun, 2002; Zhu Huan 2004), financing industry (Yang Xuebing, Zhang Tao 2003; Liu Zhibiao 2004; Zhou Xiaoyan 2007) and so on. Based on above-mentioned analysis, this paper, taking systematic theory as guide, establishes performance structure and motivation mechanism theory analysis frame through taking SCP into performance structure and motivation analysis. As shown in Fig. 1.

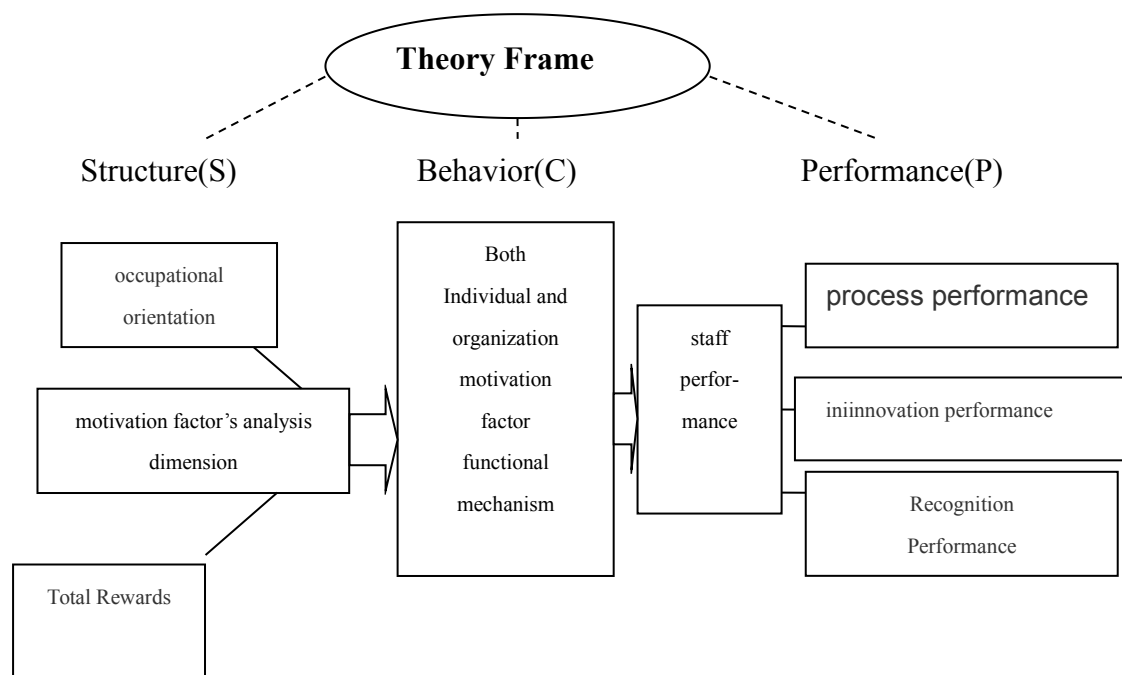


Fig.1 core knowledge-based staff performance structure and incentive mechanism theory frame establishment for new high-tech enterprise

## CONCLUSION

This analysis frame establishment aims to through and deep studying on motivation factor's analysis dimension (structure) ,analyzing both Individual and organization motivation factor functional mechanism (behavior) , improve performance level(performance) goal for new high-tech enterprise core knowledge-based staff and provide a new angel of view for promoting our new high-tech enterprise human resource management practice.

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