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MOTIVATION OF KNOWLEDGE WORKERS IN CHINESE SMALL AND MEDIUM-SIZED HIGH-TECH ENTERPRISES

Case Company: X Software

Business Economics and Tourism

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ABSTRACT

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This thesis deals with the problem of how to motivate the knowledge workers in high technology small and medium-sized enterprises (SMEs) in China. After the introduction of Small and Medium-sized High-technology Enterprises in China, the theory of motivation, and the theory of knowledge workers, the main aim of the research is to find out present situations and existing problems in knowledge workers’ motivation in Chinese high-tech SMEs. Additionally, there is the aim to figure out the main motivation factors that can motivate the knowledge workers based on a case company study. Also, suggestions are given on how to motivate knowledge workers in Chinese High-tech SMEs effectively.

Keywords           Motivation, Knowledge workers, High-tech SMEs, China
## CONTENTS

### ABSTRACT

1. INTRODUCTION .................................................................................................................... 7  
   1.1 Background of the Research ............................................................................................ 7  
   1.2 Research Problems and Objectives .................................................................................... 8  
   1.3 Structure of the Thesis ....................................................................................................... 9

2. LITERATURE REVIEW ........................................................................................................ 10  
   2.1 Theory of High-tech SMEs ................................................................................................ 10  
      2.1.1 Definition of SMEs in China ......................................................................................... 10  
      2.1.2 Definition of High-tech SMEs in China ....................................................................... 11  
      2.1.3 The Features of High-tech SMEs .................................................................................. 12  
      2.1.4 Development Status of High-tech SMEs in China ......................................................... 13  
   2.2 The Theory of Knowledge Workers .................................................................................. 15  
      2.2.1 The Definition of Knowledge Workers ......................................................................... 15  
      2.2.2 The Personality Characteristics of Knowledge Workers in High-tech SMEs .............. 17  
      2.2.3 The Work Characteristics of Knowledge Workers in High-tech SMEs. ................. 19  
   2.3 The Theory of Motivation ................................................................................................ 21  
      2.3.1 Definition of Motivation .......................................................................................... 21  
      2.3.2 The Basic Process of Motivation .................................................................................. 21  
      2.3.3 Major Motivation Theories ......................................................................................... 22  
      2.3.4 Motivation Factors for Knowledge Workers .............................................................. 29  

3. IMPACTS OF MOTIVATION THEORIES ON MOTIVATING KNOWLEDGE WORKERS .......................................................................................................................... 32  
   3.1 “People-oriented” as the Guiding Concept ........................................................................ 32  
   3.2 The Basic Premise of Effective Motivation is Defining the Needs of  

3.3 Material Motivation is as Important as Spiritual Motivation for Knowledge Workers

4. RESEARCH METHODOLOGY

4.1 Research Methods

4.1.1 In-depth Interview

4.1.2 Questionnaire

5. EMPIRICAL FINDINGS

5.1 Brief of Case Company

5.2 The Present Status of Motivation for Knowledge Workers

5.2.1 The Performance Appraisal System

5.2.2 Training system

5.3 Analysis and Results of Interview

5.3.1 Basic Information of Interview

5.3.2 Results of Interview

5.4 Analysis and Results of Questionnaire

5.4.1 Basic Information of Questionnaire

5.4.2 The Importance of Motivation Factors for Knowledge Workers

5.4.3 The Importance of Motivation Factors for Non-knowledge Workers

5.4.4 Comparison between Knowledge workers and Non-knowledge workers

5.4.5 Results of Questionnaire

5.5 The Problems of Motivation for Knowledge Workers in Case Company

5.5.1 Demission Rate and Dissatisfaction of Knowledge Workers

5.5.2 The System of Management and Motivation

6. CONCLUSIONS

REFERENCES

APPENDIX 1
LIST OF TABLES

Table 1. Definition of SMEs in China  
Table 2. The forming process of behavior  
Table 3. Process of Motivation  
Table 4. Maslow Hierarchy of Needs  
Table 5. Expectancy model  
Table 6. Goal-setting theory model  
Table 7. Business Structure of employees in X Software  
Table 8. Educational Degree structure of knowledge workers in X Software.  
Table 9. Basic information of interview  
Table 10. Results of interviews  
Table 11. Table of classification of motivation factors  
Table 12. The Basics of Sample  
Table 13. The Importance of Motivation Factors for Knowledge Workers  
Table 14. The Importance of Motivation Factors for Non-knowledge Workers  
Table 15. The Comparison between Knowledge Workers and Non-knowledge Workers.  
Table 16. The Differences between Knowledge and Non-knowledge workers  
Table 17. The main problems exists in the system of management and motivation in case company
LIST OF APPENDICES

APPENDIX 1. In-depth interview questions p. 60

APPENDIX 2. Questionnaire about Motivation of Knowledge Workers in X Software p. 61
1. INTRODUCTION

1.1 Background of the Research

In 21st century knowledge economy has taken a dominant role in the global economy. The development of science and technology has already become the core force that contributes to the developing of the world economy. In today’s world, the globalization of knowledge, technology and innovation has become an inevitable trend. In the knowledge-driven economy age, as the main carriers of science and technology, high technology enterprises are facing a new competitive environment---continuous reforms and high degree of uncertainty. Moreover, small and medium-sized enterprises are becoming increasingly important for the developing of science and technology, they are also the main body of innovation providing the vitality for updating of cutting-edge technology. If the high-tech enterprises want to survive and stay sustainable during the process of development, they need high quality and efficient employee resources. Especially for the high-tech SMEs, knowledge workers are regarded as the core competitive advantage.

“Knowledge workers are going to be the primary force determining which economies are successful and which aren't,” said by Thomas Davenport, professor of information technology and management at Babson College. “They are the key source of growth in most organizations. New products and services, new approaches to marketing, new business models—all these come from knowledge workers. So if you want your economy to grow, your knowledge workers had better be doing a good job.” High-tech SMEs need the knowledge workers and their knowledge capital to cope with the competition, and knowledge workers are the major source of productivity for high-tech SMEs.

In China the booming development of the high-tech SMEs occurred in the past decades along with the reform and opening up policy. Chinese high-tech SMEs are going
through a high-speed development, but the lack of mature managerial experiences has led to many problems in management, especially in managing company employees. It is obviously that managing knowledge workers effectively will contribute to a better development for the high-tech SMEs. More and more experts and scholars have realized the importance of knowledge workers management, and as a result, there are more and more research and studies focusing on this subject. One of the most important topics of knowledge workers management is maintainability. In recent years, the frequency of job-hopping has increased rapidly has become a major challenge for high-tech SMEs. As the core concept of human resource management, motivation plays a significant role in managing knowledge workers. Therefore, this thesis concentrates on the subject of motivation of knowledge workers in China’s high-tech SMEs.

1.2 Research Problems and Objectives

It held a great importance for today’s enterprises, since the first time Peter Drucker raised the theory of “Knowledge Workers”. In the era of knowledge-driven economy, knowledge and skills in the small and medium enterprises are occupying an increasingly important position, the owner of knowledge and skills --- the performance of knowledge workers will be the key factors for efficiency, speed and the development of the high-tech SMEs.

The main objectives of this thesis research are to examine the present situation of motivation systems existing in the high-tech SMEs, acquire and analyze the existing problems, as well as to find out the motivation factors for knowledge worker. To understand various motivation factors for high-tech SMEs from different work positions, this thesis compared the research results of knowledge workers and non-knowledge workers. Also, through this comparison, similarities and differences between two types of employees can be recognized. Still, the study aims to give suggestions to motivate the knowledge workers in high-tech SMEs.
1.3 Structure of the Thesis

This thesis is structured in six chapters. The first chapter introduction is stated before, this chapter presents the research background, and also research problems and objectives are described. Additionally, the structure is provided at the end of the chapter.

Chapter 2 is the theoretical framework of this thesis. It starts by the definition of high-tech SMEs and its development status. After the definition and characteristics of knowledge workers, it also describes the definition, process and major theories of motivation.

Chapter 3 is the impacts of motivation theories on motivating knowledge workers. This chapter provides three parts of motivation theories’ reflection in practical.

In chapter 4, research methodology is described in detail, including research methods and data collection. Also, provide the reliability and validity.

Chapter 5 is empirical findings. In this chapter company profile and present status of motivation for knowledge workers are described. Additionally, state and analyze results of research, and figure out the problems existing in case company.

In the last chapter, research results are concluded, and suggestions are also given on how to motivate knowledge workers in Chinese high-tech SMEs according to case study.
2. LITERATURE REVIEW

2.1 Theory of High-tech SMEs

2.1.1 Definition of SMEs in China

There are different definitions of Small and Medium-sized Enterprises in different countries. In China, “The Interim Classification Standard of Small and Medium-sized Enterprises (SMEs)” was published in 2003, and it is based on the “Law of the People’s Republic of China on Promotion of Small and Medium-sized Enterprises”. It states that the division criteria of SMEs in China mainly depends on the industry sectors, the number of employees, annual operating revenue and the total assets of a company (Table 1).

<table>
<thead>
<tr>
<th>Industry Sectors</th>
<th>Criteria</th>
<th>Medium Size</th>
<th>Small Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>-Number of Employees</td>
<td>&lt;300-2000</td>
<td>&lt;300</td>
</tr>
<tr>
<td></td>
<td>-Total Sales (¥ million)</td>
<td>&lt;3000-30000</td>
<td>&lt;3000</td>
</tr>
<tr>
<td></td>
<td>-Total Assets(¥ million)</td>
<td>&lt;4000-40000</td>
<td>&lt;4000</td>
</tr>
<tr>
<td>Construction</td>
<td>-Number of Employees</td>
<td>&lt;600-3000</td>
<td>&lt;600</td>
</tr>
<tr>
<td></td>
<td>-Total Sales(¥ million)</td>
<td>&lt;3000-30000</td>
<td>&lt;3000</td>
</tr>
<tr>
<td></td>
<td>-Total Assets(¥ million)</td>
<td>&lt;4000-40000</td>
<td>&lt;4000</td>
</tr>
<tr>
<td>Wholesale</td>
<td>-Number of Employees</td>
<td>&lt;100-200</td>
<td>&lt;100</td>
</tr>
<tr>
<td></td>
<td>-Total Sales(¥ million)</td>
<td>&lt;3000-30000</td>
<td>&lt;3000</td>
</tr>
<tr>
<td>Retail</td>
<td>-Number of Employees</td>
<td>&lt;100-500</td>
<td>&lt;100</td>
</tr>
<tr>
<td></td>
<td>-Total Sales(¥ million)</td>
<td>&lt;1000-15000</td>
<td>&lt;1000</td>
</tr>
<tr>
<td>Transportation</td>
<td>-Number of Employees</td>
<td>&lt;500-3000</td>
<td>&lt;500</td>
</tr>
<tr>
<td></td>
<td>-Total Sales(¥ million)</td>
<td>&lt;3000-30000</td>
<td>&lt;3000</td>
</tr>
<tr>
<td>Post and Mail</td>
<td>-Number of Employees</td>
<td>&lt;400-1000</td>
<td>&lt;400</td>
</tr>
<tr>
<td></td>
<td>-Total Sales(¥ million)</td>
<td>&lt;3000-30000</td>
<td>&lt;3000</td>
</tr>
</tbody>
</table>
2.1.2 Definition of High-tech SMEs in China.

The development of science and high-technology can be seen as the core theme of the knowledge era. It is the technology that applies or contains cutting-edge facilities and methods, furthermore, it can provide both high economic and social benefits. The growth of high-tech industry sector has become one of the main productive forces for the development of Chinese economy. There is no unified definition of High Technology industry around world. According to the standards of Organization for Economic Co-operation and Development (OECD), which is “an international economic organization of 34 countries founded in 1961 to stimulate economic progress and world trade”, the classifications of high-tech industry mainly depend on the proportion of total investment in R&D in the gross output value as a whole, as well as the proportion of direct investment in R&D accounting for the output value. In China, high–tech industry is defined by the degree of technique intensiveness and complexity according to the “Catalogue of High Technology Industry Statistical Classifications” (National Bureau of Statistics of China in July 2002). The scale of high-tech industry in China is including the aerospace and aircraft industry, the manufacturing industry of electronic and telecommunication equipment, the manufacturing industry of electronic computer and office equipment, pharmaceutical manufacturing industry and the biomedical science industry.

Combining the definition of China’s SMEs, and the classifications of high-tech SMEs in China can be said to have the following features:

1) Applying the information technology or modern biotechnology into production and operations.

<table>
<thead>
<tr>
<th>Hotel and Catering</th>
<th>-Number of Employees</th>
<th>&lt;400-800</th>
<th>&lt;400</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>-Total Sales (¥ million)</td>
<td>&lt;3000-15000</td>
<td>&lt;3000</td>
</tr>
</tbody>
</table>

Source: Interim Classification Standard of Small and Medium-sized Enterprises (SMEs), 2003
2) The content of leading products is high technology, owing independent intelligent property rights or no dispute of intelligent property rights.

3) High ability of technical innovation, the number of employees is no more than 500 and at least thirty percent of them are technical employees.

4) The proportion of R&D expenditure should exceed 3% accounting for the annual sales income.

5) The summation of technical income and production value of high-tech products should exceed 50% accounting for total income of the enterprise.

2.1.3 The Features of High-tech SMEs

The high-tech SMEs do not only have the same characteristics as general high-tech enterprises, but they also have their unique features.

1) High-tech SMEs have small scale, high flexibility, and good adaptability. In spite of the weaknesses on capital scale, batch production, and technical force comparing with the large enterprises, high-tech SMEs are better at making adjustments of existing running processes and timely response to capturing the changing market demands. Even if facing failure of the project, they can bear limited loss due to the size of enterprises.

2) High-tech SMEs have an explicit target market and high motivation of innovation. According to the report titled “Technology Innovation of Small and Medium-sized Enterprises”, 2007, “Technological innovations among SMEs in China come in four ways: internal R&D, imitation, licensing of know-how, and university- (and related institution)-led R&D”. In addition, their innovation type is “demand-driven innovation”, which is directly aiming at market demands. High-tech SMEs emphasize the initiative of expanding the market.

3) Comparing with other type of companies, high-tech SMEs can produce or provide products or services with more advanced technology. Moreover, they have
exuberant vitality because of the high-speed development of high technology industry.

4) In China most of the high-tech SMEs do not reached full development. With the horizontal comparison to other industry sectors in social and economic area, this type of enterprises have more growth potential. However, the weaknesses of high-tech SMEs is lack of managerial experiences and stability.

5) Investment mainly concentrates on knowledge and intelligence. During the developing process of high-tech SMEs, knowledge and intelligence is becoming the essential force and the source of competitive advantages. According to the data from “Empirical Research of the Developing Situation of High-tech Small and Medium-sized Enterprises in China”, written by Li Feng and Zhang Chunyan(2002), it illustrated that the influence of capital, which accounts for thirty percent to fifty percent in the research and development of high technology. Intellectual work accounts for fifty percent to seventy percent. Consequently, knowledge workers have already became very valuable for high-tech SMEs, and that increases the proportion of intangible assets of the corporation.

2.1.4 Development Status of High-tech SMEs in China

In the past two decades, Chinese small and medium-sized enterprises have attained sustainable and rapid growth. In China, SMEs are the cornerstone of the Chinese economy. The total number of SMEs in China is 36.6 million, which accounts for 99.8% of the total number of Chinese enterprises. Most of China’s SMEs have been built or have developed rapidly in the last 15 years, and the development of SMEs has continuously contributed to the growth of China’s economy. Based on the data from the report titled “SME Development in China: A Policy Perspective on SME Industrial Clustering”(2013), “The output value of SMEs accounts for at least 60 percent of the
country's gross domestic product, generating more than 82 percent of employment opportunities in China.” At the same time, the development of China’s SMEs lags behind other industrial countries. The lack of managerial experiences is the major problem during the progress of their management and operation.

China’s high-tech SMEs raised in response to China’s reform and opening up in 1987. Recently, the booming development of high-tech SMEs has effectively promoted employment and the progress of science and technology, and it has also optimized resource allocation. High-tech SMEs play an important role in promoting the domestic economic growth.

The report called “Statistical Results of Scientific and Technological Activities of China’s High-tech Enterprises in 2003” indicated that the total amount of High-tech enterprises is 124,937, and it has increased by 14.2% over last year. The annual income of high-tech enterprises (private enterprises) is 37105 billion CNY in 2003, up 50% from last year, in addition, high-tech enterprises paid above 7% of total domestic taxes in 2003. The total investment of research and development expenditures is over 500 billion CNY. Among these high-tech enterprises (private enterprises), small and medium-sized enterprises are a predominant party. There are 69,515 high-tech SMEs had an annual income of under 1 million CNY, accounting for 55.6% of total amount of high-tech enterprises, the annual income of 30,715 enterprises is from 1 million to 10 million CNY (24.6%), 19,523 enterprises had 10 million to 1 billion CNY of annual income (15.6%), the annual income of 5,175 enterprises is over 1 billion CNY (4.1%), and the annual income of 545 enterprises is over 10 billion CNY (0.4%). Moreover, the number of enterprises is growing continually and rapidly. Thus, it can be seen that it is significant for Chinese economy to support the development of high-tech SMEs due to their impact on upgrading of industrial structure and promoting of technology innovation.
2.2 The Theory of Knowledge Workers

2.2.1 The Definition of Knowledge Workers

In the era of knowledge-driven economy, knowledge and technology have become the main competitive advantages in the small and medium enterprise. Especially in high-tech SMEs, knowledge workers are the major owner of knowledge and skills, moreover, they will be the key factors for the development of SMEs. Peter Drucker defined “knowledge workers” in his book “Landmarks of Tomorrow” (1959) as the personnel who is able to master and utilize of knowledge and techniques into his/her works. Also, Peter Drucker suggested in this book that “knowledge workers and their productivity” is the most valuable asset of the 21st century.

The definition of knowledge workers from Frances Horibe’s book (1999) named “Managing Knowledge Workers: New Skills and Attitudes to Unlock the Intellectual Capital in Your Organization” is that “the people who use their heads more than their hands to produce value. They add value through their ideas, their analysis, their judgment, their syntheses and their designs.” According to this book, the knowledge workers in an organization included the personnel who are working in the fields of management, research, professional technique and sales.

According to Thomas Davenport (2005), the author of the book, “Think for a Living”, there are more and more jobs that require knowledge. He also points out that knowledge workers are different from the people who need the knowledge to work. For example, working in the advertising and marketing field, you can just know how to speak to customers, or just know how to create advertisements, however, as a knowledge worker you must understand and know everything that is needed in an advertising and marketing job, not just one aspect of this field. Cooper Doug (2006) described

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knowledge workers as “employees who have a deep background in education and experience” and are considered people who “think for a living.” They include “software developers, doctors, lawyers, inventors, teachers, financial analysts and architects”. The typical outputs of knowledge workers are creating and exploring ideas for new products or designs.

Woodruffe (1999) thought that knowledge workers are equipped with knowledge and own the ability of knowledge application to conduct innovative work. He also suggested that knowledge provides the basis for innovation. Nevertheless, knowledge cannot be equated as innovation. The essential benchmark of knowledge workers should be the innovation capability.

There is no doubt that the theory and definition of knowledge workers originated from western scholars. In China, there are also more and more researches and discussions of knowledge workers and their management in consequence of the reform and opening-up policy as well as the booming development in science and technology. For example, from the perspective of knowledge capital and human capital theories, Wang Xingcheng, Lu Jichuan and Xu Zongyao (1999) thought that the employees who can produce, create, extend and apply knowledge at their knowledge works are regarded as the knowledge workers. They increase the value of knowledge capital for the enterprises or organizations and also take this as their career. According to Yangjie, Fang Liluo and Ling Wensheng’s opinions from the book, “Looking for the Real Knowledge Workers” (2003), “Knowledge worker = knowledge work + person.” They emphasize the theory of person-post fit, and the harmony of a person and business.

Synthesizing from the previous definitions from different scholars and experts, in this thesis, the definition of a knowledge worker contains the following four elements:

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1) She or he must be an internal employees within the enterprise.

2) Devotes to knowledge work or brain work directly.

3) Provides innovative contribution to the enterprise, including the innovation of technology, management and marketing.

4) Increases the value of knowledge capital, and then rising the value of monetary capital.

In high-tech SMEs, the typical knowledge workers are managerial personnel, research and development personnel, professionals and technical personnel, as well as senior marketing personnel.

2.2.2 The Personality Characteristics of Knowledge Workers in High-tech SMEs

Comparing with the general employees, knowledge workers have some distinctive characteristics. These characteristics are the foundation for management and motivation of knowledge workers in high-tech SMEs. Therefore it is helpful to analyze the features of knowledge workers. The personality characteristics of knowledge workers in high-tech SMEs are described in the following,

1) **High independence and autonomy.**

The knowledge workers in high-tech SMEs must have a deep background of education and training, and own the strong ability in their professional field. It is clearly different from the blue-collar workers that knowledge workers are more concentrated on creative work and able to continuously create new intellectual achievements. As mentioned previously, the survival and development of high-tech SMEs basically depend on knowledge production that is produced by knowledge workers. Knowledge workers in high-tech SMEs have a distinct personality, viewpoint, and working mode, not only that, they own a stronger independent-working spirit and ability than other workers. They also prefer to solve problems on their own and enjoy challenging themselves. During the process of work, they are efficient at self-management and self-direction.
Additionally, they have the exclusive rights to dominate their professional knowledge. As a result of their personality, they prefer a free, democratic and flexible working atmosphere.

2) **Inspiration of learning and innovation.**

In small and medium-sized enterprises, the most important value of knowledge workers is their knowledge capital. That is also the biggest differences between blue-collar workers and knowledge workers. As a consequence, knowledge workers’ knowledge upgrading has to keep in pace with the developing of their professional field, otherwise, knowledge workers could lose the advantages of knowledge capital, and the obsolete knowledge will lead to the devaluation of knowledge workers. Today the majority of companies is facing the era of knowledge economy and there is a rapid development speed in society. In the future will be more and more challenges with the development of science and technology, especially for high-tech SMEs. Knowledge workers in high-tech SMEs need to continuously learn and upgrade new knowledge in order to solve new challenges.\(^5\) Consequently, knowledge workers have stronger inspiration and demand to learn new knowledge and skills. Essentially, the high-tech SMEs should provide a good learning environment for their knowledge workers.

3) **Knowledge workers are eager for self-worth realization accomplishment.**

The knowledge workers in high-tech SMEs have higher-level demands than ordinary workers. They pay more attention to individual fulfilment and self-worth, and achievement motivation and spiritual motivation are valued highly by knowledge workers.\(^6\) In general, they have specific aims and are eager to achieve self-worth. Knowledge workers expect to obtain approval from colleagues, enterprises or organizations and society, especially when they are working in the high-tech industry sector. (Hu Yan, 2007) As a result, they prefer to complete challenging projects rather

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than ordinary ones.

4) Highly self-evaluation
The reason why knowledge workers are so important is because of the scarcity of knowledge and technology, and the highly growth of market demand. From the investment in human capital point of view, knowledge workers have already paid a lot of costs during the process of accumulating knowledge. As Zhao Feng (2010) said in his research on “Performance Management and Motivation System of Knowledge Workers in High-tech SMEs based on the Theory of Game”, those costs include the tuition fees, the opportunity cost of no income during the period of study, and other psychological costs. As a result, knowledge workers have the high expectation of return for what they have been done. In general, knowledge workers would like to be given a higher self-evaluation to themselves than ordinary workers as they are giving more investment in themselves. It is a crucial feature that knowledge workers pursue the maximum of returns for their investments.

2.2.3 The Work Characteristics of Knowledge Workers in High-tech SMEs.
In the high technology industry sector, science and technology are the key to an enterprise’s success and future development, and knowledge workers are the main source to provide intellectual capital for companies. High-tech SMEs are the cradle of large-sized enterprises, they are “the dominant force in commercialization and industrialization of technological achievements” (Zhao Feng, 2008).

Knowledge workers’ job characteristics in high-tech SMEs are:

2.2.3.1 It is difficult to supervise the working process of knowledge workers.
The knowledge workers’ major responsibility is conducting creative mental activities. Unlike the physical activities, mental activities are intangible. Consequently, there is no fixed workflow during their working process, and the workers have strong independence and autonomy as well. The inspiration and ideas can occur at any time or
anywhere. Thus, it is not necessary to supervise knowledge workers’ working process, and it is also very difficult to supervise.

2.2.3.2 Knowledge workers’ intellectual achievements cannot be quantized or evaluated accurately.
In high-tech SMEs, the output greatly depends on the intellectual input from knowledge workers. This kind of an investment is not assessable, especially for some cutting-edge products, which are usually the corporate products developed by more than one knowledge worker. In this case, it is difficult to measure individual performance.

2.2.3.3 High mobility of changing jobs.
Knowledge workers are in the possession of essential productive factors in high-tech SMEs, which is their knowledge and skills. They are chasing the challenging jobs, and prefer new or difficult jobs. Knowledge workers also have the ability to accept new challenges. In this case, knowledge workers have higher freedom of right to choose their occupation than ordinary workers. If their present job is not attractive or lack of individual growth opportunities, they tend to find a new company and get a new job. It is easier for knowledge workers to quit from a job once they are not satisfied due to their knowledge capital and skills. As a result, knowledge workers are loyal to their individual career instead of a certain enterprise or an organization.
2.3 The Theory of Motivation

2.3.1 Definition of Motivation

Motivation is originally a psychological term, which means the psychological process that continuously inspire people’s behavior motivation. In management science motivation means inspiring employee to work. “It is the processes that accounts for an individual’s intensity, direction, and persistence of effort towards attaining a goal.” American psychologists Berelson and Steiner (1964) defined motivation as “an inner state that energizes, activates or moves and that directs or channels behavior towards goals.” Stephen P Robbins and Mary Coulter (2008) also indicated that “motivation in an organizational sense as to reach organizational goals, conditioned by the efforts, ability to satisfy some individual needs.” Motivation promotes goal-directed behavior and different motivations operate among different people in different times and influence their behavior. On the basis of modern organizational behavior theory, satisfaction of an employee’s individual needs is the basic requireme for employees to conduct their work.7

“A motive is what prompts the person to act in a certain way or at least develop an inclination for specific behavior.” 8 William James, known as “the father of psychology”, wrote in his book “The Principles of Psychology” that employees can only exert about 20 per cent to 30 per cent of ability to work without motivation measures. On the contrary, employees’ ability can increase to 80% - 90%. Motivation is the core theory of human resources management, as well as the most essential theory.

2.3.2 The Basic Process of Motivation

A lot of psychological research shows that people’s behaviors are determined and

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dominated by their motivation, and motivation is produced by their needs or desire. The forming process of behavior is shown in Table 2.

Table 2. The forming process of behavior

According to the forming process of behavior, Management scientist A.D. Szilagyi and M.J. Wallace divided motivation process as seven stages. (See Table 3)

Table 3. Process of Motivation

2.3.3 Major Motivation Theories

With the arrival of the era of knowledge economy, the motivation of knowledge workers
became the popular research subject of human resources management. From the 1940s to the 1980s, there was a lot of scholarly research on the subject of motivation, which emphasized why motivation is important to enterprises and how to motive employees effectively.

The main types of motivation theories I utilized in this thesis are as follow:

**2.3.3.1 Content Motivation Theory**

Content motivation theory mainly focuses on the reasons and factors within a person that influence behavior. In other words this theory tend to identify “what” motivates people’s behavior. Content theories referenced in this thesis include Maslow’s Hierarchy of Needs, ERG theory, and Herzbergs' Two Factor Theory.

1) **Maslow Hierarchy of Needs**

This is the best known motivation theory, first raised by Abraham Harold Maslow in his book “A Theory of Human Motivation” in 1943. He gave a further explanation of this theory in his book “Personality and Motivation” published in 1954. Maslow gave the idea that there exist five levels of needs in hierarchy. They progress from lower level to higher level needs. (See table 4)

![Maslow Hierarchy of Needs](image-url)
Starting at the lowest level, “as each level is sufficiently satisfied we are then motivated to satisfy the next level in the hierarchy.” In Maslow’s theory, only the unfulfilled needs can become motivation. Maslow considered physiological needs, safety needs, and social needs as the “deficiency needs”, which are very basic needs for survival and security. Esteem needs and self-actualization needs are “growth needs”, which are “associated with personal growth and fulfillment of personal potential”. However the interrogatory of this theory is under the condition of international environment as specific culture or value factors could influence the order of different needs’ and importance. People could be motivated by more than one need in the hierarchy, or turn to satisfy lower level needs. As a result, Clayton. Alderfer put forward ERG theory based on Maslow’s hierarchy of needs.

2) ERG Theory

ERG theory can be regarded as an expanding of Maslow’s theory. Clayton Alderfer reduced the levels in the hierarchy of Maslow’s theory from five to three and termed them as “existence needs”, including physiological needs and safety needs. “Relatedness needs” including social needs and esteem needs and “growth needs” including self-actualization needs. “His most significant contribution, however, was to alter Maslow's concept of a one-way progression up the hierarchy, to one that allowed for regression to lower levels if these needs are no longer being met.” ("An Empirical Test of a New Theory of Human Need", 1969)

According Maslow and Alderfer’s theory, in order to motivate employee’s initiative to work, managers should clearly realize the unfulfilled needs of employees, and the most required needs of employees, and then give specific solutions to satisfy employees’ needs and desires to raise the motivation efficiency.

3) Herzberg’s Two Factor Theory (Herzberg's Motivation-hygiene Theory)

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This theory states that there are certain factors in the workplace while cause job satisfaction, while other factors dissatisfy employees.

Two factors theory distinguishes between:

- **Motivators** (including achievement, recognition, work itself, responsibility, promotion, advancement and growth) are the factors that can give positive satisfaction, and “arising from intrinsic conditions of the job itself, such as recognition, achievement, or personal growth.”

  Motivating factors are used to increase satisfaction in the workplace and lead to better performance of employees, but the absence of these factors cannot lead to dissatisfaction.

- **Hygiene factors** (including company policies and administration, working conditions, salary, relationship with peers or boss, supervision, and security.) are the factors that remove dissatisfaction, but cannot lead to positive satisfaction or give higher motivation. The absence of these factors results in dissatisfaction.

In Herzberg’s theory, he thought “the opposite of 'satisfaction' is not 'dissatisfaction' but rather 'no satisfaction'. Likewise, the opposite of 'dissatisfaction' is 'no dissatisfaction'.” Motivating factors and hygiene factors are relatively independent of each other. As for managers, hygiene factors are obligated and necessary for employees, and improving motivating factors can make employees work proactively. The ideal situation of this theory is high hygiene and high motivation where employees are “highly motivated and have few complaints”. The contribution of this theory is that an enterprise should guarantee the satisfaction of hygiene factors for employees, in addition, a company should pay sufficient attention to motivators in order to improve the motivating effect.

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2.3.3.2 Process Motivation Theory

Process motivation theories mainly focus on explaining how behavior is triggered, directed, sustained, and stopped. There are a number of process theories including expectancy theory, equity theory and goal-setting theory.

1) Expectancy Theory

This is a very important theory of the study of motivation. It was developed by American psychologist V. H. Vroom in his book “Work and Motivation” in 1964. Different people have different needs, goals and desires, and people’s behaviors are the decisions based on their perception of outcome. In other words, he thought the most direct motivation of people’s behavior is how likely it is the outcome will occur. This theory highlights that “motivation is partly a decision-making process that evaluates effort for outcomes”, and also the “importance of the outcome representing a valued reward for the individual involved.” Still it is focus on the relationship between future outcomes and present behavior. In this case, the effect of motivation depends on two factors:

\[ Motivation = Value^{13} \times Expectancy^{14} \ (or \ M = V \times E) \]

Other behavioral scientists added an important variable into Vroom’s theory, the relationship between job performance and rewards from the work. As a result, there was an expectancy model follows (see Table 5):

![Expectancy Model Diagram]

**Table 5.** Expectancy model

It shows that the effects of motivation in an enterprise or an organization depends on three relationships, 1) effort-performance, 2) performance-rewards, and 3) rewards-

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13 Value = Individual evaluation of the importance of a certain goal.
14 Expectancy = individual evaluation of the possibility of realization.
personal goals. It would reduce the effects of motivation if anyone of these three relationships was weakened. According to the expectancy theory, we should improve the performance management system and compensation management system in order to motivate employees. In the performance management system, the performance goals should be achievable through hard work. At the same time, we should timely give the feedback to employees for their performance and help them to achieve the set goals. As for compensation management system, we should give employees rewards or payment based on their performance appraisal, on the other hand, we should design a personalized reward system based on different individuals in order to satisfy different needs and desires.

2) Equity Theory
In 1956 J. S. Adams proposed a motivation theory that has emphasis on the equity and rationality of rewards for employees’ motivation. Equity theory is based on “the assumption that employees compare their efforts and rewards with those of others in similar work situations. This theory hypothesizes that individuals are motivated by a desire to be treated equitably at work.” (Rodger Stotz, CPIM, Maritz Inc., and Bruce Bolger, CPIM, Selling Communications, Inc., “Content and Process Theories of Motivation”). According this theory employees could be motivated when they are rewarded on a fair and equitable level compared with other reference personnel. Otherwise, the inequity will lead to dissatisfaction or resignation of employees.

3) Goal-setting Theory
The goal-setting theory was developed by Edwin. A. Locke and his colleagues in 1968 based on a number of researches that goal-setting play a significant role in motivation process. He gave a basic model of goal-setting theory (see Table 6),

![Diagram](Diagram.png)
Table 6. Goal-setting theory model

As shown in Table 6 the effect of motivation mainly depends on the specificity and difficulty of these goals. According to Locke’s research, the work with goals or tasks is better than the one without goals or tasks, specific goals are better than general ones, and goals with a certain difficulty are better than the goals without difficulty or impossible goals. In business, equity theory is more focused on performance management, and the emphasis is on the relationship of goal difficulty and effort. As Locke and his colleagues (1968) found that “effort increases as task difficulty (goal) increases. However, there is a point at which the task is perceived as being too difficult and the effort actually decreases.” Therefore, the goal-setting should be specific and have a certain and rational difficulty for employees in order to motivate a better performance.

2.3.3.3 Skinner's Reinforcement Theory

Reinforcement theory was proposed by Burrhus Frederic Skinner in his book “The Behavior of Organisms: An Experimental Analysis” in 1938. Reinforcement means that the positive consequence or negative consequence of individual’s behavior will decide whether individual’s behavior could be repeated or not. This theory is a strong tool for managers in controlling employees’ behaviors. There are four methods to reinforcement theory.

- **Positive reinforcement:** “Any pleasant or desirable consequence that follows a response and increases the probability that the response will be repeated.” (Wood, Wood, & Boyd, 2005.) Positive reinforcement uses a reward system to give positive response to increase the probability of desirable behavior.

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• **Negative reinforcement**: “Psychological reinforcement by the removal of an unpleasant stimulus when a desired response occurs”. “Negative” does not mean “bad” and is not equal to punishment. It is applying the negative response to reduce the probability of undesirable behavior. It can also encourage employees to perform the desirable behavior to avoid negative reinforcement.

• **Punishment**: It is implied to decrease or eliminate the frequency of unwanted behavior. It is able to reduce the undesirable behavior, but cannot encourage employees to perform the desirable behaviors. Punishment can lead to resentment or other undesirable emotional reaction of employees.

• **Extinction**: Removing the reinforcement to reduce the probability of undesirable behaviors. Extinction could also reduce the wanted behavior if positive reinforcement of desired behavior is consistently ignored. As a result, “managers should be sensitive to the wide array of possibilities of extinction in the workplace”.

### 2.3.4 Motivation Factors for Knowledge Workers

According to the features of knowledge workers, and their difference from ordinary workers, a number of experts and scholars have conducted researches on the subject of the motivation factors of knowledge workers. One of the most well-known is Mary Han Tan Mu’s empirical research showing that the top four motivation factors for knowledge workers are individual growth (33.74%), work autonomy (30.51%), business achievement (28.69%), and salary and welfare (7.07%). Comparing with other workers, knowledge workers are more focused on challenging jobs that are able to improve individual growth. They also demand high decision-making power for their approach of work. Additionally, achievement in business helps knowledge workers to achieve self-fulfillment. Salary and money factors comes after
individual growth, and followed by job autonomy and business achievement.

Andersen Consulting is a worldwide well-known consulting company, Andersen and Australian Management Center proceed a research of motivation factors among 858 employees from Australia, Japan and the United States. According to their results, the top five factors that motivate employees most are, in order, compensation and payment, nature of the job, promotion, relationship with colleagues, and impact on decision-making. As for knowledge workers, nature of the job, relationship with colleagues and impact on decision making are the most important. The importance of compensation and promotion is same for both knowledge workers and non-knowledge workers.

In China there are also a lot of experts and scholars who have studied on this subject, their research results are almost similar to Mary Han Tan Mu and Andersen consulting. Zhang Wangjun and Peng Jianfeng (2001) concluded the order in their research on “motivation factors for knowledge workers in innovative enterprises” as compensation and reward (31.88%), individual growth and development (23.91%), and challenging job (10.15%).17 In 2004, Yang Chunhua gave the order of top five motivation factors for research and development workers in high-tech enterprises, these factors are individual growth and development, compensation, challenging and achievability of the work, fairness, welfare, and stability. 18 On the basis of Guan Baoyun and Zhao Quanchao’s research, they divided knowledge workers into three groups as technological, management and marketing workers. The first three factors for management and marketing workers are compensation and reward, promotion opportunity, and future vision of company. Nevertheless, the difference between these two kinds of knowledge workers is that management worker pays more attention to the indemnificatory and stability of their job, and

managerial level of their supervisor. As for marketing worker, they regard teamwork and company culture as crucial factors.

In conclusion, there are many factors can motivate knowledge workers. The major motivation factors are compensation, individual growth, challenging and achievement of the work, and work autonomy. These factors are related to the features of knowledge workers as mentioned before. Moreover, there are still some differences when we comparing the foreign and Chinese knowledge workers’ motivation factors. The difference is mainly concentrate on the order of compensation factor. Both Mary Han Tan Mu and Andersen Consulting cooperation thought that compensation factors are not very important for knowledge workers, but most of Chinese researches indicated that the compensation factor can still highly motivate knowledge workers in China.
3. IMPACTS OF MOTIVATION THEORIES ON MOTIVATING KNOWLEDGE WORKERS

3.1 “People-oriented” as the Guiding Concept

There are a number of philosophy thoughts that developed from thousands of years ago in China, for instance, Confucianism, Mohism, Mencianism, Military Tactics of Sunzi etc. Among these traditional Chinese philosophy thoughts, Confucianism is the most famous one that is regarded as the mainstream thoughts for China’s culture of motivation. Traditional Chinese thoughts emphasize the function and value of persons, individual effects for group, and also tend to emphasize the value of collectivism. In regard to the western motivation theories that mentioned previously, we can find out that western motivation theories were developed on the basis of empirical researches, and they emphasize the study of individual needs, and tend to the value individualism. There are many differences between traditional Chinese and western theories. Nonetheless, both of them give the same guiding concept, “people-oriented” thought, which is could be applied to motivation knowledge workers in practice.

Harmonizing traditional Chinese and western motivation theories, when motivating knowledge workers in business, we should not only emphasize individuals but also collectives. In other words, individuals should submit to group benefits, but at the same time, the group benefits should consider about individual needs.
3.2 The Basic Premise of Effective Motivation is Defining the Needs of Knowledge Workers

According to the motivation theories, knowledge workers’ needs or desires are able to stimulate the motivation, and then they can lead to desirable behaviors. Different knowledge workers have different needs or desires, so that we should define different needs of different individuals in order to choose the specific methods of motivation. Especially for the “self-actualization need” of knowledge workers, diversified motivation approaches that are based on different needs could contribute to better performance of knowledge workers.
3.3 Material Motivation is as Important as Spiritual Motivation for Knowledge Workers

The needs of knowledge workers are various and multi-leveled. One-sided motivation cannot arouse the enthusiasm of knowledge workers. Both compensation and emotional encouragement are essential for knowledge workers in high-tech SMEs in China. It is effective to combine material motivation (compensation, rewards, or welfare) with spiritual motivation (emotion, achievement, goals, or individual growth) to motivate knowledge workers.
4. RESEARCH METHODOLOGY

4.1 Research Methods

This research applies both qualitative and quantitative research method.

Qualitative research seeks to understand a given research problem or topic from the perspectives of the local population it involves. Qualitative research is especially effective in obtaining culturally specific information about the values, opinions, behaviors, and social contexts of particular populations. Also, this method is utilized to gain deep opinions of certain situation. Aim of qualitative research is to collect evidence and produce findings that were not determined in advance. The number of respondents in qualitative research can be smaller than quantitative research. The three most common qualitative research methods for gathering information are participant observation, in-depth interviews, and focus groups. (Marshall, Catherine & Rossman, Gretchen B 1998) In this thesis the method has been used is in-depth interviews. In-depth interviews are “optimal for collecting data on individuals’ personal histories, perspectives, and experiences, particularly when sensitive topics are being explored.” (Carolyn Boyce, Palena Neale 2006)

Quantitative research method is “explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics)”, this definition is taken from Aliaga and Gunderson (2000). Quantitative research method is useful for “testing the results gained by a series of qualitative experiments, leading to a final answer, and a narrowing down of possible directions for follow up research to take.” (Burns & Grove 2005:23) Therefore this research method can be utilized to verify which of such results that gathered from qualitative research are true. In addition, a quantitative research method is ideally for providing how many people think or behave in a certain way and “using statistical analysis to determine the results.” (Caswell, 2014) Quantitative research is largely use methods as questionnaires or
survey with set questions to collect empirical data from respondents. In this thesis the quantitative research method has been used is the questionnaire. Questionnaires can gather a large amount of data and designed for statistical analysis from responses. (Gault, RH (1907)

4.1.1 In-depth Interview

In order to get data from knowledge workers’ personal perspective and individual experiences, I conduct in-depth interviews because of the knowledge workers’ characteristics. And this topic could be sensitive for the employees, so the in-depth interview method is suitable to a one-to-one situation. Additionally, an in-depth interview can be a valuable method to get inside the knowledge workers and find out not only what they think but also why they think it. The interview is conducted among 30 knowledge workers (Managerial workers, technical workers, and marketing workers). With the applying of the theories of motivation factors for knowledge workers, the interview method is used to define what factors can motivate knowledge workers in the case company. There are 15 interview questions had been asked for 30 interviewees.

4.1.2 Questionnaire

The advantages of questionnaire are objectivity, reliability, ease of implementing, wide scale of research, and low average cost. It is also helpful for unified analysis. However there are also disadvantages in using a questionnaire, as it takes a long time to research and collect data. In this thesis, the questionnaires were sent to both knowledge workers (managerial workers, technical workers, and marketing workers) and non-knowledge workers, and the questionnaire was designed in three parts, 1) basic information of respondents, 2) the evaluation of the degree of importance for motivation factors, 3) the evaluation of the degree of satisfaction for motivation factors.
I sent 220 questionnaires, 204 of them were collected and there were 189 valid questionnaires. 145 of questionnaires were for knowledge workers, and 44 are for non-knowledge workers. I used the scale from 1 to 5 to express the importance of motivation factors, 5 for very important, 4 for important, 3 for general, 2 for not very important, and 1 for does not matter. As for the evaluation of the degree of satisfaction for motivation factors, 5 is used for very satisfied, 4 for satisfied, 3 for general, 2 for not satisfied, 1 for not satisfied at all.
5. EMPERICAL FINDINGS

5.1 Brief of Case Company

The case company used in this thesis is a software company located in Cheng Du, Si Chuang Province, China. The main mission of this company is software development and technology outsourcing. I am not allowed to make the details of this company known to the public because the company choose to remain anonymous.

X Software was founded with only 4 employees in 2002, however, with the rapid development they had about 400 employees in 2006. Up to now, the number of employees is 465, and X Software also has some overseas customers such as outsourcing business in Japan, Korea, and Europe.

5.1.1 The present structure of employees

The total amount of employees is 465, the structure of employees is show in Table 7.

<table>
<thead>
<tr>
<th>Department</th>
<th>Managerial Workers</th>
<th>Technological Workers</th>
<th>Marketing Workers</th>
<th>Administrative Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees</td>
<td>58</td>
<td>269</td>
<td>92</td>
<td>46</td>
</tr>
</tbody>
</table>

As shown in table 7, there are 419 employees who belong to the knowledge workers, accounting for 90.11% of total number of employees.

Among these 419 knowledge workers, the educational degree structure of knowledge workers is show in Table 8.
Table 8. Educational Degree structure of knowledge workers in X Software

<table>
<thead>
<tr>
<th>Degree Level</th>
<th>Doctor degree and above</th>
<th>Master Degree</th>
<th>Bachelor Degree</th>
<th>Junior College</th>
<th>Senior High School and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees</td>
<td>5</td>
<td>19</td>
<td>157</td>
<td>164</td>
<td>74</td>
</tr>
</tbody>
</table>

As shown in Table 8, there are 346 knowledge workers who have a degree from a Junior college or above. This accounts for 82.33% of total number of knowledge workers.
5.2 The Present Status of Motivation for Knowledge Workers

The culture of the case company is “care for people, care for customer, and care for employee”. The mission of case company is “Excellent Team and Exceed Customer Expectations”. And they defined the basic value as “honesty, cooperation, responsibility, passion, self-discipline, self-examination, and self-improvement”.

5.2.1 The Performance Appraisal System

The systems includes:

1) The strict system of checking work attendance.

2) The evaluation of knowledge workers, as for technology employees, is mainly depends on the team performance and the advice of team leaders. The marketing and management employees’ performance evaluated in terms of sales and revenue.

3) The monthly salary of knowledge workers is made up of four parts: base salary (according to employee’s educational degree, work experience and so on), position allowance, performance salary, and overtime salary.

4) As for the marketing employees, their salary depends on their monthly sales target. In addition to marketing workers, technology and management workers’ salary are dominating by the score of performance appraisal.

5.2.2 Training system

The system includes:

1) Induction and Orientation training

2) Language training. (E.g. English, Japanese and German)

3) Professional information technology training aimed at technology department, and basic information technology training for the marketing department.
5.3 Analysis and Results of Interview

5.3.1 Basic Information of Interview

Zhang Wangjun and Peng Jianfeng (2001) concluded the order in their research on “motivation factors for knowledge workers in innovative enterprises” as compensation and reward (31.88%), individual growth and development (23.91%), and challenging job (10.15%). In 2004, Yang Chunhua gave the order of top five motivation factors for research and development workers in high-tech enterprises, these factors are individual growth and development, compensation, challenging and achievability of the work, fairness, welfare, and stability. The interview questions are designed according to these theory and research results. As a results, the questions are mainly concentrate on three parts as compensation system and reward, individual growth and development, and challenging and achievability of the job. And there are also open-ended discussions with every interviewee. (see Appendix 1)

There are 30 knowledge workers who accepted the one-to-one interview. They are employed in the department of management, research and development (technology), and marketing. (see Table 9)

Table 9. Basic information of interview

<table>
<thead>
<tr>
<th>Backgrounds of employees</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>18</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 25 years old</td>
<td>9</td>
</tr>
<tr>
<td>25-35 years old</td>
<td>15</td>
</tr>
<tr>
<td>&gt; 35 years old</td>
<td>6</td>
</tr>
<tr>
<td><strong>Education background</strong></td>
<td></td>
</tr>
<tr>
<td>Under Junior College</td>
<td>4</td>
</tr>
<tr>
<td>Junior College</td>
<td>4</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>14</td>
</tr>
<tr>
<td>Occupation Category</td>
<td>Results of Interview</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Master and above degree</td>
<td>8</td>
</tr>
<tr>
<td>Management</td>
<td>8</td>
</tr>
<tr>
<td>R&amp;D (Technology)</td>
<td>12</td>
</tr>
<tr>
<td>Marketing</td>
<td>10</td>
</tr>
</tbody>
</table>

5.3.2 Results of Interview

Zhang Wangjun and Peng Jianfeng (2001) concluded the order in their research on “motivation factors for knowledge workers in innovative enterprises” as compensation and reward (31.88%), individual growth and development (23.91%), and challenging job (10.15%). In 2004, Yang Chunhua gave the order of top five motivation factors for research and development workers in high-tech enterprises, these factors are individual growth and development, compensation, challenging and achievability of the work, fairness, welfare, and stability. The interview are designed according to these theories and research results. As a results, the interview questions are mainly concentrate on three parts as compensation system and reward, individual growth and development, and challenging and achievability of the job. And there are also open-ended discussions with every interviewee. (see Appendix 1)

According to the motivation factor theories like Zhang Wangjun and Peng Jianfeng (2001), Yang Chunhua (2004), and also the interview answers by the interviewees. I concluded the main motivation factors as shown in Table 10.

Table 10. Results of interviews

<table>
<thead>
<tr>
<th>Category of Factors</th>
<th>Results of Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compensation factors</strong></td>
<td>• Salary, reward</td>
</tr>
<tr>
<td></td>
<td>• Good welfare</td>
</tr>
<tr>
<td><strong>Individual growth factors</strong></td>
<td>• Promotion opportunity</td>
</tr>
<tr>
<td></td>
<td>• Sense of achievement</td>
</tr>
<tr>
<td></td>
<td>• Challenging work</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td><strong>Job-itself factors</strong></td>
<td>• Completeness</td>
</tr>
<tr>
<td></td>
<td>• Importance</td>
</tr>
<tr>
<td></td>
<td>• Autonomy and independence</td>
</tr>
<tr>
<td><strong>Company environment</strong></td>
<td>• Relationship with leaders</td>
</tr>
<tr>
<td></td>
<td>• Relationship with colleagues</td>
</tr>
<tr>
<td></td>
<td>• Leadership</td>
</tr>
<tr>
<td></td>
<td>• Teamwork ability</td>
</tr>
<tr>
<td></td>
<td>• Participating in decision-making</td>
</tr>
<tr>
<td></td>
<td>• Fairness</td>
</tr>
<tr>
<td><strong>External factors</strong></td>
<td>• Good prospects of company</td>
</tr>
<tr>
<td></td>
<td>• Sound management system</td>
</tr>
<tr>
<td></td>
<td>• Good working condition</td>
</tr>
<tr>
<td></td>
<td>• Learning and training opportunity</td>
</tr>
</tbody>
</table>

As shown in Table 10, it can be seen that the results of interview are similar to the motivation factors that have been proposed by the experts and scholars mentioned previously. There are 19 motivation factors that I concluded from the interviews, and the questionnaires are based on these factors. In order to get a further step of research on incentive effects of these 19 motivation factors, I reduced these factors to 17 and grouped them into 4 classifications. (See Table 11)

The names of these 17 motivation factors are mainly decided by the Herzberg’s Two-factor Theory (1959), which is indicated that motivators consist of achievement, recognition, work itself, responsibility, promotion, advancement and growth. These motivators can give positive satisfaction for employees. Additionally, these 17 factors raised from the results of 4 researches, which were respectively conducted by Andersen Consulting and Australian Management Center, Mary Han Tan Mus (1999), Zhang Wangjun and Peng Jianfeng (2001), Yang Chunhua (2004), Guan Baoyun and Zhao
Quanchao (1999). Also the interview answers from the 30 knowledge workers.

Table 11. Table of classification of motivation factors

<table>
<thead>
<tr>
<th>Classification</th>
<th>Motivation factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal motivation factors</strong></td>
<td>• Promotion opportunity</td>
</tr>
<tr>
<td></td>
<td>• Challenging and accomplishment of work</td>
</tr>
<tr>
<td></td>
<td>• Individual development and growth</td>
</tr>
<tr>
<td><strong>External motivation factors</strong></td>
<td>• Salary, reward</td>
</tr>
<tr>
<td></td>
<td>• Welfare</td>
</tr>
<tr>
<td></td>
<td>• Learning and training opportunity</td>
</tr>
<tr>
<td></td>
<td>• Fairness</td>
</tr>
<tr>
<td></td>
<td>• Participating in decision-making</td>
</tr>
<tr>
<td></td>
<td>• Working condition</td>
</tr>
<tr>
<td></td>
<td>• Vision of company</td>
</tr>
<tr>
<td></td>
<td>• Company culture</td>
</tr>
<tr>
<td><strong>Job-itself motivation factors</strong></td>
<td>• Completeness</td>
</tr>
<tr>
<td></td>
<td>• Importance</td>
</tr>
<tr>
<td></td>
<td>• Autonomy and independence</td>
</tr>
<tr>
<td></td>
<td>• Time</td>
</tr>
<tr>
<td><strong>Interpersonal relationship motivation factors</strong></td>
<td>• Relationship with leaders</td>
</tr>
<tr>
<td></td>
<td>• Relationship with colleagues</td>
</tr>
</tbody>
</table>

The explanation of these four classifications is as follows:

- **Internal motivation factors**

Knowledge workers pay more attention to individual growth and development than other employees, thus challenge and accomplishment of their work, and promotion opportunities are crucial to knowledge workers as an emphasis on the factors of employee engagement as well.
• **External motivation factors**

It is essential to knowledge workers to meet their “deficiency needs” according to Maslow’s Hierarchy of Needs, especially in China’s circumstances. A competitive salary and good welfare are absolutely necessary for knowledge workers’ motivation. In addition, the better learning opportunities, working conditions, participating in decision-making, and company culture, the higher the incentive degree for the knowledge workers.

• **Job-itself motivation factors**

The motivation of work itself is an intrinsic motivator. It is the combination of job position’s properties and employee’s features, or putting the right person in the right position. Moreover, the company is able to improve the efficiency and enthusiasm of knowledge workers with the enhancement of completeness and autonomy of their work. Also increasing the degree of independence would be beneficial to knowledge workers in order to arrange their own time. Consequently, these factors can strengthen motivation.

• **Interpersonal relationship motivation factors**

Knowledge workers are not only working in pursuit of the higher level for material and spiritual life, but also demanding the self-identity and professional approval. In other words, it is necessary for an enterprise to satisfy the “growth needs” of the theory of Maslow hierarchy needs. Knowledge workers chase the trust and approval from their leaders, and establishing a good relationship with their colleagues as well.
5.4 Analysis and Results of Questionnaire

5.4.1 Basic Information of Questionnaire

Table 12. The Basics of Sample. (Knowledge Workers: 145, Non-knowledge Workers: 44)

<table>
<thead>
<tr>
<th>Information of Employees</th>
<th>Number of Knowledge Workers</th>
<th>Percentage (%)</th>
<th>Number of Non-knowledge Workers</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>113</td>
<td>77.93</td>
<td>29</td>
<td>68.91</td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>22.07</td>
<td>15</td>
<td>34.09</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;25 years old</td>
<td>44</td>
<td>30.34</td>
<td>18</td>
<td>40.91</td>
</tr>
<tr>
<td>25-35 years old</td>
<td>89</td>
<td>61.38</td>
<td>23</td>
<td>52.27</td>
</tr>
<tr>
<td>&gt;35 years old</td>
<td>12</td>
<td>8.27</td>
<td>3</td>
<td>6.82</td>
</tr>
<tr>
<td>Educational Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under Junior College</td>
<td>9</td>
<td>6.21</td>
<td>25</td>
<td>56.82</td>
</tr>
<tr>
<td>Junior College</td>
<td>43</td>
<td>29.66</td>
<td>19</td>
<td>43.18</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>77</td>
<td>53.10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Master and above degree</td>
<td>16</td>
<td>11.03</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Job Position</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>38</td>
<td>26.21</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>R&amp;D (Technology)</td>
<td>82</td>
<td>56.55</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Marketing</td>
<td>25</td>
<td>17.24</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

1) As indicated in Table 12, in the case company the proportion of female employees is lower than male employees, and the company tends to recruit male employees due to the high pressure of competitiveness in high-technology industry.

2) The average age of employees is young and mainly concentrates at the range of 25-35 years old.
3) As for the educational degree, bachelor and above degrees take the dominant role in the whole company. Comparing with the management and marketing positions, the technology positions take a dominant proportion.

5.4.2 The Importance of Motivation Factors for Knowledge Workers

Table 13. The Importance of Motivation Factors for Knowledge Workers

<table>
<thead>
<tr>
<th>Motivation Factors</th>
<th>Ranking Order</th>
<th>Number of Sample</th>
<th>Average Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual development and growth</td>
<td>1</td>
<td>145</td>
<td>4.7571</td>
</tr>
<tr>
<td>Salary and reward</td>
<td>2</td>
<td>145</td>
<td>4.5143</td>
</tr>
<tr>
<td>Vision of company</td>
<td>3</td>
<td>145</td>
<td>4.5038</td>
</tr>
<tr>
<td>Challenging and accomplishment of work</td>
<td>4</td>
<td>145</td>
<td>4.4714</td>
</tr>
<tr>
<td>Welfare</td>
<td>5</td>
<td>145</td>
<td>4.4286</td>
</tr>
<tr>
<td>Relationship with colleagues</td>
<td>6</td>
<td>145</td>
<td>4.3571</td>
</tr>
<tr>
<td>Relationship with leaders</td>
<td>7</td>
<td>145</td>
<td>4.3000</td>
</tr>
<tr>
<td>Fairness</td>
<td>8</td>
<td>145</td>
<td>4.2571</td>
</tr>
<tr>
<td>Promotion opportunities</td>
<td>9</td>
<td>145</td>
<td>4.1286</td>
</tr>
<tr>
<td>Company culture</td>
<td>10</td>
<td>145</td>
<td>4.0714</td>
</tr>
<tr>
<td>Working environment</td>
<td>11</td>
<td>145</td>
<td>3.9929</td>
</tr>
<tr>
<td>Autonomy and independence</td>
<td>12</td>
<td>145</td>
<td>3.9857</td>
</tr>
<tr>
<td>Learning and training opportunities</td>
<td>13</td>
<td>145</td>
<td>3.9427</td>
</tr>
<tr>
<td>Importance of work</td>
<td>14</td>
<td>145</td>
<td>3.8857</td>
</tr>
<tr>
<td>Completeness of work</td>
<td>15</td>
<td>145</td>
<td>3.8714</td>
</tr>
</tbody>
</table>
1) All the motivation factors were rated over 3 points by knowledge workers. Therefore knowledge workers put high value on all these 17 factors. “Individual development and growth”, “salary”, “vision of company”, and “challenging and accomplishment of work” and other 6 factors were rated over 4 points by knowledge workers. As a result, these first 10 factors are all at the important level for knowledge workers.

2) Comparing this research results with the research of Peng Jianfeng and Zhang Wangjun which is mentioned before, the new change is the “individual development and growth” factor is becoming more important than the “salary” factor.

5.4.3 The Importance of Motivation Factors for Non-knowledge Workers

Table 14. The Importance of Motivation Factors for Non-knowledge Workers

<table>
<thead>
<tr>
<th>Motivation Factors</th>
<th>Ranking Order</th>
<th>Number of Sample</th>
<th>Average Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary and reward</td>
<td>1</td>
<td>44</td>
<td>4.5846</td>
</tr>
<tr>
<td>Learning and training opportunities</td>
<td>2</td>
<td>44</td>
<td>4.5438</td>
</tr>
<tr>
<td>Relationship with Leaders</td>
<td>3</td>
<td>44</td>
<td>4.3092</td>
</tr>
<tr>
<td>Welfare</td>
<td>4</td>
<td>44</td>
<td>4.2992</td>
</tr>
<tr>
<td>Fairness</td>
<td>5</td>
<td>44</td>
<td>4.0871</td>
</tr>
<tr>
<td>Individual development and growth</td>
<td>6</td>
<td>44</td>
<td>3.9931</td>
</tr>
<tr>
<td>Relationship with colleagues</td>
<td>7</td>
<td>44</td>
<td>3.8575</td>
</tr>
<tr>
<td>Promotion opportunities</td>
<td>8</td>
<td>44</td>
<td>3.8445</td>
</tr>
<tr>
<td>Vision of company</td>
<td>9</td>
<td>44</td>
<td>3.8278</td>
</tr>
</tbody>
</table>
1) The top five factors for non-knowledge workers are “salary”, “learning and training opportunities”, “relationship with leaders”, “welfare” and “fairness”. These five factors are mainly concentrate on the part of external motivation factors. As the external motivation factors, the salary and welfare factors play crucial roles for non-knowledge workers.

2) The reason why “learning and training opportunities” factor also rated important for non-knowledge workers is that the company aligns employees’ salary with their performance. This motivational method is effective for knowledge workers, and also stimulates the demand of learning new knowledge and skills for non-knowledge workers.

5.4.4 Comparison between Knowledge workers and Non-knowledge workers

Table 15. The Comparison between Knowledge Workers and Non-knowledge Workers. (The Number of Sample: 145)
<table>
<thead>
<tr>
<th>Field of Differences</th>
<th>Workers</th>
<th>Non-workers</th>
<th>differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual development and growth</td>
<td>4.7571</td>
<td>3.9931</td>
<td>0.7640</td>
</tr>
<tr>
<td>Vision of company</td>
<td>4.5038</td>
<td>3.8278</td>
<td>0.6760</td>
</tr>
<tr>
<td>Challenging and accomplishment of work</td>
<td>4.4714</td>
<td>3.8115</td>
<td>0.6599</td>
</tr>
<tr>
<td>Learning and training opportunities</td>
<td>3.9427</td>
<td>4.5438</td>
<td>-0.6011</td>
</tr>
<tr>
<td>Relationship with colleagues</td>
<td>4.3571</td>
<td>3.8575</td>
<td>0.4996</td>
</tr>
<tr>
<td>Company culture</td>
<td>4.0714</td>
<td>3.6449</td>
<td>0.4265</td>
</tr>
<tr>
<td>Autonomy and independence</td>
<td>3.9857</td>
<td>3.6226</td>
<td>0.3631</td>
</tr>
<tr>
<td>Completeness of work</td>
<td>3.8714</td>
<td>3.5229</td>
<td>0.3485</td>
</tr>
<tr>
<td>Importance of work</td>
<td>3.8857</td>
<td>3.5436</td>
<td>0.3421</td>
</tr>
<tr>
<td>Promotion opportunities</td>
<td>4.1286</td>
<td>3.8445</td>
<td>0.2841</td>
</tr>
<tr>
<td>Working environment</td>
<td>3.9929</td>
<td>3.8002</td>
<td>0.1927</td>
</tr>
<tr>
<td>Fairness</td>
<td>4.2571</td>
<td>4.0871</td>
<td>0.1700</td>
</tr>
<tr>
<td>Welfare</td>
<td>4.4286</td>
<td>4.2992</td>
<td>0.1294</td>
</tr>
<tr>
<td>Salary and reward</td>
<td>4.5142</td>
<td>4.5846</td>
<td>-0.0703</td>
</tr>
<tr>
<td>Time of work</td>
<td>3.6571</td>
<td>3.5994</td>
<td>0.0577</td>
</tr>
<tr>
<td>Participating of decision-making</td>
<td>3.6286</td>
<td>3.6113</td>
<td>0.0173</td>
</tr>
<tr>
<td>Relationship with leaders</td>
<td>4.3000</td>
<td>4.3092</td>
<td>-0.0092</td>
</tr>
</tbody>
</table>

5.4.4.1 The Differences between Knowledge and Non-knowledge workers

Table 16. The Differences between Knowledge and Non-knowledge workers

<table>
<thead>
<tr>
<th>Field of Differences</th>
<th>Knowledge Workers</th>
<th>Non-knowledge workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Motivation factors were rated over 4 points | 1) Individual development and growth  
2) Salary and reward  
3) Vision of company  
4) Challenging and accomplishment of work  
5) Welfare  
6) Relationship with colleagues  
7) Relationship with leaders  
8) Fairness  
9) promotion opportunities  
10) Company culture. | 1) salary and reward  
2) learning and training opportunities  
3) relationship with leaders  
4) Welfare  
5) Fairness |
| --- | --- | --- |
| Top five motivation factors | 1) Individual development and growth  
2) Salary and reward  
3) Vision of company  
4) Challenging and accomplishment of work  
5) Welfare. | 1) Salary and reward  
2) Learning and training opportunities  
3) Relationship with leaders  
4) Welfare  
5) Fairness |
| Classification of motivation factors | Both internal motivation factors and external motivation factors | external motivation factors |
| The importance order of motivation factors | Individual development and growth, vision of company, challenging and accomplishment of work, relationship with colleagues, and company culture are more important for knowledge worker than non-knowledge workers | Learning and training opportunities, salary and reward factor, and relationship with leaders are more important for non-knowledge workers than knowledge workers |
5.4.4.2 The similarities between Knowledge and Non-knowledge Workers

1) All 17 motivation factors were rated over 3 points by both knowledge workers and non-knowledge workers, which means these 17 factors are all important for both knowledge and non-knowledge workers.

2) Salary and reward, time of work, participating of decision-making, and relationship with leaders factors have similar importance for both knowledge workers and non-knowledge workers.

5.4.5 Results of Questionnaire

The results of questionnaire:

1) “Salary” and “welfare” factors are important to both knowledge and non-knowledge workers. This is related to the phenomenon of excessive rise in commodity prices, while the lower growth of wage level in China, especially in SMEs. The wage level in SMEs lacks in competitiveness in the comparison with large-scale enterprises and foreign enterprises.

2) The major factors that can motivate knowledge workers significantly are “Internal motivation factors”, “external motivation factors”, “job-itself motivation factors”, and “interpersonal relationship motivation factors”.

3) There is a positive correlation between knowledge workers’ satisfaction and the influence of these four parts of motivation factors. “job-itself motivation factors” reveal the greatest impact on knowledge workers, on the other hand, “interpersonal relationship motivation factors” do not show remarkable effects.

4) The factors of age and job position reveal the more remarkable effects than gender and educational degree to knowledge workers now.
5.5 The Problems of Motivation for Knowledge Workers in Case Company

5.5.1 Demission Rate and Dissatisfaction of Knowledge Workers

The average demission rate of China’s high-tech industry is 20%-50%, the annual demission rate of the case company is 16%. During the process of one-to-one interview, I concluded that the dissatisfaction for knowledge workers is concentrating on 1) dissatisfaction with the compensation system, 2) expectation of broad and better individual development opportunities, 3) the unfairness of performance appraisal, and 4) high pressure of work and the company atmosphere is not relaxed.

5.5.2 The System of Management and Motivation

The main problems exists in the system of management and motivation. (See Table 15)

Table 17. The main problems exists in the system of management and motivation in case company.

<table>
<thead>
<tr>
<th>The performance appraisal</th>
<th>The single structure performance appraisal for knowledge workers is not fair enough.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The compensation system</td>
<td>The humdrum compensation system is not able to utilize the welfare, stock rights, and other forms of compensation.</td>
</tr>
<tr>
<td>The training of employees</td>
<td>Only focus on technology and marketing department, and the lack of training for knowledge workers in management department.</td>
</tr>
<tr>
<td>The career development and management</td>
<td>The lack of career development and management for knowledge workers influence their future and loyalty.</td>
</tr>
<tr>
<td>The company culture construction</td>
<td>Not strong enough to support the rapid expansion of company and the demand of knowledge workers’ motivation.</td>
</tr>
</tbody>
</table>
6. CONCLUSIONS

With the rapid development of economy and society, China’s enterprises are facing more and more challenges and chances, especially in the high-technology industry. As a result, the enterprises are putting more emphasis on the role of knowledge workers. Therefore, how to attract, retain and motivate knowledge workers is becoming increasingly crucial for enterprises. Compared with the large scale companies, small and medium-sized enterprises are facing more complicated and challenging circumstances.

The previous researches about the motivation of knowledge workers in China’s high-tech SMEs generally indicate that the motivation factors are “salary and reward”, “individual development and growth”, “challenging of the work”, “the vision of company”, and “the guaranteed and stable work”. However, in this thesis the importance of “individual development and growth” factor exceeds the “salary and reward” factor. It is highly related to the rapid development of China. “Individual development and growth” are playing more and more crucial roles in the motivation of knowledge workers in China’s high-tech SMEs.

When comparing the results with overseas researches, I found that in China the “salary and reward” factor is regarded more important than other countries. Knowledge workers from different cultures and national conditions have different features. In terms of the knowledge workers from American and European high-tech SMEs, they own the higher degree of achievement motivation than China. The knowledge workers also own the mature mechanism in high-technology industry.

Furthermore, in China, the welfare and the future vision of the company are essential to knowledge workers because of the uncertainty and risks that the high-tech SMEs need to face. A high degree of challenging and accomplishment of work will be very
effective factors in motivating knowledge workers in China.

According to the motivation theories and the case company study, the suggestions that I conclude are:

1) **Improvement of Performance Appraisal System**

Building the more flexible and reasonable system of checking work attendance, especially for technology and marketing employees. It is reasonable to give them the chance to choose their working place and working times. It is necessary to enhance the communication with knowledge workers about the performance target setting. Increasing the proportion of self-examination during the evaluation of knowledge workers’ performance in order to reflect the fairness is needed.

As for the technology department, the company can increase the importance of evaluation among team members. The degree of customer satisfaction can be considered as a major assessment criteria for marketing employees. In addition, the evaluations from other colleagues would be highly helpful in enhancing the performance appraisal for managers.

The feedback of performance appraisal could be an effective approach to motivate knowledge workers. Therefore, the knowledge workers can realize that performance appraisal will not only relate to their salary, but also influence their career planning.

2) **Build the Comprehensive Compensation System and Welfare System**

As for the importance of salary and welfare factor which is shown in the research results, the company should enhance the connection between the salary and employee’s technical ability. Also, considering adding the share-holding of human capital, and welfare allowance into the compensation system. It would also be beneficial to allow the knowledge workers to become a shareholder for the company.

Implementing the diversified welfare system to provide more benefits for knowledge
workers should be considered. Organizing more leisure activities to strengthen the cohesion among employees could also motivate the knowledge workers.

3) Career development and management
The company needs to emphasize the individual demands and career aspiration of knowledge workers, while, enhancing the connection between the company goals and individual goals. Moreover, The company should regard the management training as important as the technology or marketing training. It is very significant for knowledge workers to have the opportunities to learn new knowledge, meet the challenges, and promoted. The company should also give the opportunities for knowledge workers to make horizontal movements among different departments since they strongly emphasize the individual development and growth.

4) The Company Culture
Emphasizing innovation, emotional motivation, and reasonable tolerance of failure would be helpful for the company in building mutual trust and a positive working environment. The construction of the company culture cannot only depend on the concept of basic values. It also requires the help of culture activities in practice and the implementation of regulations. In Chinese culture, the principle of “tempering force and mercy” or “carrot and stick” are advocated. This principle can improve the positive effects of motivation with the flexible application of “positive reinforcement” and “negative reinforcement”.

5) Based on the Practical Conditions
There are a lot of other factors that can influence the motivation of knowledge workers, for instance, the geographical realities, the nature of enterprise, individual differences and so on. Even for the same single knowledge worker, there exist different motivation factors under the influence of different external conditions. Therefore, it is really necessary for enterprises to formulate a motivation system or a mode based on their practical conditions.
REFERENCES

16. Hu Yan, “Research on the features and management strategy of Knowledge


31. Yang Chunhua. “Comparative Analysis of Motivation Factors of Knowledge Workers in Foreign and China’s Enterprises”, Scientific and Technological


APPENDIX 1

In-depth interview questions

1. Could you please tell me about the main responsibilities of your job?
2. How long have you been working in this field? How long have you been working in the X Software?
3. How do you evaluate this experience that working in X Software?
4. What is the biggest characteristic of your company?
5. What are the reasons for you to choose to work at X Software instead of other company?
6. How do feel about the working environment? What are the satisfactions and dissatisfactions from your point of view?
7. How do you evaluate the compensation and welfare system? What are the satisfactions and dissatisfactions for you?
8. Have you ever raise a claim of salary increase or any other claim about salary issues to your leaders?
9. What kind of training program available in your company? And what kind of training program that you have ever attend before? What are your satisfactions and dissatisfactions?
10. How do you evaluate the career development and management system as an individual?
11. Are there any punishment system exist in the company? How do you evaluate the performance appraisal system?
12. What do you think of the promotion system in your company?
13. Could you please make an order of the top three factors that can highly motivate you during your work processes?
14. Why do you think that these factors can motivate you?
15. What is your career plan in the recent future?
APPENDIX 2

Questionnaire about Motivation of Knowledge Workers in X Software

I. Basic Information

1. Gender
   A. Female  B. Male

2. Age
   A. under 25 years old  B. 25-35 years old  C. over 35 years old

3. Educational degree
   A. Junior college and below  B. Junior college
   C. Bachelor degree  D. Master degree and above

4. Job position
   A. Management  B. Technology(R&D)  C. Marketing

II. How do you scale the importance of these following factors in your work?
(5 for very important, 4 for important, 3 for general, 2 for not very important, and 1 for does not matter.)

1. Individual development and growth

   | 1 | 2 | 3 | 4 | 5 |

2. The Challenging and Accomplishment of work

   | 1 | 2 | 3 | 4 | 5 |

3. Salary and reward

   | 1 | 2 | 3 | 4 | 5 |

4. Fairness

   | 1 | 2 | 3 | 4 | 5 |

5. Welfare and stability

   | 1 | 2 | 3 | 4 | 5 |

6. Relationship with leaders (the trust and approval from your leaders)

   | 1 | 2 | 3 | 4 | 5 |
7. The future/vision of your company
1 2 3 4 5

8. Relationship with colleagues
1 2 3 4 5

9. Promotion opportunities
1 2 3 4 5

10. Participating in decision-making
1 2 3 4 5

11. Company culture and values
1 2 3 4 5

12. Work environment
1 2 3 4 5

13. The importance of your work
1 2 3 4 5

14. Autonomy and independency of your work
1 2 3 4 5

15. Learning and training opportunities
1 2 3 4 5

16. The time of work
1 2 3 4 5

17. The completeness of your work
1 2 3 4 5

III. In your daily, do you satisfied or motivated by these following factors?
(5 for very satisfied, 4 for satisfied, 3 for general, 2 for not satisfied, and 1 for not satisfied at all.)

1. Individual development and growth
1 2 3 4 5

2. The Challenging and Accomplishment of work
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Salary and reward</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Fairness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Welfare and stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Relationship with leaders (the trust and approval from your leaders)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>The future/vision of your company</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Relationship with colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>Promotion opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>Participating in decision-making</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>Company culture and values</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>Work environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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17. The completeness of your work

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