

CONTRIBUTING MANAGEMENT FACTORS TO PERFORMANCE
MANAGEMENT EFFECTIVENESS IN INFORMATION TECHNOLOGY
INDUSTRY OF SMALL AND MEDIUM ENTERPRISES IN WUHAN, CHINA

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To my family & friends
for your love and support...

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ABSTRACT

The purpose of this study is to investigate management factors that contribute to effectiveness of performance management in Information Technology Industry of Small and Medium Enterprises in Wuhan, China. The respondents of this study consist of 151 human resource managers from IT SMEs in Wuhan. Specifically, this study aims to investigate the main factors affecting the effectiveness of IT SMEs performance management, the relationships between management factors (planning, communication, information collection, appraisal, feedback and reward) and the effectiveness of performance management, and the critical factors that influence the effectiveness of performance management in IT SMEs in Wuhan. The study uses survey method whereby data was collected using questionnaire and was later analyzed by using quantitative method, such as descriptive and inferential statistics. Statistical Package for Social Science (SPSS) was used for data analysis in this study. The descriptive statistical analysis of mean range was used to identify the level of six management practice factors in Wuhan IT SMEs. Pearson Correlation Analysis was used to identify the relationships between independent variables (planning, communication, information collection, appraisal, feedback and reward) and dependent variable (effectiveness of performance management). Furthermore, the Multiple Regression Analysis was used to test the critical factors influence effectiveness of performance in Wuhan IT SMEs. The findings showed that the information collection is the main management factors affecting the effectiveness of IT SMEs performance management, and all the six management factors have significance and positive relationships between the effectiveness of performance management. However, the performance planning, reward, appraisal and communication were the critical factors influence the effectiveness of performance management in IT SMEs in Wuhan. In order to improve the performance management in IT SMEs in Wuhan, several suggestions were forwarded at the end of this study.

ABSTRAK

Tujuan kajian ini adalah untuk mengkaji factor-faktor pengurusan yang menyumbang kepada keberkesanan pengurusan pencapaian dalam Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana di Wuhan, China. Respondens kajian ini terdiri daripada 151 pengurus sumber manusia dari Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana di Wuhan, China. Secara terperinci, kajian ini bertujuan untuk mengkaji faktor-faktor utama yang mempengaruhi keberkesanan pengurusan pencapaian, hubungan antara faktor pengurusan (perancangan, komunikasi, pengumpulan maklumat, penilaian, maklum balas, dan ganjaran) dan keberkesanan pengurusan pencapaian, serta faktor-faktor kritikal yang mempengaruhi keberkesanan pengurusan pencapaian dalam Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana di Wuhan. Kajian ini menggunakan rekabentuk kajian selidik, di mana maklumat dikumpul melalui soal selidik dan dianalisis dengan cara kuantitatif, termasuk statistik deskriptif dan inferensi. *Statistical Package for Social Science (SPSS)* telah digunakan untuk menganalisis data dalam kajian ini. Analisis statistik deskriptif digunakan untuk mengenal pasti tahap keenam-enam faktor pengurusan dalam Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana di Wuhan. Analisis Korelasi Pearson digunakan untuk mengenal pasti hubungan antara pemboleh ubah tak bersandar (perancangan, komunikasi, pengumpulan maklumat, penilaian, maklum balas, dan ganjaran) dan pemboleh ubah bersandar (keberkesanan pencapaian pengurusan). Di samping itu, Analisis Regresi Berganda juga digunakan untuk menguji faktor kritikal yang mempengaruhi keberkesanan pengurusan pencapaian dalam Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana di Wuhan. Analisis maklumat menunjukkan faktor pengumpulan maklumat adalah faktor pengurusan utama yang mempengaruhi keberkesanan pencapaian pengurusan dalam Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana. Kenam-enam faktor pengurusan menunjukkan hubungan signifikan dan positif antara keberkesanan pengurusan pencapaian. Walau bagaimanapun, perancangan pencapaian, ganjaran, penilaian dan komunikasi adalah faktor-faktor kritikal yang mempengaruhi keberkesanan pengurusan pencapaian dalam Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana di Wuhan. Bagi meningkatkan lagi pengurusna pencapaian dalam Industri Teknologi Maklumat Perusahaan Kecil dan Sederhana di Wuhan, beberapa cadangan telah dikemukakan di akhir kajian ini.

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LIST OF ABBREVIATIONS

IT	-	Information Technology Industry
SME	-	Small and Medium Enterprises
PM	-	Performance Management
PP	-	Performance Planning
PC	-	Performance Communication
IC	-	Information Collection
PA	-	Performance Appraisal
PF	-	Performance Feedback
PR	-	Performance Reward
FI	-	Financial Indicators
NFI	-	Non- financial Indicators
SPSS	-	Statistical Package for Social Science

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

In 21st century, the trend of economic globalization and information is growing more and more intense and companies around the world are facing increasingly fierce competition in both domestic and overseas markets. In order to improve their competitiveness and adaption ability, many companies are exploring effective ways to increase productivity and organizational performance: organizational restructuring, organizational downsizing, organizational decentralization which are the main trends of contemporary organizational change (Martocchio, 2006). However, practice has proved that though the measures above can indeed reduce costs, they cannot necessarily improve the performance; regardless at which level: organization, team or individual, it is to evaluate performance and how to define performance, organizational restructuring just provides an opportunity to improve the performance, it cannot fundamentally improve business performance and cannot ensure a continuous increase of business performance (Williams, 2009).

Why do organizations manage their performance? Why more and more enterprises establish performance management system? In the 21st century, the pace of economic globalization is moving rapidly with highly intense market competition. In this situation, for an enterprise to be competitive enough, it must continuously improve its entire effectiveness and performance (Ngema, 2003). Lawler (2003) has proved that performance management is an effective way to improve performance. This is because performance management is about thought and strategic management in which its integrated method can improve performance of organization and staff in order to develop potentials teams and individuals. Performance management can help organizations to achieve sustainable development on their performance; to promote performance-oriented corporate culture; motivate employees to work harder; to motivate employees to develop their potentials and improve their satisfaction towards their job; to enhance team cohesion and improve team performance; to establish a constructive and open relationship between employees and managers through continuous communication and interaction during work; to offer opportunities for employees to express their aspirations and expectations (Garengo and Strfano ,2005).

Performance management originated in the United States in the 70's, and entered into China in 90's. However, after being practiced by Chinese enterprises for years, enterprises without performance management rushed to implement it, while those with performance management gradually lost their confidence towards it (Fang, 2008). Zhu (2009) pointed out that performance management do have significant efforts on the achievement of developmental goals and improvement of management capacity, but there is no doubt that for the special foundation and culture of Chinese enterprises, organizations must search for a simple and practical 'Chinese style' performance management which is more suitable.

Since 1990, Chinese government gradually loosened control over the market, hence the market environment becomes more and more free. This has prompted the establishment of a large number of SMEs (Luo, 2006). In the recent ten years, SMEs have grown rapidly. The number of SMEs has reached more than 8 million in China,

accounted 99% of total number of enterprises, provided 75% of urban employment opportunities, and contributed 60% of exports (Ma, 2006). At the same time, with the deep development of knowledge economy, there were a large number of IT SMEs emerged out, and became the backbone of economic growth and sustainable development (Zuo, 2007). Due to their unique characteristics of development and the increasingly important roles in the national economy, the Chinese government has introduced a series of policies and regulations in order to improve the environment of development of IT SMEs, and to promote their development (Di, 2009). The plentiful policies and regulations has shown how serious that the Chinese government towards IT SMEs (Yang, 2009).

Although IT SMEs achieved great development and accomplishment, there are still widespread problems in management. Currently, most of Chinese IT SMEs are still in management disorder state, and IT SMEs set department discretionarily, boundary of duty is poor-defined, business process is impeded, relation between responsibility, and right is overlap, and lack of coordination between departments. Most of IT SMEs do not have clear development goals, the concept of organization and management is weak, no target-oriented management system, and performance management system is not in line with its business development goals (Wang, 2004). Therefore, enterprises are unable to establish a stable business core and effective management pattern according to enterprise's goals and future development; this seriously restricts the development and improvement of overall quality of IT SMEs in China.

In addition to that, since China's accession to World Trade Organization in 2001, the investment environment in China has been greatly improved, foreign companies' prospects to the development of Chinese market are optimistic, and they rushed into Chinese market. IT SMEs no longer face competitors of domestic companies, but also competitors from abroad. The initial environment which foreign competitors live in is economy market, so they are aware of competition, innovation, management, this provides higher possibility for them to sustain in this fierce market competition. Chinese enterprises, including IT SMEs, all lived in the period of

transition, from planned economy to economy market, they need some time to adapt to the transition, and their awareness of competition, innovation and management are incomparable to foreign enterprises (Wang, 2007). It is crucial for Chinese IT SMEs, especially local SMEs, to grow up and adapt to market conditions in order to deal with the fierce market competition, to enhance the sense of competition, and to improve their performance management. After studying the background of this research topic, performance management is a strong necessity and urgent to IT SMEs in China.

1.2 Statement of the Problem

Xiao (2008) emphasized that performance management is a system which consists of three components: performance planning, continuous communication and performance appraisal. In the performance planning, the company pays great attention to the participation of employees, managers and staffs to determine the employee's performance goals and the company's strategic goals together, and develop employees' career development and training. Meanwhile, the company recognizes that once or twice a year of communication is not enough, and communication should be run through the entire performance management process, so the company emphasizes on continuous communication throughout the year. In the communication process, managers treat employees equally, and listen to the views of staffs, in order to mobilize the enthusiasm of employees, and encourage them toward a common goal. In addition, the company will take performance appraisal to every employee at the end of each year. Performance appraisal can be divided into Employee self-appraisal and competent appraisal, the company managers pay attention to collect information related to performance, and record the behavior of employees into written document, in order to provide the basis for the appraisal. In addition, the manager will tell the results to the employees in the form of interview. Through appraisal, employees will know their shortages, thus to make improvement. The study shows that the company have improved the company's

organizational performance and individual performances successfully through performance management, these three components will all affect the effectiveness of performance management.

On the basis Xiao's (2010) study, Xiong(2010) considered that an effective performance management system should also include feedback, reward, information collection and analysis. The information that managers collected at daily work can provides the basis for employees' year-end appraisal Timely feedback allows managers to realize the problems occur in employees' work, and to help them improve their performance in time. Combining reward with appraisal results will greatly improve employees' working motivation. Xiong (2010) has improved Xiao's (2010) performance management system, but he ignored an important part of performance management, that is performance planning.

IT SMEs only have limited financial resources, their financial strength is not strong enough, and this results in a number of IT SMEs that cannot attract high-level managers (Grote, 2010). The research of Wu (2010) reported that most managers in IT SMEs in China, had not learnt the courses of human resources systematically, and they were short of theories of performance management. With poor understanding and incomplete mastery of performance management cause that some managers of IT SMEs consider take performance appraisal equivalent to performance management during the process of performance management (Meng, 2007). Simply performance appraisal is difficult to give full play to the effectiveness of performance management, after a period of time, employees may take it just as a formality by only finishing appraisal tables and hand them to managers. Managers may not take those forms seriously to make any analysis and summary either, but just casually write down comments and thus the performance appraisal is done. Therefore, Lack of timely communication and feedback and lack of relevant performance and reward make it difficult for performance management to play its role to encourage employees. And it is difficult to promote enterprises' development (Yang and Song, 2009).

In fact, performance appraisal is only a part of the system of performance management. Lack of aspects such as communication before the appraisal, feedback and applications of appraisal result, will lead to ineffective performance appraisal. These would not achieve the incentive, but discourage initiative of employees to participate in performance, and hinder the development of performance management (Martocchio, 2006). Taking performance appraisal as performance management and ignoring other aspects will greatly reduce the effectiveness of performance management. Performance management is a systematic project (Xie, 2006). Although scholars have different views of performance management system, a famous Chinese scholar, Fu Yahe considered performance planning, performance appraisal, performance feedback are the most basic components of performance management system (Fu and Xu, 2008). Performance appraisal is only a part of this project. It will greatly reduce employees' enthusiasm, if performance appraisal had been done without reasonable performance planning.

Employees do not know what they are good at and what needs to be improved without timely communication and feedback (Xiao, 2010). Bernice and Peter (2007) believes that communication is the intermediate link that connects performance planning and appraisal, which can make each individual in performance cycle to obtain information about improvements at any time, in order to better respond to the changes in work. Xie (2006) pointed out that information collection and analysis is essential, the lack of sufficient information will make managers can't control employees' progress and problems, managers can't make accurate appraisal and provide feedback to employees' work results. At the same time, Daniels (2007) pointed out that performance reward also an important part of performance management system. Performance reward is directly related to employee's personal interests. If performance reward is not reasonably used, the incentive to employees will be greatly reduced, and it cannot effectively improve employees' performances and abilities.

If IT SMEs want to achieve competitive advantage, they must constantly improve their overall efficiency and performance, and an effective way to improve performance is performance management (Aguinis, 2009). Corporate strategic objectives, culture and quality of manager will affect the effectiveness of performance management. As a complete system, every aspect of the system is a direct impact on the effectiveness of performance management (Cao, 2009). Managers of IT SMEs in China do not have necessary theoretical basis of performance management, and they have not realized that performance management is a system, but just take the performance appraisal is performance management. It is difficult to improve employees' performance and organizational performance goals if a performance management system lacks of certain aspects (Chen, 2011).

Performance management is a system, and every part of this system will affect the effectiveness of performance management (Zhang, 2010). So far scholars have different views of performance management system, based on the discussion above that this research will examine more management factors contributing to the effectiveness of performance management. Management includes: performance planning, performance communication, information collection and analysis, performance appraisal, feedback and performance reward. Therefore, this study aims to help IT SMEs in China to know the factors contributing to performance management effectiveness thus help them to improve on performance management, to stimulate the potential of employees, and finally to achieve a win-win formula for both companies and employees.

1.3 Research Questions

This research aims to examine factors that affect IT SMEs performance management. The specific questions are:

1. What are the management factors influencing the performance management effectiveness among IT SMEs in Wuhan, China?
2. What are the relationships between management factors and the performance management effectiveness?
3. What are the critical management factors influencing the performance management effectiveness?

1.4 Objectives of the Study

The objectives of the research are as below:

1. To investigate the main management factors influencing the performance management effectiveness among IT SMEs in Wuhan, China.
2. To examine the relationships between performance management factors and the effectiveness of performance management.
3. To determine the critical factors influencing the performance management effectiveness.

1.5 Hypothesis

H: There is a significant and positive relationship between management factors and performance management effectiveness among IT SMEs in Wuhan, China.

Ha: There is a significant and positive relationship between performance planning and performance management effectiveness.

Hb: There is a significant and positive relationship between performance communication and performance management effectiveness.

Hc: There is a significant and positive relationship between information collection and performance management effectiveness.

Hd: There is a significant and positive relationship between performance appraisal and performance management effectiveness.

He: There is a significant and positive relationship between performance feedback and performance management effectiveness.

Hf: There is a significant and positive relationship between performance reward and performance management effectiveness.

1.6 Significance of the Study

The development and growth of IT SMEs has great significance to China. Although they achieved great success in implementing performance management, the management is still lacking. Chaotic in management is currently the greatest characteristic of IT SMEs, and it is a stumbling block to the development of IT SMEs (Li, 2008). In order to achieve large-scaled and long-term development, they have to implement effectiveness of performance management intensely. The study on performance management for employees in IT SMEs has great practical significance, both in micro level and macro level.

The context of the micro level is to improve the management level of IT SMEs, the implementation of performance management effectiveness in IT SMEs in China must be monitored to an acceptable standards. Research on effectiveness of

performance management-related theory shows that using the idea of performance management to manage SMEs can greatly improve their management level and optimize their performances, and thus enhance its core competitiveness, and finally achieve a better and faster development. In addition to that, it can be seen that enterprises that implement effectiveness of performance management had shown improvement in their business performances. Furthermore, if the performance management in IT SMEs had been effectively implemented, the management can be improved significantly, and it could become a competitive enterprise, and in addition enhance the core competitiveness too. This helps IT SMEs to remain competitive.

At the macro level, through the study of effectiveness of performance management in IT SMEs, organizations can review its own problems in implementation of performance management, and to seek solutions for the problems. In order to improve management level of enterprises, most SMEs focus on improving management efficiency. The level of management of the entire SMEs in China will increase, and enterprises will gradually become stronger. Enterprises will drive strong economic growth, and hence enhance economic strength of China.

Therefore, this study aims to help IT SMEs in China to get a better understanding of the problems in performance management and thus help them to improve on performance management, to stimulate the potential of employees, and finally to achieve a win-win formula for both companies and employees, by proving the relationship between the effectiveness of performance management and the six aspects of performance management systems which are performance planning, continuous communication, information collection and analysis, performance appraisal, performance feedback and performance reward.

1.7 Scope of the Study

This research will be conducted in Wuhan, China. Wuhan is located in central China, and it is an important economic center, education center and transportation hub of China. Wuhan, an industry-based city, is one of China's largest industrial cities. Since China had focused on developing coastal areas in 1980, the development of Wuhan is relatively slow because it is in the inland, but this began to change since the last 10 years. Since 2003, Wuhan government realized that the development can't simply rely on industry, so that it established several economic development zones, and accelerated the development of SMEs, and IT SMEs was also included. Wuhan is one of the most important cities in central China, in order to develop the middle of China, Wuhan must be developed first. Wuhan is a representative city in China.

Optic valley is a well-known IT industrial cluster in Wuhan, is gradually becoming the center of China's IT industry. Optic valley plays a vital role in IT industry in China. The respondents include human resource managers from Wuhan IT SMEs. There are 400 organizations in the category of IT SMEs in optic valley of Wuhan. All of the organizations will be the population.

In this research, the researcher will design a set of questionnaire based on the performance management factors and gather information from respondents through questionnaire. The aim is to identify the relationships between performance management system and effectiveness of performance management in IT SMEs in Wuhan.

Due to the fact that performance management process are the main factors that influence the effectiveness of performance management in IT SMEs, therefore, this research mainly focused on six major aspects of the performance management system which are planning, communication, information collection and analysis,

appraisal, feedback, and reward that in order to reflect the real situation of performance management of IT SMEs in Wuhan.

1.8 Limitation of the Study

In this research, the researcher selected some representatives of IT SMEs in Wuhan as sample to analyze the application of performance management system. However, due to the large amount, different situation of operations and management of IT SMEs in China, the results of this research cannot represent the problems faced by all IT SMEs in China. Therefore, this research will provide constructive comments for the effective factors of performance management system for IT SMEs, and to promote the application of performance management in Chinese enterprises, especially in IT SMEs .Meanwhile, new employees of a company, who do not have deeper understanding of the performance management system, influence the accuracy of results.

There are also limitations on researcher's capability and time for conducting this research. As a result, the existing problems on performance management in IT SMEs cannot be investigated in depth. Nevertheless, to improve the performance management system in IT SMEs, there is still a large number of issues to be studied. This research is one step towards the identification of factors to better performance management implementation.

1.9 Conceptual and Operational Definitions

1.9.1 Small and Medium Enterprises in IT Industry

IT is the short form of information technology. Companies that mainly responsible for the development and use of information technology can be called as IT business (Lu, 2006). Computer industry, telecommunications industry and Internet industry are all belong to IT industry (Jiang, 2006).

There are several definitions of IT SMEs have been found. They refer to IT industry SME's in foreign countries and China. The definition of IT SMEs in the United States is more extensive. Number of employees under 500 in an enterprise can be fall into the category of SMES (Zhang, 2006). The definition of IT SMEs given by UK is the enterprise which has less than 200 staffs and low market share, and business was run rely on business owners' personal judgments (Jouirou, 2004). However, in Malaysia, the Department of Statistics (2006) note small enterprise refers to "those fixed assets less than 50 million ringgit or full-time workers less than 50 in enterprise", and medium-sized enterprises means "with 50-250 million ringgit in enterprises".

In China, Ministry of Finance and National Bureau of Statistics had studied and developed *Provisional Regulations on Standards for SMEs* in the year of 2009, in which the definition of IT SMEs was written as follows: enterprises with employees less than 300 or business incomes less than 10,000,000 Yuan are small and medium enterprises. Among them, enterprises with employees more than 100 and business incomes less than 10,000,000 Yuan are medium enterprises; enterprises with more than 1 employees and business incomes less than 1,000,000 Yuan are small enterprises (Di, 2009).

The operational definition of IT SMEs is the company that mainly responsible for the development and use of information technology, and its staffs are less than 300 or its business income is less than of 10,000,000 Yuan.

1.9.2 Performance

Performance can be defined in three different concepts: (i) Performance is a result. According to Smith and Reading (2001), performance can be seen as the result of work outcome because these results are most closely related to the organization's strategic goals, customer's satisfaction and return of investment.

Furthermore, (ii) Performance is a behavior as explained by Risher (2002), which means performance should be separated from result, because result will be affected by factors system. According to Lam (2003), performance is a set of behaviors related to the overall goals of organization and specific goals in the department which the employees must achieve. Clark and Berkeley (2001) considered performance cannot be simply defined as results of work, because many results of work are not only because of individual behavior, they may affected by factors unrelated to work.

Besides that, (iii) Performance is the combination of both result and behavior. Kluger and Denisi (2004) believed that performance of organization, team and individual cannot only assess performance and its completion, but assessment of adaptive performance of members needs to be considered. Adaptive performance reflects the ability of organization, team and individual to adapt to changes. Another definition made by Gohosh *et al* (2001) for performance is Performance includes behavior and result. Act is displayed by a person who works and put the task into implementation. Behavior is not just the tool of result, but behavior itself is also

result. It is the result of mental and physical consequences paid for the completion of tasks, and it can be judge separately with result.

Performance in operational definition can be defined as the result shown by employees at a satisfactory level within a specified time frame. In addition, changes in employees' behavior are important to look at how employees can adapt to changes in the organization, so that employees are able to compete in the very challenging SMEs sector.

1.9.3 Performance Management

According to Aguinis (2009), Performance Management will link together with the purpose of whole working unit through the work of individual employees or managers, to support the goal of organization's overall business.

Locke and Latham (2000) considered that performance management is a process where manager make sure that employees' work and output must be consistent with the goal of organization.

Risher (2002) believed that performance management is a system that manages employees' performance. Performance management can be regarded as appraisal and reward that organization award to an employee for the achievement and encourage for future development potential.

Performance management is a management process that makes organizations and individuals to achieve better results of the work on the basis of mutual understanding. Mutual agreement between employees and managers on goals, standards and capabilities are required in order to achieve the better performance (Kanfer & Ackerman, 2004).

Performance management is a complete system, and it can be divided into four parts: guidance and planning, management and support, review and appraisal, development and reward (Lawler, 2003).

The operational definition of performance management is a coherent and integrated system. Integrated performance management system consists of six parts, which are performance planning, performance communication, information collection and analysis, performance appraisal, performance feedback, and performance reward. In this system, managers and employees are all involved to co-improve the performance through continuous communication.

1.9.4 Effectiveness of performance management

Effectiveness of performance management starts from the beginning of the process, which is a well-designed performance management processes in order to achieve effective implementation, thereby maximizing the inspire employees, strengthen and promote better communication within the organization, in order to improve employee's capacity and performance and hence enhance enterprise's management level (Feng, 2006).

Effectiveness of performance management is a systematic project, affected by corporate culture, and composed by coaching, appraisal, reward, planning. Effectiveness of performance management is a cycle where managers and employees work together to achieve organizational goals. They participate in performance planning, performance coaching communication, performance appraisal, performance results application, and performance goals improvement. The purpose is to enhance individual and organizational performance (Hong, 2004).

Effectiveness of performance management is to analyze performance management problems occur in an enterprise, to come up with strategies and scientific performance management system and later use the right method to maximize the function of performance management. Effectiveness of performance management needs to grasp performance planning, implementation, appraisal and employee incentive (Qu, 2010).

Effectiveness of performance management is established through scientific and effective performance management system. This is important so that performance management not only used as a management tool, but also as a cognitive approach, a kind of behavior, and a combination between personal behavior and business strategy to provide communication opportunities, self-improvement opportunities and to strengthen the enterprise competitiveness (Zhi, 2007).

The operational definition of effective of performance management refers to the process of reaching consensus on what are responsibility goals and how to achieve goals between managers and employees, and the process of promote employees to achieve goals for achieving excellent performance.

1.9.5 Performance Planning

Performance planning is a process through communication between manager and subordinate to achieve the performance's goals. During this process, both manager and subordinate will be responsible to discuss the planning (Whitmore, 2001).

Performance planning is a process of management and subordinate discussing tasks assessment period and appraisal standards to reach the mutual performance agreement (Locke & Latham, 2000).

In performance planning, appraiser and appraisee have to establish a well discussion about employees' job performance that should be achieved in the given period of time. Furthermore, the final decision will be transformed into a formal agreement. It is the organization's internal agreement that based on employee responsibility and benefits (Satterfield, 2003).

The operational definition of performance planning is a contract about goals and standards. The performance contract shall be inclusive of performance goals to be achieved within a certain period, specific targets to be reached and standards of targets judged to be accomplished. Performance planning is based on enterprise strategy and set by supervisor and employees consultation.

1.9.6 Performance Communication

Performance Communication refers to the interviews between appraiser and staff about problems that performance appraisal reflected and problems of appraisal mechanism itself for seeking reply policy, in order to serve management practices of improvement of organization and employees in later stage (John, 2004).

Performance communication between appraiser and appraise are crucial to examine the weaknesses in the performance appraisal and its methods. The interview aims to find appropriate solutions to enhance employee performance management (Latham et al, 2005).

Performance communication is the process that manager makes staffs be clearly aware of their organizational expectations through interviews, and enhance mutual understanding and trust between managers and employees (Du, 2011).

The operation definition of performance communication is the process that manager and employees work together to share information. This information includes case process, potential problems, solutions and what can managers do to help employees, etc.

1.9.7 Information Collection

Information collection and analysis is an organized systemic method to collect information about employees, work activities and organizational performance (Ncikson and Butterworth, 2007).

Information collection and analysis is a method that manager collects performance-related information, records employee work behavior and creates written documents (Fu and Xu, 2008).

The operational definition of information collection and analysis is the method manager pay attention to collect performance-related information and record employees' behaviors intend to provide the basis for year-end appraisal.

1.9.8 Performance Appraisal

Performance appraisal is a process to identify, observe, measure and develop employees' performance in an organization. It is an important management tool, and relates to some management functions, such as planning and organizing. It is the basic guideline for organization to decide to reward or punish promotion, training and dismissal according to employee's current job performance (Grote, 2006).

Performance appraisal is a process of collection, analysis and transfer information that related to individual's working behavior, skill proficiency, working efficiency, and etc. (Aguinis, 2009).

Performance appraisal is a process that the organizations use to achieve the purpose of operation, specific standards, indicators and scientific approach to judge employee's productivity, efficiency, and etc. (Lam et al, 2002).

The operational definition of performance appraisal is assessment and measurement of work behavior and work result of employee through systematic approaches. The appraisal results of performance appraisal can directly affects the salary, job promotion and other vital interests of employees.

1.9.9 Performance Feedback

Performance feedback will be conducted after the performance appraisal through communication and discussion between appraiser and appraise regarding current job performance. The purpose of the performance feedback of employee is to find out deficiencies in the work and to suggest improvements to enable better work performance among employees (Ruppel & Harrington, 2000) .

Performance feedback refers to give rewards to positive aspects of staffs and propose programs and measures of improvements for inadequacies through the communication between appraiser and staffs according to the result of performance appraisal (Yang, 2007).

Performance feedback refers to a method of achieving communication between the organization and staffs for personal performance and organizational expectation, thus individuals and organization can understand the expectation and contribution of both sides, in order to enhance employees' performances, and improve management efficiency (Fang, 2008).

The operational definition of performance feedback can be defined as a communication channel whereby appraisal or manager responsible for evaluating the employee's performance should discuss the results for improvement and corrective

measures. In addition, employees are given the opportunity to provide comments and suggestions on how to improve organizational performance and the effectiveness of performance appraisal.

1.9.10 Performance Reward

Performance rewards are usually divided into individuals, teams and organizations subject to the policies of the organization. In addition, the employee performance is an indicator of changes in wages and benefits. Therefore, changes in the performance index represent the different salary range (Aguinis & Pierce, 2008).

Performance rewards can be divided into two parts, the intrinsic rewards and extrinsic rewards. Extrinsic rewards are bonuses, promotions, awards and so on. Such rewards motivated by external factors such as an organizational rewards system and manager who wants to motivate employees to work harder. While intrinsic rewards are seen as an internal motivation that move an employee to perform a job. Rewards and benefits are typically derived from personal satisfaction, achievement of personal aspirations and self-control (Whitmore, 2001).

The operational definition of performance rewards means an exchange given to employees for the efforts and contributions to the organization. Additionally, the reward is seen as appreciation to the employees and encourages employees to remain in organization for longer period. Besides that, the rewards can be a medium to meet the needs of employees.

PM System/Scholar	Bredrup (1992)	Ainsworth & Smith (1993)	Quin (1993)	Mcfee & Champagne (1993)	Spangeberg (1994)	Torrington & Hall (1995)	Hatry (2002)	Wu (2004)	Meng (2008)	Xiong (2010)	Xiao (2010)	Summary
Performance Planning	√	√	√	√	√	√	√	√	√		√	10
Performance Improvement	√							√				2
Performance Inspection	√					√						2
Performance Feedback		√					√		√	√		4
Performance Appraisal		√	√	√			√	√	√	√	√	8
Management			√	√	√							3
Performance Support						√						1
Communication							√	√	√	√	√	5
Performance Reward					√		√		√	√		4
Design					√							1
Information collection							√	√	√	√		4

Table 1.1: Summary of Performance Management System

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