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Research Article Research on the Performance Evaluation of the SME Administrative Staff

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Abstract: Performance evaluation is the most central part of the enterprise performance management process. The nature of administrative staffs' work and the work features are different. The results of their work are difficult to assess. Thus, how to assess their performance becomes the top priority of the enterprise management. In the study, data evaluation index determination, calculation of the process of design and evaluation criteria are discussed. The study also constructs a SME executive's performance appraisal data model. A wide range of assessment methods are used in the design process of the model which comprehensive quantitative evaluates staffs' work performance. The assessment information of the employee's basic performance is put in EXCEL spread sheet to performance sort which is simple and convenient and examination results are fair and impartial, easy to convince the public. In the model, no absolute values are set in assessment times, assess results fully consider the teamwork effect. Moreover, it's easy for examiners to use for lateral longitudinal contrast, employees will find their own strengths and weaknesses and know the reasons timely which can improve their assessment scores as well as help their colleagues. In general, it easily gives accurate guidelines for future work.

Keywords: Administrative staff, business management, countermeasure, digitized, performance assessment

INTRODUCTION

SME refers to enterprises that the number of employees is less than 1000 and more than 100. Administrate staffs is staffs engaged in enterprise services, supervision, coordination who not directly engaged in production activities but play vital roles in safeguarding the realization of the strategic objectives, the creation of corporate interests. Their work cover A wide range, including planning, procurement, human resources management, financial management, quality management and public affairs (Lu and Sun, 2007; Avila et al., 2010; Xu, 2011). According to their job duties, Administrate staffs can be roughly divided into several types which are staffs who provide decisionmaking information to senior managers, who provide advice to the business sector and other functions of the office and coordinate between the departments. Their work has characteristics as following (Korman, 1986; Boyle, 2001):

- **Difficult to quantify:** Administrate staffs' work is very similar that monthly operating basic procedures of operation and most of the work results is difficult to be determined by qualitative indicators, rather than quantitative data to measure and subjectivity is difficult to be avoid.
- The outcome is not exploitations: Most of the word content is courses of certain events and the

impact of their contribution to the company is very indirect and difficult to judge the quality of their work.

- Work is not easy to plan: Most of the administrate staffs' day-to-day work are temporary tasks. In some enterprises it even accounts for more than 40% of the total work which directly affect the assessment focus.
- **Difficult to our performance:** Large amount of temporary teamwork exist within the administrative departments, especially when in busy time or temporary tasks are arranged. Most or all personnel in the sector are often involved in a job, administrative personnel performance's difficulties in the team work greatly increase.
- An increase in coordination: Administration work needs to do a lot of coordination of internal and external. Measure of the quality of their work involves not only administrative staff themselves, may involve multiple assessors.
- The requirements of their quality are relatively high: Due to the requirements of the job duties, administrative requirements are higher than other employees in the cultivation of knowledge, morality and the ability to work. Generally, they have higher educations, most of who are colleges or undergraduates.

Performance evaluation refers to the a comprehensive, systematic, scientific considerations

assessment process of staffs' behavior, performance and results through the scientific application of qualitative and quantitative methods according to the needs of corporate human resources management in a certain period of time (Jones, 2001). Enterprise business people could examine their performance. However, some non-business sectors, such as administrative departments, whose members are located in different administrative positions which covers a wide range and are complex hierarchical. Moreover, there are many differences in nature and characteristics of their work which led to that assessing its performance have become imperative in enterprise management.

Following phenomena occur in the current management of SME executives (Fernandez-Araoz, 1999; Grimsley and Jarrett, 1973):

- Evaluation positioning is not clear, no specific content: In the past, most of the performance evaluations of corporate executives are based on their performance over the past year. But clear quantitative criteria are lack that it's difficult to carry out the actual evaluation of results of the work and behaviors, performance and quality characteristics affect the results of the work. That's to say, either subjectively evaluation of the evaluation staffs or appraisal staffs are involved in a negative attitude that they are irresponsible to make evaluations.
- The indicators are difficult to quantify, performance evaluations are unfair. Assessment of corporate executives contains a large number of qualitative assessment indicators that lack objectivity. So called emotional points come out that the evaluations are susceptible to the influence of personal prejudices and make unrealistic evaluation that it would not be true pictures of its features and the true level. This can damage enthusiasm of the real hard working, capable administrative staffs and will affect the fairness of the performance appraisal.
- Performance appraisal has emphasized too much on the history and less on development potential. Enterprise performance appraisal is at the level of "backward-looking and ignores the forwardlooking development, does not pay attention to scientific predictions of human potential and the development trend analysis, lack the function of analyzing and proposing recommendations for improvement of the short comes of the administrators' work. Therefore, it is difficult to determine the focus of future training and direction of development. Also, it is difficult to tap its potential and improve their ability.
- Performance appraisal merely is a formality and stimulating is difficult. Enterprise performance appraisal process is generally the same: first, fixed forms are distributed to various departments,

managers stipulated time table circles and hooks and add some reviews. Then he/she will give a brief communication with each subordinate on the contents of the table and sign in each examination sheet at last that the evaluation work is done. The evaluation results in addition to the individual special circumstances, if any, production, safety, quality of major accidents was named as incompetent, other personnel monotony are be classify competent, which has greatly restricted the effect of evaluation work.

• No feedback of the evaluation results, the lack of a performance improvement plan. Leaders of most SMEs don't make related evaluation and analysis of the evaluation results and don't propose appropriate improvements, which makes the correct behavior of assessed persons cannot get the organization upper affirmation, the inadequacies competent leaders can't be pointed out and corrected and also do not know how to improve in order to meet the expectations of the organization.

Above problems in the performance appraisal make enterprise performance appraisal work to achieve its proper role in the enterprise staff recruitment, reward and punishment, executive training cannot achieve the desired effect. Many executives of assessment held an indifferent attitude, thus forming a vicious loop affecting the realization of corporate objectives.

MODELING

Assessment contents and indexes:

- Virtue: This mainly refers to the loyalty of the staffs of the company which mainly evaluate the performance of the ideological and political performance and professional ethics. Based on principles of practical, easy inspection, operational, four evaluation aspects should be designedobedience, the ability to actively implement the competent superiors arrangement, service, whether service objects are satisfy with their own job, responsibility, whether on their own work and temporary assigned by task best, make themselves and their superiors satisfied from beginning to complete the job and have the courage to take responsibility for the mistakes encountered the work, team awareness whether working harmony with superiors and colleagues and have the overall positive and proper cooperation.
- **Capability:** This mainly refers to the administrate staffs' ability, technology and knowledge required by job. This focused on the evaluation of business knowledge whether the staff has a wealth of job management knowledge to understand the work processes and business, master job content and have the ability of independent processing services, can satisfactorily deal with business issues,

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First level indexes	Second level indexes	Code	Meaning	Evaluation grade
Virtue	Responsibility sense	D1	Whether one takes his own work and dedicates to temporary tasks assigned to	Evaluation grade
virtue	Responsibility sense	DI	him, satisfies his superiors, from start to finish to complete the job, has the	
			courage to take responsibility of the mistakes encountered the work	
	Service sense	D2	Assessment the satisfaction of the service object of their own work	
	Obedience	D3	Ability to actively implement the arrangements of the competent superiors	
	Team spirit	D4	Be harmony with superiors and colleagues, work based on the overall situation, to	
	1		cooperate actively and properly	
Capability	Business knowledge	N1	Whether the staff has a wealth of job management knowledge to understand the	
	-		work processes and business, master job content and have the ability of	
			independent processing services, can satisfactorily deal with business issues	
	Innovation capability	N2	Whether professional knowledge and the ability originally and independently to	
			solve problems.	
	Ability to execute	N3	Whether successfully work toward the goal	
	Communication skills	N4	Whether actively communicate with colleagues, whether there is clear and	
			concise, methodical skills as well as quickly and efficiently to contact with the	
			relevant departments and personnel to solve the problem of coordinating capacity.	
Diligence	Attendance	Q1	Daily attendance and record of employees' late arrive, early leave, personal leave	
	¥ •.• .•		or sick leave, absenteeism, not lazy and not burnout.	
	Initiative	Q2	One can take the initiative to improve the working methods without direction or	
	XX 1 1.4 .	02	order of superior.	
	Work completion rate	Q3	Whether one complete job content evaluated according to the percentage of	
	Dillionard	04	completion of work.	
	Diligence and professionalism	Q4	Whether one has consolidate the professional ideology, and has a strong sense of professionalism, a strong awareness of enterprising, selfless dedication, diligent	
	professionalism		working attitude.	
Performance	Work results	J1	Whether tasks are completed on time in accordance with company policy.	
i citormance	Number of tasks	J1 J2	The number of tasks completed on time in accordance with company poncy.	
	Quality of tasks	J2 J3	Whether high quality completion of tasks in accordance with company policy	
	Operating cost control	J4	Control operating cost in reasonable range plan.	
	operating cost control	3-1	contor operating cost in reasonable range plan.	

Table 1: Administrative personnel performance evaluation index in the Table 1 First level

innovation whether professional knowledge and the ability originally and independently to solve problems, the ability to execute whether successfully work toward the goal, communication skills whether actively communicate with colleagues, whether there is clear and concise, methodical skills as well as quickly and efficiently to contact with the relevant departments and personnel to solve the problem of coordinating capacity.

- Diligence: This mainly refers to the degree of the dedication of the administrative staff which focuses on evaluation of the administrative staffs' attendance-daily attendance and record of employees' late arrive, early leave, personal leave or sick leave, absenteeism, not lazy and not burnout, initiative-without direction or order of superior one can take the initiative to improve the working methods, work completion rate-whether one complete job content evaluated according to the percentage of completion of work, diligence and professionalism-whether one has consolidate the professional ideology and has a strong sense of professionalism. а strong awareness of enterprising, selfless dedication, diligent working attitude.
- **Results:** Mainly it refers to the efficiency and performance of the staffs. The evaluation focuses on the number of staffs-whether tasks are completed on time in accordance with company policy, the quality of work-whether in accordance with company policy tasks are completed in high-quality, the effect of work that award-winning of the work and whether the work has been completed to achieve the aim set, cost control-the ability to

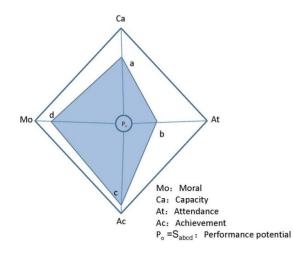


Fig. 1: Analysis diagram of the administrative staffs' performance evaluation model in SME

control operating cost in reasonable range plan (Table 1).

Following are the Fig. 1:

Assessment standards setting:

- Two types of standard should be considered when performance standards are set:
- **Basic standards:** Basic standards mean the level an assessment is expected to reach and it can be achieve through the staffs' efforts. Moreover, for certain jobs, the basic standards can be listed.
- **Standard of excellence:** The standard of excellence is the performance level that there are no requirements and expectations, but one can achieve. The excellence level is not everyone can

Table 2: Award-winning	corresponding	performance point lis	st

	Corresponding performance points		
Award-winning level (or ranking)	Awards outside the enterprise	Enterprise award	
First prize or rank first or second	8	4	
Sencond prize or rank third or forth	6	3	
third prize or rank fifth or sixth	4	2	
Other- rank lower that seventh or eight	2	1	

reach, also unlike the basic standards can be listed. Its role is to be the job title role models which representatives of organizations that encourage the behavior.

Grade score standard setting: Qualitative 0 evaluation indexes are set by excellent, good, medium and poor four performance evaluation standard grade. Be assessed by different evaluators from different perspectives. Then determine the levels of the corresponding score based on "excellent = 90 points, good = 80 = 70, SD = 60points criteria. In the process of evaluation to ensure that the evaluation is fair, open and impartial. normal distribution law principles must be adhere with to limit excellent administrative officer that the ratio cannot exceed 20% of the total number of evaluation, "poor" administrative officer ratio must be controlled within 10% of the total number of performance evaluation and the ratio of "good" should be controlled within 70% of the total number of performance evaluation. Otherwise, the assessment can be regarded as unqualified and should be re-conducted evaluation.

• The selection criteria of evaluator members:

- **Leaders:** leaders directly in charge of administrative staffs and heads of related business department
- **Colleagues:** other employees of the department and other business related departments' staff
- Choose typical assessment representatives from various departments of the enterprise service object: 4-fold of the number of the evaluation sub-category.
- Setting Standard of work results
- **Awards:** Various awards administrative staffs' received in appraisal year are some performance points can be accumulated in effect performance value. Points set corresponding to various awards of the performance are listed on the basis of the following Table 2.
- Effectiveness of the work: The formulation or implementation of the work (programs, plans or reports, etc.) in the appraisal year are some performance points accumulated in the effect of performance values of responsible administrative staffs in which the effectiveness of the work to set corresponding performance points should be calculated as following: Very good is 6, good is 4, generally is 2. If the work have not produced any

benefits yet, enterprise's point is 2 and departments' point is 1.

Choosing assessment methods:

Oualitative indicators of the evaluation: With reference to the principles and requirements of the key event evaluation method and the 360 performance evaluation method, different evaluators from their own prospect assessed the assess object. Thus, the evaluation results reflect the behavioral characteristics and performance of the administrative staffs in different scenarios, different aspects which consolidated to have a more comprehensive and objective evaluation of the administrative staffs. Assesse are divided into four categories: leaders' evaluation, colleagues' evaluation, service objects' evaluation and selfevaluation (Peng, 2004; Qiao, 2008). Leaders directly in charge of the administrative personnel and other heads of the related business departments can first evaluate the performance level of the administrative staff according to the administrative staff personal annual performance. Then the performance level can be converted to the corresponding fraction values from which the administrative staff annual leading evaluate performance scores are derived. Other employees of the department and other business related degree sector employees-first assessed administrative staff performance level based on the annual performance of administrative staff personal. Then the performance level can be converted into the corresponding fraction values from which the administrative staff annual colleague's evaluation performance scores are derived. First, evaluation objects complete personal summary of the work. Then, select typical representative four times the number of evaluators from various departments of the enterprise. The evaluation last convened evaluation on behalf of the forum and to consider individual summary of material approved performance level, the performance level converted into the corresponding score summary from which other personal annual job performance evaluation scores are drawn. First, assess the performance level according to own annual performance. Then the performance level can be converted into the corresponding score from which the annual work

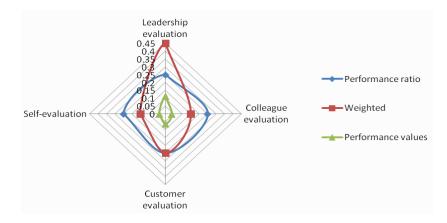


Fig. 2: Content and weight qualitative indicators of performance evaluation

of the administrative staff department performance evaluation of the self-evaluation value is derived. All this can be shown in Fig. 2

- Quantitative indicators of appraisal: Classify and aggregate corresponding administrative staffs' quantitative indicators values
- The establishment of the evaluation model: According to the principles of benchmarking requirements, we can build a performance appraisal data model as follows combined with the characteristics of enterprise management:

$$E = \sum_{i=1}^{n} e_i$$

where,

E = The annual sum of the performance evaluation e_i = The sum of the performance point

• Basic performance calculation model:

$$e_b = \sum_{i=1}^n \operatorname{Rank} (X_i, \{X_i, \dots, X_n\}, Z)$$

where, e is the sub-annual performance evaluation point, Rank is the EXCLE sort function, X_i is enterprise administrative staff's individual performance point. $\{X_{i}..., X_{n}\}$ is a performance evaluation point collection of entire administrative staff Involved; Z is the performance sort which is descending. Specific procedures: Rank function returns specified value rank of the field of the result set partition-collection performance point of the entire administrative staff. The rank is related to the line before the (descending order value) plus one. Corresponding to descending the performance of corporate executives, performance point is given, such as six people who all have performance value participate in the performance evaluation and who score highest performance points compared with the corresponding 6, the minimum is 1 as Table 3.

Table 3: Descending the performance of corporate executives	Table 3: Descen	ding the per	formance of	corporate execut	ives
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Table 5. Descending the performance of corporate executives					
	Performance		Basic		
Evaluation	appraisal	Efficiency	performance		
subjects	value	Ranking	point		
Worker 1	60	4	4		
Worker 2	80	5	5		
Worker 3	50	3	3		
Worker 4	10	1	1		
Worker 5	30	2	2		

Table 4: Excellent performance calculation model					
	Performanc	Excellent		Excellent	
Assessme	e appraisal	performan	Performan	performance	
nt object	value	ce value	ce ranking	rate	
Worker 1	60	14	2	2	
Worker 2	80	34	3	3	
Worker 3	50	4	1	1	
Worker 4	10			0	
Worker 5	30			0	

• Excellent performance calculation model:

$$e_e = \sum_{i=1}^n \operatorname{Rank}(Y_i, \{Y_i, \dots, Y_n\}, Z)$$

where, $Y_i = X_i - Average$ $(e_{bi}:e_{bn}), Y_n = X_n - Average$ $(e_{bi}:e_{bn})$, Average is the EXCLE arithmetic mean of function. Y_i Is the excellent performance that administrative staff performance value minus the value. $\{Y_i \dots Y_n\}$ is an excellent performance evaluation point collection of entire administrative staff Involved; Z is the performance sort which is descending. The specific procedure is the same as basic performance value calculation process shown in Table 4. Specific to say is:

$$E = e_i(M) + e_i(C) + e_i(D) + e_i(P)$$

where,

$$(1) e_i(M) = e_b(M) + e_e(M) \circ (2) e_i(C) = e_b(C) + e_e(C) \circ$$

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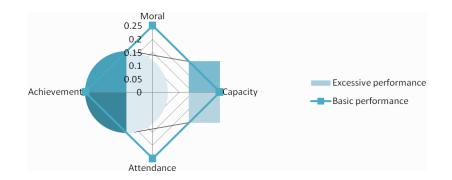


Fig. 3: The SME administrative staff performance evaluation data model proportion

The proportion of the modeling is shown in Fig. 3.

ALGORITHM EXPERIMENT

Qualitative indicators of appraisal calculation: First, assess the performance level of the administrative staff from four perspectives: leadership, colleagues, clients and self-evaluation. Then draw all levels of administrative personnel performance scores and then get the average value each grade. Thus, administrative staff's performance points are got, respectively.

Basic performance:

- The leader's performance evaluates point: Put the leadership evaluation summary performance score value in descending order. Then the corresponding ranking is the performance leader evaluation points of the administrative staff in the year
- **Colleagues performance evaluates point:** Put the departmental staff performance evaluation score values in descending order, Then the corresponding ranking is the point of evaluating performance of the administrative staff of the year from colleagues
- Service objects performance evaluates point: Put administrative staff performance evaluate scores of the annual service objectin descending order. Then corresponding ranking is the point of evaluating performance of the administrative staff of the year from service objects
- Self-evaluation of performance points: Put performance evaluation of the self-evaluation score in descending order. Then corresponding ranking is the administrative staff annual self-evaluation of performance points
- Add the aforementioned four performance point, namely the basic performance of the executives "virtue" and "sense of responsibility"

Excellent performance: Minus administrative staff's annual performance point to the department's annual average basic performance point. Remove negative numbers; get the points in descending order. Corresponding ranking is the year of the administrative staff's excellent performance in "virtue" and "sense of responsibility".

Virtue" and "sense of responsibility "performance: The aforementioned basic performance and performance excellence sum is the performance of the administrative staff's "virtue" and "sense of responsibility "performance. Qualitative evaluation in performance evaluation indicators of administrative staff, such as service, obedience, team awareness virtue, business knowledge, innovation ability, the ability to execute, communication skills (capacity), initiative, diligence and professionalism (diligence) can be done in accordance with this Act.

Evaluation of quantitative indicators calculated:

Attendance basic performance point: Based on the unit attendance record, aggregate as the number of attendance. Put the aggregation in descending order that the corresponding ranking is attendance basic performance point of administrative staff of the year.

The attendance excellent performance point: Minus the sum of the administrative staff attendance basic performance point to the entire administrative staff year average attendance performance point. Remove negative numbers, the put the points in descending order. The corresponding ranking attendance excellent performance point of administrative staff of the year.

Attendance performance point: Add the aforementioned two-part performance points which is administrative staff attendance performance points of the year. Indicators in the performance evaluation of corporate executives, such as "indicators of the quantitative evaluation of attendance, work completion rate in diligence, work effect, the number of tasks, task

quality, cost control in performance can be assessed in accordance with this Act.

Balance to determine the rank of annual performance evaluation of administrative staff: Sort above four areas-virtue, capability, diligence and achievements-performance points and rank them that can be derived the administrative staff performance ranking within departments in the year. If two staff has the same performance points, results of Deneng Peregrine to it can determine the annual performance evaluation of the administrative staff ranking according to the weights order-achievements, virtue, capability and diligence. Economic globalization has brought opportunities to our country's unprecedented enterprises, but also brought huge challenges. To cope with the challenges Enterprises need to continuously upgrade its own strength. Corporate administrative staff is an integral part of the corporate management team groups which is an auxiliary and coordination role for the production, management. Its quality and effectiveness is the key of enterprise management level and efficiency. The core purpose of the performance appraisal is a comprehensive study of the ability and level of staff. Effective performance appraisal system can improve the performance of their work, develop the potential of employees, employee career development and enhance their competitive advantage, which to some extent determines the competitiveness of enterprises. The development and implementation of the performance appraisal system for corporate executives related to the future destiny of the enterprise. Enterprises must integrate theory with practice and constantly improve the practice of administrative personnel evaluation mechanism so as to improve the overall level of work, establish positive values, creating more profits for the enterprise, improve operational efficiency and build competitive advantage. Therefore, the establishment and improvement of scientific performance evaluation mechanism specific for administrative staff can help comprehensive, accurate and objective evaluate their work performance, which stimulate enterprise administrative staff's enthusiasm, improve service quality and has an active role in promoting the improvement of enterprise management level. This will help administrative staff complete administrative objectives and work plans in highquality, achieve the common development of enterprises and individuals.

CONCLUSION

According to the characteristics of the nature of the administrative staffs' work, the study has designed a data model for performance evaluation:

$$E = \sum_{i=1}^{n} e_i$$

where performance point calculation model is:

$$e = \sum_{i=1}^{n} \operatorname{Rank} \left(X_{i}, \{X_{1}, \dots, X_{n}\}, Z \right)$$

and be calculated by basic performance (e_b) and excellent performance (e_e) . Then get (e_b+e_e) that can be the result of administrative staff's annul performance evaluation. comprehensively quantitative evaluate personnel work performance by using the combination of the application of the diversification of assessment methods, such as 360-degree assessment method (assessment of virtue), method of management by objects (assessment of capacity), behavioral observation scale method (assessment of diligence), key performance indicators act (assessment of results). In the appraisal process, appraisal staff only required to fill in the personal performance information which can also be collected directly by the assessment office before assessment. The data will by input to EXCEL spreadsheet by the assessment staff. This can come up with the sort of performance results which to ensure the result is fair and impartial. The results also give full consideration to the effect of teamwork. Through the evaluation, employees understand that in order to get higher scores help improve colleagues is also an important factor. Of course, due to the limited capacity, the complete system performance modeling work has not been completed. Till now, Simply a EXCEL RANK function helps. Goal setting qualitative assessment of the corporate executives and the use of scientific assessment methods still have shortcomings. Overall, performance accounting is slightly cumbersome that it should be further streamlined and refined. Also, diligence assessment still could be improved.

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REFERENCES

- Avila, P., L. Costa, J. Bastos, P. Lopes and A. Pires, 2010. Analysis of the domain of applicability of an algorithm for a resources system selection problem for Distributed/Agile/Virtual Enterprises integration. Proceeding of the 5th Iberian Conference on Information Systems and Technologies (CISTI), pp: 1-5.
- Boyle, M., 2001. Performance reviews: Perilous curves ahead. Fortune, 5(28): 187-188.
- Fernandez-Araoz, C., 1999. Hiring without firing. Harvard Bus. Rev., 77(4): 109-120.
- Grimsley, G.H. and F. Jarrett, 1973. The relation of managerial achievement to test measures obtained in the employment situation: Methodology and results. Pers. Psychol., 26(1): 31-48.

- Jones, D., 2001. More firms cut workers ranked at bottomtomake way for talent.USA Today, 5(30): 1-5.
- Korman, A.K., 1986. The prediction of managerial performance: A review. Pers. Psychol., 21(3): 295-322.
- Lu, Y. and F. Sun, 2007. Thinking of the performance evaluation problems of enterprise executive. J. Hebei Univ., Econ. Bus., 4(1): 91-92.
- Peng, J.K., 2004. Company management personnel performance evaluation study. Central South University, Changsha, pp: 12-14.
- Qiao, D., 2008. Construction method of SME staff performance appraisal system. Yanshan University, Qinhuangdao Island, pp: 23-25.
- Xu, S., 2011. On the problems and tactics of technology innovation of small and medium enterprises in China. Proceeding of the International Conference on Management and Service Science (MASS), pp: 1-4.