

A Study of Deming Quality Cycle Model Affecting Employee Performance Management[†]

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Abstract

In 2020, affected by the severe economic situation at home and abroad, coupled with the sudden outbreak of the novel coronavirus, the challenges and risks faced by China's banking industry will increase sharply, and the risks faced by the banking industry will become increasingly large, which puts higher requirements on the risk identification ability, management level and control technology of commercial banks. This study uses Deming quality cycle model as research method to study how to optimize the employee performance management process of Z Bank. The sample of this paper is 303 persons randomly selected from 14.30 middle, senior and junior employees of the management of Z Bank. The research tool was questionnaire, and the content validity and reliability of the questionnaire were 0.78 and 0.85, respectively. Statistics used for data analysis include percentages, averages, and standard deviations. Follow-up analysis was conducted according to the average of statistical results.

The results show that: In the performance planning survey of Z Bank, the comprehensive scores of Z bank employees in the performance stages of Plan, Do, Check, Action and overall performance process are 3.21, 2.65, 2.55, 2.48 and 2.42, respectively. The grades are Middle, Middle, Middle, Low, Low. The results show that there are problems that need to be optimized in every stage, and the performance of planning stage is better than other stages. It can be seen that the current Z bank needs to optimize the existing performance evaluation system, focusing on the 3 stages of Action, Check and Do. The overall fitting R-square value of the model is 0.664, indicating that the overall fitting of the model is good. Each variable is significant at least at the 5 % level (the *p*-value of all 4 variables is less than 5 %, that is, less than 0.05).

Keywords: Performance management, Deming quality cycle model, Multiple regression model

Introduction

Research background

In 2020, affected by the severe economic situation at home and abroad, coupled with the sudden outbreak of novel corona virus, the challenges and risks faced by China's banking industry will increase sharply. This year, the global economy has not fully recovered, and there are still many uncertainties about the evolution of the epidemic. In addition, with the bankruptcy and bankruptcy of 2 consecutive banks in the United States in March, the risks facing the banking industry are increasing, and higher requirements are put forward for the risk identification ability, management level and control technology of commercial banks. In this competition, how to seize the opportunity to meet the challenge, human resources is the fundamental, reasonable and effective employee performance management process is the core means to achieve human efficiency. Improving the performance management process can not only help banks to attract and retain talents, but also stimulate the potential of employees, create a good working atmosphere, and significantly improve the work performance and business ability of employees, so as to improve the market competitiveness of banks. (Wang, 2003).

China's financial markets have changed dramatically in recent years. With the improvement of the economic level, the customer needs have become more diversified. Especially in the development of global

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economic integration, the development of banks is facing great challenges. In addition, a series of regulatory policies for the prevention and rectification of financial risks in the banking industry are also proposed. The overall tone of compliance supervision will continue for long time, and the supervision will become stronger and stronger (Chen, 2018).

With the normalization of interest rate liberalization, the normalization of strengthened supervision of the banking industry and the deepening of the structural reform, the banking industry is faced with severe challenges such as the impact of Internet finance, the gradual decrease of profits, the gradual increase of the proportion of non-performing loans, and the simultaneous rise of market competition pressure (Hu, 2019). These external pressures require banks to improve their management to meet difficulties and challenges. In order to achieve effective operational objectives and ensure the overall sustainable construction, it is necessary to standardize the performance management process of bank employees, strengthen the strength of the bank itself, and ensure that the diversified needs of customers and the market are met.

Related research

1) Performance Plan (P)

If there is no goal as the basis, the performance management system will have no support, and it cannot play its comprehensive utility. The purpose of implementing performance management is to provide support for the realization of the goals and help them decompose and implement the goals.

Goal is the starting point and the foothold of performance management practice, first goals, and the target to the annual, formation, annual business plan, and then through the performance management target decomposition tool (SMART principle), the decomposition to the department, form department performance goals, and then to the specific staff, form the key performance indicators (KPI) (Zhao & Liang, 2003) Therefore, the first standard to investigate whether the performance management system of an enterprise is effective is to see whether the goal setting of the enterprise is clear and clear, whether it has been well known by the management of the enterprise, and whether it has been decomposed.

2) Performance Do (D)

After the performance target (P) is set, the evaluator began to work as planned. During the whole performance period, the manager should guide and supervise the work of the evaluated person, constantly guide and give feedback to the employees, regularly discuss the existing and possible problems, jointly solve the problems, remove obstacles, achieve common progress and common improvement, and achieve the purpose of high performance. Performance counseling is also conducive to establishing a good working relationship between managers and employees (Deval & Beijing Edison Culture Exchange, 2003).

3) Performance Check (C)

Performance Check is a formal employee evaluation system. At the end of the performance period, the supervisor evaluates the completion of the subordinate's performance objectives according to the plan made in advance. Performance check is the basis of the performance period agree on the performance of the key performance indicators, at the same time, in the process of performance implementation and management, collected can explain the evaluated performance data and facts, can be used as judge whether the evaluated meet the key performance indicators of evidence (Zhu, 2008). The results of performance evaluation can directly affect the vital interests of many employees, such as salary adjustment, bonus payment and job promotion.

4) Performance Action (A)

Usually performance evaluation and employee rewards and punishments are closely linked, if the evaluation is over, enterprises did not honor the original promise, no incentive for good employees, so the enthusiasm of good employees will be hit, similarly, if not after the evaluation of bad employee punishment, then will also cause bad influence on the company's management environment. Therefore, after the end of the performance evaluation, the enterprise must apply the results of the performance evaluation in

accordance with the provisions of the performance system, so that the performance system develops in the direction of a virtuous cycle. (Jin & Liu, 2009).

5) Management by Objectives of Drucker

Peter Drucker first in the book management practice put forward an epoch-making concept - target management, because management has become a social science, manager need according to the overall target work, listed target unit expected performance, he and his unit cooperate with other departments, should contribute. The management by objectives method emphasizes the need for teamwork in the process of management by objectives, and the ultimate realization of the goals is also the result of the team. In the process of achieving their goals, employees can act as target executors to achieve self-restraint, which is conducive to improving their working ability and professional level. The process of goal setting also needs a communication process. According to the theory of management by objectives, employees can identify with the goals rather than passively accept the task, and even participate in the target process, so that employees can consciously design the target path and target management method, and can play an important role in completing the goals in the bank plan.

Key performance indicators are often used in target setting, which are key indicators to measure the responsibilities and performance of various departments and employees of Bank Z. It is the foundation of enterprise performance management, first coming from the "280 principle" Pareto proposed by Italian economists. That is to say, in the process of achieving strategic goals, 80 % of the target tasks achieve 20 % of the key behaviors, as long as 20 % of the key behaviors are equal to more than half of the success. The primary role of key performance indicators is the decomposition. In order to achieve strategic goals, bank managers adopt systematic methods to determine performance appraisal indicators, use kpi to decompose the overall strategic objectives of the bank into each department and employee, and finally use the performance appraisal results of each department or individual to measure the completion of overall performance. At present, commercial banks generally adopt key performance indicators in their performance management, which can make a comprehensive and objective evaluation of their business performance and help banks to improve their management level. The key indicators should follow the SMART principle, and the selected indicators should meet the 5 criteria of "specific, measurable, achievable, true and sometimes limited". KPI is from the formation of the bank's actual operation status and performance measurement index system. By making the performance plan and improving the participation of employees, the performance management work can be made more scientific, reasonable and perfect, so as to achieve the strategic development goals of the enterprise. Therefore, KPPI is not only for banks to motivate employees, but also for banks to achieve business development goals.

Research objectives

- 1) To study the level of employee's opinions on the Deming quality cycle model.
- 2) To study of the Deming quality cycle model affecting employee performance management.

Research hypothesis

The study makes the following assumptions for the 4 phases (PDCA) of the employee performance management process:

- 1) Performance Plan has an important impact on the employee performance management process.
- 2) Performance Do has an important impact on the employee performance management process.
- 3) Performance Check has an important impact on the employee performance management process.
- 4) Performance Action has an important impact on the employee performance management process.
- 5) This study is limited to the overall situation of the Bank Z staff performance management process in the previous year, and this study will be limited to the attitudes and personal views expressed in the scientifically constructed questionnaire generated from equal proportional stratified sampling of all Bank Z staff.

Methodology

This paper designed a corresponding questionnaire survey for 303 employees of Z Bank, and conducted a questionnaire survey on employees of different genders, ages, educational backgrounds and levels. Through in-depth analysis of employees' satisfaction with the company's performance management process, the existing problems in Z Bank's employee performance management process are dug out, providing a basis for the design of optimization programs.

Part 1: General information of the interviewees.

Part 2: The process state of employee performance management.

Part 3: Suggestions.

The above questionnaire survey will be sent to 303 employees through the performance management system of Z Bank to ensure that only employees of Z Bank receive and feedback, and only employees of Z Bank can fill in the questionnaire. If employees fail to complete the questionnaire, they will trigger email reminders every day. After completing the questionnaire, employees will give anonymous feedback through the system, set up anonymous Settings and inform the system. Employees will be assured to fill in the questionnaire, determine the survey object, design the questionnaire delivery and recovery process operation, can ensure the reliability and effectiveness of the questionnaire.

The criteria for interpreting the meaning of the mean from the data analysis (Siljaru, 2017) are as follows:

Mean 4.51 - 5.00 means the highest opinion level.

Mean 3.51 - 4.50 means a high level of opinions.

Mean 2.51 - 3.50 means moderate opinion level.

Mean 1.51 - 2.50 means low level of opinion.

Mean 1.00 - 1.50 means the lowest level of opinion.

Validity and Reliability of Research Instruments

Validity

The content validation was carried out by 3 experts, Index of the Item Objective Congruence (IOC) was computed for the survey questionnaire. Index of Item Objective Congruence (IOC) points of congruence were rated. IOC scores reached the high level of value 0.95 and The IOC points in calculations provided into 3 scales of rating for consistency and congruencies of the items. All experts had to choose only one answer as the given mark from these 3 alternatives of choices.

+1: If experts definite feeling that an item is a measure of an objective.

0: If experts undecided about whether the item is a measure of an objective.

-1: If experts definite feeling that an item is not a measure of an objective.

Total points for each item must have the consistency value equal to or above 0.50.

The formula for calculating the $IOC = \Sigma R/N$

where;

IOC = Item Objective Congruence

R = Sum of the scores of individual experts

ΣR Total scores from each experts

N = Number of experts

It was also examined by 3 experts for the IOC analysis which ranges from +1 to -1. The total marks of each item from all experts produced out different outcomes. For example, if the total marks were equal to two (2). It is possible that by 2 of them select one point (2x1), and 1 of them select the zero points (1x0). Therefore, the outcome was: $2 + 0 = 2$ points. Moreover, then, such 2 points had to be divided by total experts which were 3, then the outcome of such item will be $(2/3) = 0.67$. However, the idea to examine the IOC regarding consistency as validity must not lower than 0.50. The validity score of the questionnaire was 0.91.

Reliability

After IOC approval was obtained the researcher conducted sample of 30 participants from 1 group is similar to the sample. The researcher uses the Cronbach's alpha formula to reliability of the 30 questionnaires. (The rating scale of Cronbach's alpha is showed in **Table 1**).

Cronbach's alpha (α) formula: $\alpha = Nc / (v + (N-1)c)$

where;

N = the number of items

c = average covariance between item-pairs

v = average variance

Table 1 Rating scale.

No	Coefficient of Cronbach's alpha	Reliability level
1	More than 0.90	Excellent
2	0.80 - 0.89	Good
3	0.70 - 0.79	Acceptable
4	0.6 - 0.69	Questionable
5	0.5 - 0.59	Poor
6	Less than 0.59	Unacceptable

Source: Monica and David (2018).

The questionnaire items with Cronbach's alpha 0.70 or greater than 0.70 were used as 0.70 is acceptable according to Cronbach's alpha rating scale. The Reliability score of the questionnaire was 0.84 this result means that the questionnaire is reasonable.

Results and discussion

Research results

1) Statistics of planning stage

Table 2 Descriptive statistics for overview of performance management.

Overview of performance management issues	Means	Standard deviation	Interpret	Rankings
Plan	3.21	0.09	Middle	1
Do	2.65	0.07	Middle	2
Check	2.55	0.09	Middle	3
Action	2.48	0.10	low	4
Employee performance management	2.42	0.06	low	5
Total	2.57	0.09	Middle	

Descriptive statistics for the performance management overview are shown in **Table 2**. In the overall statistical results, the scores of plan, do, check and action of the performance evaluation system were 3.21, 2.65, 2.55, 2.48, respectively, while the comprehensive evaluation score of employee performance management was the lowest, 2.42. From this result, an intuitive impression can be obtained that in the current performance evaluation system of Bank Z, the initial plan is relatively well done, but there are obvious problems in the subsequent implementation and application of the results, which makes the final comprehensive evaluation score be pulled to the lowest. The cause of this problem may be attributed to the management, that is to say, the managers did not fulfill the options listed in the plan during the implementation of performance evaluation, which led to great dissatisfaction of employees with the subsequent stages of the entire performance evaluation system.

2) Statistics of planning stage

Table 3 Results in performance management planning stage.

Variables	Means	Standard deviation	Interpret	Rankings
1. Are you clear about the company's strategy?	3.15	0.07	Middle	3
2. You believe that the current employee performance plan is in line with the company's development strategy	3.51	0.06	high	1
3 You can refer to the employee Performance plan	3.26	0.09	Middle	2
4. You understand the performance plan for your position.	2.98	0.07	Middle	5
5. Your supervisor will communicate their performance plan to you.	3.12	0.08	Middle	4
Total	3.21	0.07	Medium	

As can be seen from **Table 3**, in the survey of the performance plan of Bank Z, it was found that the overall rating of the plan by employees for performance was 3.21, which was interpreted as medium. Specifically, on the question of whether employees know the company's development strategy, the average value is 3.15, which is interpreted as medium. On the question of whether the employee performance plan is consistent with the company's development strategy, the average value is 3.51, which is interpreted as high. On the question of whether employees will refer to the company's performance plan, the average is 3.26, which is interpreted as medium. On the question of whether employees are aware of the company's performance plan, the average is 2.98, which is interpreted as medium. On the question of whether employees' superiors communicate with them about performance plans, the average is 3.12, which is interpreted as medium.

3) Statistics of doing stage

Table 4 Results in performance management Doing stage.

Variables	Means	Standard deviation	Interpret	Rankings
6.Proactively communicate with superiors during performance execution.	3.61	0.08	High	1
7. Does your superior take the initiative to communicate with you regularly during performance execution.	2.16	0.09	Low	4
8. During performance implementation, whether your superiors will provide you with necessary assistance in a timely manner to help you	2.35	0.11	Low	3

Variables	Means	Standard deviation	Interpret	Rankings
effectively complete the performance plan.				
9. During performance execution, superiors can give you personalized guidance to help you improve your personal ability.	2.49	0.05	Low	2
Total	2.65	0.07	Middle	

As can be seen from **Table 4**, in the survey on the performance execution of Bank Z, it was found that the overall rating of employees on the execution of performance was 2.65, which was interpreted as medium. Specifically, on the question of whether employees will take the initiative to communicate with superiors, the average value is 3.61, which is interpreted as high. On the question of whether employees will take the initiative to communicate with superiors regularly, the average value is 2.16, which is low. On the question of whether superiors will provide necessary help to you in a timely manner, the average is 2.35, which is low. The average was 2.49, which was low, on the question of whether your supervisor would provide personalized guidance.

4) Statistics of Checking stage

Table 5 Results in performance management Check stage.

Variables	Means	Standard deviation	Interpret	Rankings
10. You understand the company's performance measurement criteria	3.84	0.07	High	1
11. You think the company's performance review score is fair and equitable	2.45	0.06	low	3
12. Your company's performance review is very good	2.12	0.11	low	4
13. Your company uses two-dimensional assessment	1.48	0.06	Lowest	5
14. After the assessment, do you know the final assessment result	2.86	0.07	low	2
Total	2.55	0.08	Middle	

As can be seen from **Table 5**, in the survey of the inspection of Z Bank's performance, it was found that the overall rating of the inspection of performance by employees was 2.55, which is interpreted as medium, but this result is very close to the low rating grade. Specifically, on the question of whether employees are aware of the company's performance evaluation standards, the average is 3.84, which is interpreted as high. On the question of whether the company's performance appraisal score is fair, the average is 2.45, which is interpreted as low. The average was 2.12, which was interpreted as low, on the question about whether the company's performance review was a good one. The average was 1.48, which was the lowest interpret, for questions that used a two-dimensional assessment of the company. On the question of whether employees knew the final results, the mean was 2.86, which had the lowest interpret.

5) Statistics of Action stage

Table 6 Results in the Action phase of performance management.

Variables	Means	Standard deviation	Interpret	Rankings
16. You believe that the company's performance evaluation results have been comprehensively applied	2.56	0.12	Middle	3
17. You think performance results are a fair use in terms of bonus incentives.	2.43	0.07	Low	4
18. You think performance results are justified in terms of career advancement.	2.86	0.09	High	1
19 You are satisfied with the company's current application of performance appraisal results	2.63	0.11	Middle	2
20. You are satisfied with your company's current performance management process.	2.13	0.03	Low	5
Total	2.48	0.08	Middle	

As can be seen from **Table 6**, in the survey of the application of Z Bank performance, it was found that the overall rating of the application of performance by employees was 2.48, which is low, but this result is very close to the low rating grade. Specifically, in the case that the performance evaluation results of the company are comprehensively applied, the average value is 2.56, which is medium in interpret. On the question of whether performance results are reasonably applied in bonus incentive, the average value is 2.43, which is interpreted as low. In terms of whether performance results are reasonable in terms of career promotion, the average value is 3.86, which is interpreted as low. On the question of whether they are satisfied with the application of the company's current performance evaluation results, the average is 2.63, which is interpreted as medium. On the question of whether they are satisfied with the company's current performance management process, the average is 2.13, which is interpreted as low.

6) Statistics of employee Performance management

Table 7 Performance management process questionnaire results statistics.

Variables	Means	Standard deviation	Interpret	Rankings
21. You understand the performance review system in your position.	3.52	0.05	High	1
22. You think the assessment weight of employee performance management is reasonable.	2.13	0.11	Low	5
23. You are satisfied with your current performance management.	2.26	0.07	Low	4

Variables	Means	Standard deviation	Interpret	Rankings
24 You find it unnecessary to adjust your current performance review cycle.	1.12	0.06	Lowest	6
25. You believe that your current performance review results accurately reflect your work.	2.53	0.08	Middle	3
26. Please give Z Bank an overall score for its performance appraisal management system	2.97	0.10	Middle	2
Total	2.42	0.08	Low	

As can be seen from **Table 7**, in the investigation of the management process of Bank Z's performance, it was found that the overall rating of the management process of performance by employees was 2.42, which was interpreted as low. Specifically, for the question about understanding the performance appraisal system of your position, the average value is 3.52, which is interpreted as medium. On the question of whether the weight of evaluation for employee performance management is reasonable, the average is 2.13, which is interpreted as low. In terms of whether to adjust the current performance evaluation cycle, the average value was 1.12, which was the lowest interpret. On the question of whether the performance review accurately reflects your job, the mean was 2.53, which is moderate in interpret. On the overall rating of the company's current performance review management process, the mean was 2.97, which was interpreted as medium.

Table 8 Coefficient of determination of the model.

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0.815	0.664	0.647	0.082

Before further analyzing of the problems for each part, this study first conducted a simple linear regression on the impact of each part on the performance management results. A linear regression was conducted according to the scores of 303 questionnaires, and the results are shown in **Table 8**.

Table 4 shows that the 4 parts of Z Bank's performance evaluation system, including planning, execution, inspection, and communication, have a significant impact on performance management. The overall fitting R-square value of the model is 0.664, indicating that the overall fitting of the model is good. The adjusted R-square value is 0.647, which is not much different from that before adjustment, indicating that the fitting degree of the model is relatively good. Meanwhile, the overall estimated standard error of the model is 0.082, which is within the appropriate interval of the standard error of each variable. In general, the model fits the results of impact of each part of Z Bank's performance evaluation system on performance management well. These factors (variables) are significant at least at the level of 5 % (p -values of the 4 variables are all less than 5 %, that is, less than 0.05). This result verifies the research hypothesis proposed above. That is, each part has a significant impact on performance management.

Table 9 Analysis of variance table.

Model	Sum of squares	df	Mean squares	F	sig
Regression	196.36	4	77.91	415.36	0.000
Residual	67.28	297	0.953		
Total	263.54	303			

According to **Table 9**, the total F-value of the equation is 415.36, which means that the equation better fits the actual situation of employee performance management in Z bank. The total freedom is 303, of which 4 represent the 4 aspects of performance management, so the remaining freedom is 297.

Table 10 Regression results of the impact of each part of Z Bank's performance evaluation system on performance management.

Variables	Unstandardized coefficient	Standard deviation	Standardized coefficient	T-value	Sig.
Performance management plan (X1)	0.59	0.07	0.51	0.014**	0.001
Performance management execution(X2)	0.81	0.11	0.73	0.021**	0.000
Performance management check (X3)	1.31	0.09	0.95	0.011**	0.000
Performance management applications (X4)	1.16	0.08	0.91	0.022**	0.000
Constant	0.41	0.04		0.016**	0.000

According to the Table 10, the function can be described as:

$$Y = 0.41 + 0.51X_1 + 0.73X_2 + 0.95X_3 + 0.91X_4 + \epsilon$$

Among them, Y represents the employee performance of Bank Z, and X1-X4 respectively represents each aspect of employee performance management. Correspondingly, the coefficient before each variable represents the impact of that variable on employee performance. From this equation, the impact of each aspect on employee performance can be visually observed.

Table 11 Results of hypothesis testing.

Hypothesis	Sig	Results
H1: Performance Plan has an important impact on the employee performance management process.	0.538	Accept
H2: Performance Do has an important impact on the employee performance management process.	0.421	Accept
H3: Performance Check has an important impact on the employee performance management process.	0.159	Accept
H4: Performance Action has an important impact on the employee performance management process.	0.142	Accept

1) Performance Plan has an important impact on the employee performance management process, as supported by the p-value of 0.538.

2) Performance Do has an important impact on the employee performance management process, as supported by the p-value of 0.421.

3) Performance Check has an important impact on the employee performance management process., as supported by the p-value of 0.159.

4) Performance Action has an important impact on the employee performance management process, as supported by the p-value of 0.142.

From the perspective of influence coefficient, the 4 parts according to interpret from high to low are inspection, communication, execution and planning. This means that in the current performance evaluation system of Bank Z, the most important part considered by employees, and the part that has the greatest impact on the system, is the inspection part of performance communication, followed by communication, and finally the 2 parts of execution and planning.

Combined with the above segmentation of the performance evaluation system, the current performance evaluation system of Bank Z has the greatest impact on the way employees score their performance, which means that there is room for improvement in this part, because employees believe that the optimization of this part can better improve the entire performance evaluation system. Similarly, in the performance appraisal system, whether Bank Z can timely, effectively and fully realize the results of performance appraisal, such as salary changes and position promotions, after completing the performance appraisal is also a part that has a great impact. In contrast, employees believe that the planning and specific implementation of performance appraisal are relatively good, and its improvement should be placed after the other 2 parts.

Accordingly, in the last question of the questionnaire, this study asks employees to answer what part of the current performance appraisal system of Bank z needs to be improved most. **Table 12** shows the corresponding proportion of each part:

Table 12 Proportion of survey results of the parts that should be improved in the performance evaluation system of Bank Z.

Variables	Proportion (%)
Performance management plan	11.23
Performance Management	17.84
Performance Management Check	33.75
Performance management actions	37.18

As can be seen from **Table 12**, most of the employees who participated in the survey believed that the 2 parts that need to be improved in the current performance evaluation system of Bank Z are performance management inspection and communication, and the sum of the proportion is 70.93, of which performance management inspection draws 33.75 % and performance management communication draws 37.18 %. This result indicates that the current performance appraisal system of Bank Z has major problems in the aspects of appraisal (i.e. the method of performance scoring) and communication (i.e. the realization of appraisal results), while the problems in the other 2 parts are relatively small. Based on this result, this paper further analyzes the problems existing in each part of the performance appraisal system of Bank Z.

Discussion

The impact of Deming quality cycle model on employee performance management. It is found that the overall average is equal to 2.57, because the overall result is affected by the implementation stage and the inspection stage. Although the result of the planning stage is better, the overall score is still lower, indicating that the current performance of Z Bank in the 4 stages is consistent with Li's theory (Li, 2005), which means that the performance of the 4 stages is very important for employee performance. Especially in the implementation and subsequent evaluation and application stage, which is directly related to the enthusiasm of employees and future work performance. Moreover, according to Zhang (2009), research on the balance measures of employee performance, the results show that Z Bank should pay more attention to the application in the implementation stage and the performance evaluation stage, so as to ensure the effectiveness of the performance evaluation system and the fairness of the evaluation results.

When discussing the results Employee performance management process status side by side Plan, it was found that the overall average was equal to 3.21, and the result is relatively middle. This paper finds that they are consistent with the theory of (Zhao & Liang, 2003), who indicates that Bank Z invested more resources in the planning stage to obtain better design results of the evaluation system, but in the subsequent

research results, the planning stage of Bank Z did not achieve the expected results. This is a realistic supplement to the existing research, that is, how to design a better performance evaluation system that is more convenient for practical operation and supervision in phase of planning, and how to add more effective communication way to ensure the demand of employees.

When discussing the results Employee performance management process status side by side Do, it was found that the overall average was equal to 2.65, and the result is relatively low. According to the result, this paper finds that it is mutually confirmed with Andre's theory. (Deval & Beijing Edison Culture Exchange, 2003). According to Andre's theory, if superior leaders can have good communication and guidance with employees in the implementation stage, employees will get better performance evaluation results, and employees will also give better evaluation of the performance evaluation system. However, taking Z Bank as an example, judging from the scoring results, the management of Z Bank did not do well in this aspect, and the employees did not perform well in the subsequent performance appraisal results, and their evaluation of the performance appraisal system was also relatively poor, especially in the implementation stage of the performance appraisal plan, their scores significantly decreased. This indicates that Z Bank has a big problem in the implementation stage, corresponding to the management in the communication and guidance to employees there is a big shortage, need to further improve.

When discussing the results Employee performance management process status side by side Check, it was found that the overall average was equal to 2.55, and the result is relatively low. This paper finds that this is mutually confirmed with the theory of (Zhu, 2008). According to relevant research, performance appraisal is based on the key performance indicators reached during the performance period. Meanwhile, in the process of performance implementation and management, data and facts that can explain the evaluated performance are collected, which can be used as evidence to judge whether the evaluated enterprise meets the key performance indicators. The results of performance appraisal are directly related to the vital interests of many employees, such as salary adjustment, bonus payment, position promotion and so on. In the actual situation, the employees of Bank Z have a relatively low score on this aspect, which means that there are problems in the indicator design, the objective reflection of employees' work content, and the impact on employees' salary and bonus. This can also provide a detailed direction for theoretical research, that is, how to completely analyze the performance evaluation system in the actual operation process.

When discussing the results side by side Action, it was found that the overall average was equal to 2.48, and the result is relative low, performance appraisal is usually closely linked with employee rewards and punishments. If after the appraisal, the enterprise fails to honor the original commitment and does not motivate the good employees, the enthusiasm of the good employees will be hit. Similarly, if the enterprise does not punish the employees with poor evaluation after the appraisal, It will also have a bad impact on the company's management environment. In the actual scoring results, employees believe that the current performance evaluation results are difficult to be correctly applied, that is, they cannot well correspond to the rewards and punishments that employees deserve, which is not only related to the lack of fairness of the evaluation results, but also related to the lack of attention paid by the management to the evaluation results. Employees also show great dissatisfaction with this. As a result, the overall score of the performance evaluation results is low, which corresponds to the study of (Jin & Liu, 2009), that is, after the performance evaluation, the enterprise must use the results of the performance evaluation according to the provisions of the performance system, so as to better ensure the satisfaction and enthusiasm of employees, so as to stimulate better work efficiency.

When discussing the results side by side Employee performance management, it was found that the overall average was equal to 2.42, relatively low. To achieve the strategic objectives, the Bank's managers adopt a systematic approach to determine the performance appraisal indicators, decomposes the overall strategic objectives of the Bank into various departments and employees, and finally uses the performance appraisal results of various departments or individuals to measure the completion of the overall performance, which is the management process of the performance appraisal system. If this process is difficult to be effectively implemented, it will lead to dissatisfaction of employees. However, from the actual scoring results, employees obviously show great dissatisfaction with this, thinking that employees'

participation in this process is low, and the design and implementation of the appraisal system do not well reflect the real situation of employees, resulting in low scoring of the whole system. This corresponds to the study of (Li & Ding, 2020), that is, in the whole management process, the performance management must be more scientific, reasonable and perfect, and the participation of employees also needs to run through the whole assessment process, not only in the actual operation stage, but also in the design stage of the assessment system and plan, and the subsequent publicity and feedback stage of the results. The autonomy of employees must be well respected.

When the hypothesis is tested, it is found that the overall average indicates that the 4 stages have a significant impact on the performance evaluation system of Z bank. Because here are problems of communication, guidance and coordination between the management and the employees in the actual operation and implementation of the In other stages, different problems exist in different stages and have different impacts on the overall results, which is consistent with the study of (Zhao, 2019), that is, in different stages, different problems will appear in the performance evaluation system of enterprises according to their own characteristics and the preferences of the management who set the assessment. This means that it is necessary to further combine the development goals of the enterprise and the comprehensive perception of employees to form a good feedback to the manager, so as to form a circular correction of the evaluation system. Moreover, this is also consistent with the research of (Xu, 2019). Especially for banks, it is more necessary to consider the feelings of front-line employees and carefully review the performance evaluation system at different stages to ensure the fairness of performance evaluation and smooth feedback channels.

Conclusions

Taking the behavior of Bank Z as an example, this paper analyzes the influence of the 4 parts of the performance evaluation system of Bank Z on the overall performance management and the existing problems through questionnaire interview and linear regression, and puts forward the optimization scheme of performance management. From the perspective of the overall score results and influence coefficients, these 4 parts are respectively inspection, communication, execution and planning according to interpret from high to low. This means that in the current performance evaluation system of Bank Z, the part that employees think is the most important and has the greatest impact on the system is the inspection part of performance communication, followed by the communication part, and finally the execution and planning part in order.

In the investigation of Z Bank's performance planning, the overall score of employees on the performance plan is 3.21, among which the highest score is whether the employee's performance plan is consistent with the company's development strategy, and the lowest score is whether the employee's superior communicates with the employee on the performance plan. This indicates that in the process of making the performance plan, Z Bank paid good attention to the match between performance evaluation and corporate strategy, but it did not consider enough whether managers would communicate with employees about the performance plan. But overall, the score was good.

In the investigation of Z Bank's performance doing, the overall score of the employees on the performance execution is 2.65. The question with the highest score is whether the employees take the initiative to communicate with their superiors, and the question with the lowest score is whether the employees take the initiative to communicate with their superiors regularly. According to this result, in the implementation process, problems mainly occur in the communication between managers and employees, that is, managers do not take the initiative to communicate with employees on performance issues and provide help, and employees do not communicate regularly, which also indicates that when performance evaluation is implemented, feedback channels are not set and employees do not have timely communication with superiors.

In the investigation of Z Bank's performance checking, the overall score of employees' performance appraisal was 2.55, among which, the question with the highest score was "whether employees understand the company's performance appraisal standards", while the question with the lowest score was "the company conducts binary performance appraisal". This result indicates that although employees have a

clear understanding of the company's performance evaluation criteria, they are dissatisfied with the evaluation methods and criteria, especially with the single evaluation criteria. This aspect of the problem means that in the formulation of the performance plan, Z Bank did not properly formulate the performance evaluation standards according to the actual situation, resulting in the rigid and inflexible performance evaluation methods.

In the investigation of Z Bank's performance action, the overall score of employees on the application of performance results is 2.48, which is a low score. The question with the highest score was "whether the performance evaluation results have been applied reasonably from a career advancement perspective", while the question with the lowest score was "whether the company is satisfied with its current performance management process". From the perspective of the results, the main problem in this part is that they are not satisfied with the overall result application process. Although the results can well affect the promotion of employees, there may be shortcomings in other aspects (such as salary and bonus), which means that the evaluation results should be further combined with the work benefits of employees, so as to give employees better work incentives.

In the investigation of the overall performance process of Z Bank, it was found that the overall score of employees on the performance management process was 2.42, which was interpreted as low. The most obvious question was whether the current performance evaluation cycle is reasonable, with an average score of 1.12. This shows that there are still major problems in the current performance evaluation cycle of Z Bank. In combination with the existing system, the current performance evaluation cycle of Z Bank is too long, and it is difficult to give a fair evaluation of the overall work of employees in a timely and effective manner.

In general, in the specific score analysis of various aspects, the current performance evaluation system of Bank Z has the highest score in the planning stage, and the evaluation result of employees is also relatively good. However, from the implementation stage to the subsequent evaluation and application, the score decreases significantly, which indicates that the main problems of the current performance evaluation system adopted by Bank Z occur in the actual operation stage. As well as the application stage of performance evaluation results. At this time, employees' communication and guidance to superior leaders, as well as the setting of evaluation indicators, the fairness of results and the impact of subsequent results on the bonus and other aspects reflect the big problems by giving low scores. On this basis, employees thought that there was a big problem in the overall management process and comprehensive score of the performance evaluation system, so they gave a low score.

From this result, the analysis of this paper basically verifies the 4 hypotheses given in the previous section, that is, the planning, implementation, evaluation and application of the current performance evaluation system all have a significant impact on the performance management effect, and the last 3 stages show a significant negative impact. Therefore, combined with the above segmentation of the performance evaluation system, the current performance evaluation system of Bank Z should pay attention to the optimization of the actual operation of performance evaluation. At the same time, the index design of the performance evaluation system, the application of evaluation results, and the communication between the leadership and employees should be optimized accordingly, so as to achieve effective improvement effects.

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