PATHOLOGICAL STUDY OF IMPLEMENTING A PERFORMANCE MANAGEMENT SYSTEM BASED ON DE WAAL AND MIEDEMA MODEL: A CASE STUDY OF REGIONAL WATER COMPANY IN QAZVIN

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Abstract

The present project is a De Waal and Miedema model-based pathological study of implementing performance management system in Regional Water Company of Gazvin. The main question is whether necessary contexts for implementing performance management system exist in statistical population or not. Statistical population includes all employees of regional water company (n=250) and the statistical population involves 165 employees selected by simple random sampling. The main data gathering tool is a researcher-made questionnaire. This research is an applied and descriptive survey. The obtained data has been analyzed by SPSS software, revealing that the structural and behavioral dimension of the model including responsibility structure, performance context, integration, managerial power, consistency, accountability, managerial style, implementation method and organizational communication for implementation of performance management system is favorable in statistical population.

Keywords: Pathology, Performance, Performance management, De Waal and Miedema model

INTRODUCTION

Many studies have been conducted about evaluative methods but none of them has emphasized on a certain method, confirming this necessity that organizational objectives and expectations from performance evaluation should be first determined based on which appropriate method should be selected. Since it is difficult to precisely determine the consequence of individuals’ work and their potential capabilities should be considered, it is better to apply a combination of individual, behavioral and functional characteristics in the combinational framework of evaluation methods which compensate the lack of work standards and criteria somehow. Establishing proper management in each organization involves applying appropriate systems and creating appropriate context for optimal use of its available resources. Accepting the fact that human resources are considered as the most important capital in each institute reveals that among various systems and methods of proper human resources management, performance evaluation system is of high importance and its proper implementation causes proper and prompt exploitation of programs and efficiency in organizations. In spite of the practical and rational importance of employees’ evaluation, with respect to the fact that such a managerial action is neglected, evaluation has been unsuccessful not only in most of organizations, particularly state organizations, but also such an
evaluation has been criticized by employees and even managers for many reasons (Purbey et al., 2007).

State management services law approved in 30 September 2007 by common commission of inspecting state management services act of the Parliament, according to article 85 of Constitution of Islamic Republic of Iran submitted to the Parliament, after the agreement of the Parliament on its 5-year experimental implementation, was confirmed by Guardian Council in the open session dated 10 October 2007 and communicated to the government to be implemented through a letter from the Parliament speaker in 17 October 2007.

In the eleventh chapter in the article 81, all executive organizations of the country have been obliged to establish performance management system based on which employees’ performance is evaluated.

The article 81- all executive obligations are obliged to implement the programs of performance and productivity rate evaluation in their units by establishing performance management system including organizations’, management’s and employees’ performance evaluation based on a regulation proposed by the organization and approved by the Council of Ministers. These organizations are also obliged to regularly report the obtained results (State management services law).

Nowadays, performance management can be considered as a data-oriented and systematic approach to employees’ and other organizational resources’ management which tends to maximize the performance of employees and organization through positive reinforcement by stimuli. Performance management believes that there is a distance between what is currently performed by employees and what can be performed in a better way. In performance management, the important thing is the potential concept that the potential distance between the current performance and the desirable performance should be identified and investigated (Armstrong, 2006: 4). Performance management is a key element of talents’ management in organizations and it is used to measure the current talents of organizations and predict future needs at two levels of individual and organizational. Successful implementation of performance management s necessary for successful implementation of other human resources’ activities such as human resources’ planning, training, employment, wage and salary (Taticchi, 2010).

Performance management is based on the agreement of objectives, knowledge, skill, competency, performance improvement, and human development plans and involves successive reconsideration of such objectives, needs, plans, agreement, and improvement and development plans implementation. Performance management is one of the tools to obtain better results from entire organization or groups and its individuals through understanding and managing the performance in a contingency framework of the planned objectives, standards and requirements of competency. According to Sheppard and Philpott, the main purpose of performance management is to create a culture based on which individual and groups undertake the responsibility of continuous improvement of business process, participation and their own skills (Slater et al., 1998).

In spite of excitements related to the results obtained from implementing performance evaluation, a major part of these projects has not led any significant effect on the mentioned organizations; i.e., as a strategic tool, it has not provided the context of successful organizational performance. Such a fact can be a serious alarm for managers of organizations interested in implementing performance management projects. However, understanding the reasons of less successful implementation of performance management projects and the fact that these projects can be better managed is a highly important issue for all organizations involved in the activities of designing and implementing performance management.
With respect to the substance of state management services act and the necessity assigned to organizations regarding establishing performance management system and in order to prevent disregarding performance management system by managers of organizations, it is critical to explore the problems of employees’ performance evaluation which have previously existed in governmental organization to design an optimal performance management system which can be able to solve some of the problems of previous evaluation systems. Therefore, the main concern of the present paper is to identify the flaws and damages related to performance management. In this regard, the model proposed by De Wall and Miedema (2006) has been used in this study. In this model, performance management has two dimensions of structural and behavioral and it is believed that effective function of performance management system involves equal attention to both dimensions. Structural dimension is related to a framework which should exist in an organization to allow implement performance management system. This dimension involves the main factors of success and the main indices of performance. Behavioral dimension is related to members of an organization (managers and employees) and the way of using performance management system. Changing an organization into a performance-oriented organization requires a serious attention to both aspects (De Wall and Miedema, 2006).

THEORETICAL PRINCIPLES

The concept of performance management is one of the most important and constructive advancements obtained from human resources management area during the recent years. For the first time, this term was used by Bear and Ruh in 1976 but up to the middle 1980s, it was not recognized as a distinct approach to human resources management. Such an approach believes that there is a need of a more organized and stable system for performance management and its rewarding. Elementary evaluation and performance-based payment systems which were hastily implemented could not meet the results expected by individuals. In this time, performance management appeared as a savior and derived from old systems and relatively discredited competency evaluation and objective-based management.

Based on such a definition, performance management is a strategic and integrated process which works with improving the performance of individuals working in organizations and provides the opportunity of stable success of organizations through developing individual and group capabilities (Armstrong, 2006: 2).

Since performance management is related to wider business issues and its bias to achieve long term objectives, it is considered a strategic fact if an organization tends to effectively act in its environment. Increasing organizational efficiency, employees’ and groups’ profitability, improving the level of employees’ skill, competency, motivation, and commitment are the objectives which have been considered by performance management. As Pursel (1999) believed, considering performance management, particularly in case of low organizational profitability, can be a reliable solution since employees seek to acquire knowledge and skills which management does not possess them (Pursel, 1999: 41).

Armstrong considered the purpose of performance management as providing tools and strategies through which better results can be achieved by organizations, groups and individuals and a better understanding can be obtained about objectives and agreement framework. Standards are obtained for both managers and employees. Such a system tries to acquire the agreement of managers and employees of organizations in such a way that prefer irrevocable and necessary affairs at the first priority and increase the probability of organizational success in short term and long term by injecting the sense of commitment to individuals (Armstrong, 2004: 214).
Bamberger (2000) considered the increase of skill as the cause of increasing the role of individuals in organizations. Performance management system also contributes the increase of individuals’ role and accordingly, employees’ efficiency and profitability (Bamberger & Meshoulam, 2000: 112).

The Concept of Performance

There are various definitions about performance. Performance can be considered as only the obtained results history. Individually, performance is the history of individuals’ positions. Kane (1996) asserted that performance is what is created by an individual and it is separated from objective.

Bernardin et al. (1996) stated that performance should be defined as work results since the results have the strongest relation with the strategic objectives of an organization, customer satisfaction and economic roles (Bernardin & Klatt, 1984).

According to the definition of Oxford dictionary, performance is “to fulfill, implement and complement committed or ordered work “. Such a definition refers to outputs or results and indicates that performance is related to fulfilling work and its obtained result. Therefore, regarding performance as a behavior is not an inappropriate supposition. Campbell (1996) also believed that performance is behavior and should be distinguished from results since system factors can avert the obtained results. If performance is defined in such a way that it involves both behavior and results, a more comprehensive view can be obtained.

Brumbranch (1998) explicitly asserted that performance is both behavior and result. Behaviors derive from doer and changes performance from an abstract concept into a practical concept. Behaviors are not only tools for results but they also considered as results (the result of mental and physical effort applied for tasks) and can be judged separated from results. Such a definition about performance leads to a conclusion indicating that both inputs (behaviors) and outputs (results) should be considered during managing the performance of groups and individuals. Hartel (1995) called this model as reference model or combinational model of performance management. This model introduces the importance of the levels of capabilities or competencies and successes equal with the importance of targeting and reconsidering objectives (Armstrong, 2004: 217).

The Difference between Performance Management and Performance Evaluation

Many writers such as Fletcher (2001), Rao (2008), Frenham (2004), and Dan Harteg et al. (2004) referred that performance management and performance evaluation are used interchangeably. However, there is a highly important difference between these two methods. In the following, the differences between performance management system and performance evaluation system are discussed.

Table 1. The Comparison of Performance Management and Performance Evaluation (Rao, 2008)

<table>
<thead>
<tr>
<th>Performance Management System</th>
<th>Performance Evaluation System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused on performance management</td>
<td>Focused on performance evaluation and gathering rankings</td>
</tr>
<tr>
<td>Emphasis on improving the performance of individual, unit and group</td>
<td>Emphasis on relative evaluation of individuals</td>
</tr>
<tr>
<td>Continuous process with the discussion of periodical and seasonal performance reconsideration</td>
<td>Annual practice-although periodical evaluation is periodically performed</td>
</tr>
<tr>
<td>Emphasis on planning, analysis, reconsideration, development, and improvement of performance</td>
<td>Emphasis on evaluation and ranking</td>
</tr>
</tbody>
</table>
Performance rewarding may be or may be not a complete part. Defining and specifying standard performance is a basic and important part. Reward and good performance specification is regarded an important constitute.

| It is designed through human resources/personnel unit but it can be controlled by its related sectors. | It is controlled and designed by administrative/personnel. |
| Ownership is of operational managers and human resources unit play the role of facilitator in implementation. | Its ownership is mainly by administrative unit. |
| Developmental needs are determined in the beginning of a certain year based on competency needs for coming year. | Developmental needs are specified in the end of the year based on evaluations obtained from competencies gap. |
| There is a reconsideration mechanism to improve performance. | There is a reconsideration mechanism to ensure the access to objectives. |
| A system has a certain time period, input, output, and format. | A system has a certain time period, input, output, and format. |

Traditionally, performance assessment system is an annual event in which the previous performance of employees is evaluated and the increase of employees’ wage or their performance reward is determined. If the performance problems evaluation is determined, training and development programs are determined after passing time from primary needs. The objectives of employees’ new performance determined for the next year may be related to their past and may be has no relation with their past. But, performance management system involves many activities such as frequent feedback, employees’ and managers’ performance investigation in a collaborative method to regulate their objectives and development, and social-motivational aspects. Performance assessment is a small part of performance management system. In each organization used performance management system to adjust its unique needs, there are main characteristics which are the parts of the performance management system including:

1. Regulating employees’ objectives with the help of organization mission, organizational goals and values, informing employees using clear relations regarding the fact that how they support the functional objectives of the organization.
2. Regular visit and feedbacks on individual and organizational performance during a period in which the programs of improving organization and employees are reconsidering and updating.
3. These activities have been considered to adjust employees’ activities with strategic objectives of organization: reinforcing employees and improving the organizational performance. But the most important difference is that performance assessment system influences the pervious performance of employees while performance management system focuses on improving employees’ performance in future (Coleman, 2009).

Fletcher and Williams (1992) stated four basic elements of performance management as follow:
1. Performance management is controlled and directed through alignment management but not through human resources;
2. Performance management emphasizes on common organizational values and objectives;
3. Performance management is not a stereotype solution but a process which should be specifically created for each certain organization;
4. This process should be applied for all employees but not for a part of managerial group. Armstrong (2006) added a fifth element to these elements, indicating that some businesses consider applying various processes useful for various sectors of their organization. This element will be applicable if the processes work in an identical framework and are related to mission values and organizational objectives.

**Dimensions of Performance Management System: Conceptual Model of the Study**

De Waal and Medema (2006) consider the dimensions of performance management as structural and behavioral. They believe that effective function of performance management system involves identical attention to these two dimensions. Structural dimension is related to a framework which should be existed in an organization to implement performance management system. This dimension includes the main factors of success and the main indices of performance. Behavioral dimension is also related to members of an organization (managers and employees) and the way of using performance management system. Changing an organization into a performance-oriented organization involves serious attention to both parts. Each of these two dimensions includes the following subsets:

![Figure 1. The Dimensions of performance management (De Wall et al., 2004: 199)](image-url)

Structural dimensions refer to the content of performance management and its scientific methods while behavioral dimensions refer to a method that employees use performance management to improve their organizations. In the following, the components of the model are discussed:

**Responsibility structure**: indicates the clarity level of responsibilities and precise definition of tasks in all management levels;
Integrity: Mange ability: is another structural aspect referred to timely, reliable and uniform functional information; Manage ability: is the way of access level to information systems of performance management and using its defined indices, i.e. whether managerial reports and performance management and the tools of achieving this information is user-oriented or not. Accountability: it means that members of the organization consider themselves responsible for their performance results and their authority domains and generally, they consider themselves responsible against their organization. Management style: senior managers of organizations refer to the kind of mangers’ behavior with the main problems of organization and their main concern is performance. Mangers should use appropriate methods to create motivation and improve individual and organizational performance; they should also select appropriate method to cope with functional problems. Action orientation: it emphasizes on performance information integration in daily activities of organizations’ members to adopt preventive or modifying actions as soon as observing performance problems. Communication: it plays a significant role in designing and implementing performance management in such a way that information is well exchanged and organizational units and managers make use of these information and communications to improve performance at all levels. Alignment: it refers to consistency of other systems of the organization such as human resources management system with performance management in such a way that what is important for the organization is emphasized and reward is also paid based on the same trend (De Wall and Medma, 2006). Simultaneous emphasis on structural and behavioral aspects of management performance is the fundamental principle in designing and implementing performance systems (De Wall and Medma, 2004: 199-306). The present work is a pathological study of implementing performance management system in Regional Water Company in Gazvin. In fact, the main question of the study is that to what extent this company is able to implement performance management system based on the components of the model.

METHODOLOGY
This research was an applied, cross sectional and descriptive survey. The statistical population in volves all employees of regional water company (n=250) and the statistical population involves 165 employees selected by simple random sampling. The main data gathering tool is a researcher-made questionnaire. 180 questionnaires were distributed among the sample and 172 questionnaires were gathered and used for statistical analysis. The questionnaire’s reliability was evaluated using bis section method (0.93). The content validity of the questionnaire was also evaluated using experts’ opinions. To analyze the obtained data, single-variable t-test and Kolmogorov–Smirnov test was used through SPSS software.

FINDINGS
Kolmogorov–Smirnov Test
To investigate the variables’ normality, Kolmogorov–Smirnov test is used. The null hypothesis indicates the normality of data and the main hypothesis indicates non-normality of data. Table 2 presents the results obtained from Kolmogorov–Smirnov test:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig.</th>
<th>α Level</th>
<th>Test Result</th>
</tr>
</thead>
</table>

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The results obtained from normality test (Kolmogorov–Smirnov test) reveal that data distribution of all research variables is normal. In the following, the research hypotheses are tested using t-student parametric test.

**Research Test Hypotheses**

With respect to data normality, single-variable t-test is used to test the research hypotheses. The null hypothesis indicates the lack of appropriate context for each of the model components in two structural and behavioral dimensions and the main hypothesis indicates there is appropriate context for each of the model components in two structural and behavioral dimensions to implement performance management system. The null hypothesis of all the components is as follows: $\mu \neq 3$ and $\mu \leq 3$

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Sig.</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility structure</td>
<td>3.5131</td>
<td>0.61074</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
<tr>
<td>Performance context</td>
<td>3.4930</td>
<td>0.64251</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
<tr>
<td>Integrity</td>
<td>3.5775</td>
<td>0.70812</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Mange ability</td>
<td>3.6647</td>
<td>0.69482</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
<tr>
<td>Alignment</td>
<td>3.6628</td>
<td>0.69808</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
<tr>
<td>Accountability</td>
<td>3.5552</td>
<td>0.72839</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
<tr>
<td>Management style</td>
<td>3.5930</td>
<td>0.90789</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
<tr>
<td>Action orientation</td>
<td>3.5795</td>
<td>0.70514</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
<tr>
<td>Organizational communications</td>
<td>3.5795</td>
<td>0.70514</td>
<td>0.000</td>
<td>Confirming the main hypothesis</td>
</tr>
</tbody>
</table>
Shown in Table 3, the mean obtained for all the components is more than 3 and on the other hand, significance level (0.000) is less than error level (α=0.05); accordingly, the null hypothesis is rejected and the main hypothesis is confirmed. Therefore, it can be said that all the components are at a good state in the organization to implement performance management system.

**Friedman Rank Test**

Friedman test is used to rank the variables. In the present research, this test is used to investigate the homogeneity of the importance of each variable influencing performance management system implementation.

The statistical hypothesis of this test is as follows:

H₀: The importance of the prerequisite components of performance management system implementation is identical in this research.

H₁: There are at least two components with different importance.

To analyze the obtained data, SPSS software was used and the obtained results are as follows:

<table>
<thead>
<tr>
<th>Sample number</th>
<th>172</th>
</tr>
</thead>
<tbody>
<tr>
<td>X² statistics</td>
<td>41.762</td>
</tr>
<tr>
<td>Degree of Freedom</td>
<td>8</td>
</tr>
<tr>
<td>Sig</td>
<td>0.000</td>
</tr>
</tbody>
</table>

As shown in the above table, p-value (0.000) is less than 0.05, indicating that the importance of the components is not identical; therefore, the null hypothesis is rejected and the main hypothesis is accepted.

Table 5 shows rank mean of the components, indicating different mean of ranks.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Means' Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility structure</td>
<td>4.46</td>
</tr>
<tr>
<td>Integrity</td>
<td>4.97</td>
</tr>
<tr>
<td>Mange ability</td>
<td>5.58</td>
</tr>
<tr>
<td>Accountability</td>
<td>4.85</td>
</tr>
<tr>
<td>Management style</td>
<td>4.87</td>
</tr>
<tr>
<td>Adjustment</td>
<td>5.41</td>
</tr>
<tr>
<td>Performance context</td>
<td>4.27</td>
</tr>
<tr>
<td>Action orientation</td>
<td>5.00</td>
</tr>
<tr>
<td>Organizational communications</td>
<td>5.59</td>
</tr>
</tbody>
</table>

According to Table 5, among the components considered in this study, organizational communications, manage ability and alignment with the means of 5.59, 5.58 and 5.41 have the most importance to investigate the preparation of the organization to implement performance management system. Such an importance indicates that these variables can be more useful and reliable to implement performance management system of the organization. But among the eight considered variables, performance context and responsibility structure with the means of 4.27 and 4.46, respectively, are placed at the lowest level of importance. The lowest importance of these variables indicates that currently, these variables are less considered and to implement performance management system, the organization should have more effort and attention for improving the situation of these variables.
CONCLUSIONS AND RECOMMENDATION
The present study was a De Waal and Miedema model-based pathological study of implementing performance management system in Regional Water Company of Gazvin. In this regard, 9 hypotheses were formulated based on 9 components of the model. The null hypothesis indicates the lack of appropriate context for each of the model components in two structural and behavioral dimensions and the main hypothesis indicates there is appropriate context for each of the model components in two structural and behavioral dimensions to implement performance management system. Considering the gathered information, the research hypotheses were tested. The obtained results revealed that all the dimensions required for implementing the model exist. In this regards, the following recommendations are presented for each of the research hypotheses:
The first hypothesis:
1. The clarity of personnel’s task explanation;
2. Alignment between personnel’s task explanation and the work processes of the organization;
3. Clear responsibilities and authorities domain;
4. Clear objectives and expectations of individuals at all levels.

The second hypothesis:
1. Appropriate culture building to implement performance management;
2. Holding educational seminars and workshop for familiarity with the concepts and objectives of performance management;
3. Updating and modifying principles and rules of the company regarding appropriate performance management implementation;
4. Coordinating other systems of human resources management area with performance management system.

The third hypothesis:
1. Creating integrated information system for timely and prompt access to information;
2. Implementing integrated organizational resources system to make performance management system effective.

The fourth hypothesis:
1. Clarifying organizational objectives and strategies for managers regarding performance management system;
2. Exact and complete training for managers of the organization with all aspects of performance management system such as objectives, implementation procedure, results, evaluation method, targeting, etc.;
3. Convincing managers about the benefits of performance management system.

The fifth hypothesis:
1. Determining exact functional objectives and expectations of individuals during work period;
2. Creating a periodical reporting system regarding the assigned tasks.

The sixth hypothesis:
1. Identifying appropriate management style for optimal performance management system implementation;
2. Creating necessary incentives for employees to create more adherence to performance management system;
3. Determining tangible, appropriate and motivating rewards for individuals with high performance level.
The seventh hypothesis:
1. Formulating macro-strategies of the organization;
2. Making familiar all employees with organizational strategies;
3. Formulating human resources strategies based on macro-strategies of the organization;
4. Designing performance management system based on human resources strategies;
5. Creating coordination between performance management system with other systems of the organization in human resources and non-human resources areas.

The eighth hypothesis:
1. Exact and continuous supervision on the way of implementing performance management system;
2. Updating performance management system to avoid being involved in a repetitive trend and avoid losing non-motivating nature of the system;
3. Creating a proper feedback mechanism;
4. Making managers to present feedback on performance;
5. Holding periodical meeting for pathological study of performance management system.

The ninth hypothesis:
1. Determining the level of individuals’ access to information;
2. Providing employees with the access of required information;
3. Creating clear top-down and bottom-up communicative channels;
4. Reinforcing organizational trust at various organizational levels.

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