The Investigation of the Relationship Between Organizational Structure and the Possibility of Establishing 360-Degree Performance Assessment System in Petropars Company

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Abstract: Following Robinz model consisting of (formality, complexity, concentration), in this research we investigate the relationship between organizational structure and building possibility of 360-degree performance evaluation system in Petropars company. This research aims fundamentally to determine the link between structural requirements and the feasibility of 360-degree performance appraisal system establishment so as to enhance staff satisfaction and consequently improving the performance in Petropars firm. In this regard, these secondary goals are concerned: 1-to shed light on the linkage between complexity and 360-degree performance assessment system founding possibility for the sake of satisfying employees and as a result making a better performance in Petropars company. 2- The exploration of the correlation between concentration and establishment feasibility of 360-degree performance assessment system, leading to a higher level of performance in Petropars firm. 3-to investigate the relationship between formality and 360-degree performance assessment system founding possibility to improveworkers' satisfaction and subsequently increasing performance in Petropars company. Deductive and descriptive statistical methods have been applied to analyse the data obtained from received questionnaires, and at inferential level, correlation and chi-square tests have been executed to examine our hypotheses as well as the independency amongst variables, respectively. General analysis of research results reveals that there is a significant relationship between building possibility of 360-degree performance assessment system and variables of organizational structure dimensions.

Key words: Organizational structure, 360-degree performant assessment system, petropars company.

INTRODUCTION

Performance evaluation is a stressful and sophisticated approach for most of people due to various reasons, coming from inappropriate methods of performance measurement or the time of assessment at which individuals feel they have no opportunity to modify their actions or in many cases, it originated from adverse experience of individuals' performance evaluation. However, not only it is not stressful and intricate but also as long as it is implemented precisely, accurately, in a proper time and is unanimously accepted by the staff, it would even be calming and a stimulating factor of positive stress so that it creates an ideal opportunity for modification. Not accountable for the sake of lacking a comprehensive approach to investigate the whole aspects of organization to provide reliable and credible information by itself, classical feedback chain has practically become obsolete in industrialized countries and this kind of feedback is not anymore applicable in today organizations. By contrast, nowadays, 360-degree assessment has been appeared to be a suitable alternative for previous evaluations in which all those who form our surroundings and shape the organization, such as customers, competitors, staff, shareholders, dealers, workers and so on are surveyed to extract promising feedback affecting our performance effectively.

Problem Statement:

In general, 360-degree feedback is one of developed methods of performance assessment processes in today organizations. 360-degree feedback systems have been developed to address the prevalence of smoother group and organizational structures in addition to the problems of conventional forms of performance management systems. Lacking a systematic and well-documented performance appraisal system, staff performance is measured traditionally under managers' and wardens' supervision at the end of each year at Petropars company. Such a system is likely to reduce the motivation of workers since assessment has been done without pre-planned, documented framework, not designed in advance, not accompanied by pre-defined factors of staff progression and enhancement and without informing their staff about their performance and their actions'
feedback. Establishing 360-degree performance assessment system has taken the priority of top-level managers to alleviate discrimination and biased attitudes of performance evaluation process regarding the fact that the existing system of performance evaluation has seriously troubled the staff as they always feel annoyed because of discrimination and biased attitudes of managers in calculation of their performance, which results in a substantial reduction in their incentives. The first question of the present study is to explore whether proper structural requirements of executing 360-degree performance appraisal system do exist at Petropars company or not.

360-Degree Feedback Method:
For the first time in 1967, Lawler stated that evaluation on the basis of just one source does not provide enough information so as to assess performance, and the performance problems would be tackled by the application of multi-source information. This approach is appropriate in developing the quality of leadership and development management. This process is a thorough cycle gaining a brief feedback of all individuals (superiors, subordinates and colleagues) from different aspects of leadership, management and their performance. Some organizations systematically carry out the feedback process for a sector of organization. Feedback helps the individuals to compare their perceptions within their working environment with those of main evaluators including colleagues, subordinates, managers and even customers, suppliers or members. Multi-source and 360-degree feedback programme have been extracted from developed methods of performance assessment, organizational investigations and customer feedback (as a part of comprehensive quality management). This system has grown as a result of smoother team and organizational structures' dominance and in response to the problems of conventional systems of performance assessment. There are various definitions for this process. It generally relies on the data gathered from wardens, managers, subordinates and suppliers.

360-Degree Performance Assessment System:
In today competitive world, only organizations that take the best advantage of their resources could continue their business. One of the important organizational resources is human force. Human force performance is of great importance and one of most critical problems of administrators in different organizations so that the workers need to know their performance and the expectations of organization to compensate past deficiencies and increase their productivity and effectiveness and to discover their abilities.

While classic managers execute evaluation to control their employees' works, today assessment has been targeted to appraise and guide the staff towards group cooperation so as to improve the effectiveness and productivity of organization. 360-degree performance assessment system attempts to provide their staff with more accurate and diverse information about their performance through seeking feedback reflected from different sources, such as bosses, colleagues, lower-rank workers, teammates, customers and suppliers.

Definitions of 360-Degree Feedback Assessment:
1-360-degree feedback process is the combination of perceptions pertaining to the behaviour of an individual, including evaluation of beneficiaries, multi-criteria feedback, perfect cycle assessment, multi-source appraising, colleague and subordinate measurement, the evaluation of group performance, multi-approach assessment. In 360-degree feedback assessment the skills or behaviours of staff are evaluated by not only their lower-rank workers but also their colleagues, customers, bosses and themselves (PurSadegh, 2005, P. 40). 2-360-degree feedback or multi-source feedback is based on the collected data from wardens, colleagues, subordinates, clients and suppliers (Mac Carti, 2001). 3-360-degree approach is a perfect cycle providing a brief feedback of all individuals (superiors, subordinates and colleagues) from different aspects of leadership, management and their performance. 4- 360-degree feedback has been described by Ward (1997) as regular collection and feedback of performance data obtained by an individual or a group of shareholders about their performance. It is also called multi-source evaluation or the feedback of some evaluators (Mirsepasy et al., 2006, P. 169).

The Components of 360-Degree Feedback:
Lepsinger and Lusia (1997) explain that 360-degree feedback process is the collection of perceptions related to the behaviour of a person, attempting to attract individuals' attention to their behaviours in working environment and the way they affect others in organization.

Top-to-down evaluation: The conventional form of assessment that evaluates wardens, managers and subordinates and is still an essential part of 360-degree feedback process. In this evaluation there are four bosses that could be a credible source of feedback. Immediate senior and matrix managers, the immediate lower manager and other bosses take part in this evaluation.

Down-to-top assessment: One of the primary initiatives of 360-degree feedback process is to provide a ground which offers feedback to high-ranking staff. In this method, inferiors carry out a multi-dimensional
evaluation and pass the results to the head. Down-to-top assessment is a component of widespread process of 360 degree feedback dimmed as a crucial process helping the development of individuals and organization.

**Colleague feedback:** In 360-degree feedback model, assessing co-workers presents a 180-degree approach for individual performance assessment. It is regarded by Ken and Lawler as the process of cooperation between a group of individuals each with distinctive behaviour, character or position judging that person.

**Self-assessment:** This notion points to a process by which individuals would be able to estimate their performance. In this process the person himself is the source of assessment and interested to self-assessment.

![Figure 1. 360-degree feedback system(PurSadegh, 2005, P.40)](image)

**The Reasons for 360-Degree Feedback Prevalence:**
Multi-source evaluation prevailed among organizations in 1980 and was widely applied as a development tool. Down-to-top assessment and colleague assessments were become popular in 1970 and during the late 1980, respectively, but by the late 1990, the 360-degree feedback became commonplace. In the late 1980 some books on multi-source feedback that were achievements of the research by centre of creative leadership in Grinburon were published. On the basis of these researches, 3 results were outstandingly noticeable: 1- feedback is a key factor of personality and skill enhancement 2-Many of effective managers are learners. In other words, these managers encourage the opportunities of learning and development. 3- Many managers are functioning in weak feedback environments. Overall, researchers believe that there are a serious of factors that undertake the role of simplification in the evolution of multi-resource assessment. The first factor is to investigate the attitudes of staff towards staff satisfaction which has been based on these dimensions: mainstream ideas, procedures, working environment, benefits and rewards. Comprehensive quality management functions with the emphasis on quality and customer satisfaction as impetus for developing 360-degree feedback. Comprehensive quality management has focused particularly on customer/quality. To reach excellent quality, 360-degree feedback obtains an enriched and extremely helpful resource because customers and suppliers can give their feedback from different points. Grut(1996) alleged that comprehensive quality management has been used as a strengthening power in individuals’ development and advancements in which it is supposed that the closest people at a job, have the best state to measure performance and suggesting methods of development and enhancement. From this viewpoint, comprehensive quality management is a tool for the extension of 360-degree feedback processes. Another simplifying factor is self-assessment. Torno and Londen(1996) discuss that traditional assessment has been expanded to encompass other evaluators such as subordinates and colleagues to create more fair and appropriate performance evaluation system in organization. They explain that managers’ needs to adjust to variable business environment have been the major reason of widespread use of 360-degree feedback in past decades. The (internal, external)sources of assessment provide valuable information to make the organization adaptable.

**Data Analysis & Research Findings:**

**Independency Test:**
To explore the Independency between variables, Chi-square test has been implemented (Azar, A. Momeni, M.2006). Table 1 shows the figures of statistic, freedom degree and significance level of Pearson Chi-square and the logarithm of chi-square. According to table results, since probability level of chi-square statistics are less than %5, zero hypothesys is rejected. Furthermore, the investigation of chi-square results indicates that 360-degree performance assessment system is independent from structural variables(concentration, formality, complexity).
H0: The variables of the possibility of establishing 360-degree performance assessment system and formality are independent.
H1: The variables of the possibility of establishing 360-degree performance assessment system and formality are not independent.

H0: The variables of the possibility of establishing 360-degree performance assessment system and complexity are independent.
H1: The variables of the possibility of establishing 360-degree performance assessment system and complexity are not independent.

H0: The variables of the possibility of establishing 360-degree performance assessment system and concentration are independent.
H1: The variables of the possibility of establishing 360-degree performance assessment system and concentration are dependent.

H0: The variables of the possibility of establishing 360-degree performance assessment system and organizational structure are independent.
H1: The variables of the possibility of establishing 360-degree performance assessment system and organizational structure are not independent.

<table>
<thead>
<tr>
<th>Table 1: Chi-Square test.</th>
<th>Formality</th>
<th>Complexity</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>248.262</td>
<td>118.416</td>
<td>134.593</td>
</tr>
<tr>
<td>Logarithm of Chi-Square</td>
<td>167.330</td>
<td>84.252</td>
<td>100.696</td>
</tr>
<tr>
<td>Sig</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</tbody>
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Correlation Test:
In this section correlation analysis has been used to determine the type and intensity of relationship between variables of research hypotheses. In order to examine all the main and secondary hypotheses, Pearson and Spearman correlation coefficients have been calculated in 4 states. In our correlation test H0 and H1 are as follows:
H0: p=0 there is a significant correlation
H1: p<>0 there is not a significant correlation

Correlation coefficient is a parametric approach used for data with either normal distribution or large number of observations. If the number of observations is low and their normality assumption is not rational, then Spearman correlation coefficient is applied instead (Momemi, M. 2007).

<table>
<thead>
<tr>
<th>Table 2: Correlation coefficients.</th>
<th>Formality</th>
<th>Complexity</th>
<th>Concentration</th>
<th>Organizational structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson coefficient</td>
<td>0.759</td>
<td>0.647</td>
<td>0.479</td>
<td>0.805</td>
</tr>
<tr>
<td>Spearman coefficient</td>
<td>0.766</td>
<td>0.646</td>
<td>0.510</td>
<td>0.805</td>
</tr>
<tr>
<td>Sig</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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</table>

Probability for all tests is lower than 5%, representing that at 95% confidence interval each of four tests are rejected; hence the possibility of establishing 360-degree performance assessment system and organizational structure are significantly correlated. Regarding that whatever correlation coefficient is in close proximity to 1, the relationship is stronger, it can be concluded that the possibility of establishing 360-degree performance assessment system and formality have the highest correlation with each other.

Discussion and Conclusion:
In this research this hypothesis that there is a significant linkage between organizational structure and the possibility of establishing 360-degree performance assessment system was put forward.

As previously mentioned, first we examined the possibility of establishing 360-degree performance assessment system. According to results founding 360-degree performance assessment system in Petropars company is feasible. A correlation test was also run to discover the relationship between the possibility of executing 360-degree performance assessment system and organizational structure.

With respect to zero probability of correlation test for all variables, it can be claimed that there is a significant relationship between organizational structure and the possibility of founding 360-degree performance assessment system in Petropars firm. Moreover, since with correlation coefficient closer to 1, the relationship would be stronger, it can thus be asserted that there exists a high level of correlation among these two variables.

Therefore, the main hypothesis is confirmed, pointing to a direct and significant relation between the possibility of executing 360-degree performance assessment system and organizational structure.
The main hypothesis apart, 3 other hypotheses were also proposed to study the relationship between organizational structure dimensions' variables and the possibility of executing 360-degree performance assessment system:

1- There is a significant relationship between the possibility of executing 360-degree performance assessment system and concentration in Petropars firm.

2- There is a significant link between the possibility of executing 360-degree performance assessment system and formality in Petropars firm.

3- The possibility of executing 360-degree performance assessment system and complexity in Petropars firm are significantly correlated.

Similar to main hypothesis, correlation test was performed to investigate and examine these hypotheses. sig at confidence level of 95% are zero for all these tests, indicating that there is a direct relationship between the possibility of establishing 360-degree performance assessment system and organizational structure dimensions' variables (formality, complexity and concentration). In addition, since the correlation coefficient between formality and the possibility of 360-degree performance assessment system establishment is higher than two other variables (complexity and concentration), therefore formality and 360-degree performance assessment system founding feasibility are more closely intertwined than two other variables.

Suggestions:

1- Holding training course for all the staff on performance evaluation to familiarize themselves with notions human resources. Educating those working in the company would considerably help successfully execute performance assessment systems especially the 360-degree performance assessment system. Thus, holding several educational courses on the realm of human resources and performance evaluation system in Petropars is recommended.

2- Since labour forces are principal properties of Petropars company who play a substantial role on organization success or failure, it is suggested that Petropars takes account of some appropriate criteria for recruiting humanly skilled and qualified workers when the company is employing people and by this way, reinforces their employees' knowledge about the importance of human resources systems and 360-degree performance assessment system in particular.

3- As one of the results of the present study was to shed light on the lack of defined and documented process for human resources in Petropars company and since there must be logical and appropriate process regarding human resources to establish a system of performance assessment, It is suggested an exhaustive research be conducted on the subjects of needed human resources and their execution methods.

REFERENCES