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An empirical study on performance management: A case study of national Iranian oil Production Distribution Company

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ABSTRACT

The primary goal of creating a culture of performance management is to improve processes based on the responsibility of individuals and groups for the continuous improvement of business processes, and to contribute to their skills. In this paper, we discuss all related issues and indentify the most important aspects and components of performance management. The proposed study of this paper is to find out which performance management works best for national Iranian oil products distribution company (NIOPDC). The proposed study uses analytical hierarchy process to prioritize all important factors based on pair-wise comparison. We use geometric mean to find the average of comparisons and all computations are performed using Expert Choice software package. In summary, stakeholders (0.262) are the most important components of our survey followed by employee management (0.247), social responsibility (0.190) comes in the third position and quality of services (0.166) and internal process (0.134) are two less important factors in this survey.

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1. Introduction

During the past few years, there have been tremendous efforts on having efficient methods for measuring and improving quality of organizations. Many of these methods focus on more than just financial figures and they have looked inside the organization by investigating different items such as people, processes, customers, etc. (Hooks & Farry, 2000; Westcott, 2005; Ueltschy et al., 2007). SERVQUAL has been considered as one of the most important one (Parasuraman et al., 1985, 1991). According to SERVQUAL model, customers evaluate quality of service through five aspects including tangibles, reliability, responsibility, assurance, empathy.

The BSC breaks through the traditional limitations of finance, examining an organization's performance from the four main perspectives of finance, customer, internal business process, and

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learning and growth. It emphasizes both aspects of the financial and non-financial, long-term and short-term strategies, and emphasizes internal and external business measures (Kaplan & Norton, 1992, 1996a, 1996b). The EFQM excellence model is another technique, which is based on nine criteria where five of these are 'enablers' and four are 'results'. The Enabler criteria cover what an organization does while the results criteria cover organizational achievements (Hakes, 2007). Ueltschy et al. (2007) performed a comprehensive review on different methods reveal some of the common and uncommon features of these models described as follows,

Perspective	SERVQUAL	ASC	SMART	EFQM	BSC
Internal processes		•	$\sqrt{}$		$\sqrt{}$
Customer satisfaction		$\sqrt{}$		$\sqrt{}$	
Stakeholders		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$
Service quality	$\sqrt{}$		$\sqrt{}$		
Social responsibility				V	

In this paper, we present an empirical study in a major producer in Iran by looking into all five perspectives including internal processes, customer satisfaction, stakeholders, service quality and social responsibility. The organization of this paper presents details of the proposed model as well as the necessary questions of the survey in section 2 and section 3 explains details of our results. The paper ends with concluding remarks to summarize the contribution of the paper.

2. The proposed model

The proposed study of this paper is to find out which performance management works best for national Iranian oil products distribution company (NIOPDC) and what would be the components of this proposed model. This could lead us to consider the following questions,

- 1. What are the dimensions of performance management and their priorities in the National Iranian Oil Products Distribution Company?
- 2. How performance management components and operational parameters are determined and evaluated?
- 3. What are the priorities of management performance indicators in the National Iranian Oil Products Distribution?

In this study, qualitative and quantitative approach are used. Explanatory model for the design and exploration of the interview as a qualitative method and the Delphi method as a quantitative method are used. The purpose of this descriptive study, in terms of cross-sectional and time of data collection method is a combination of qualitative and quantitative methods. In this study, two groups of internal and external experts for gathering the necessary data are used. The first step of judgment sampling was used to determine the panel members. Next, using a sampling chain and assigning an initial panel board, surveyed people were requested to choose panel members. Therefore, we have chosen two groups of expert people including 30 people from inside and 15 members from outside organization. In this survey, Delphi questionnaire was designed based on a conceptual model using exploratory interviews and reviews of the theoretical basis and then the resulted questionnaire was distributed among the experts. The members were requested about the questionnaire and the suitability of components and indicators obtained. Experts expressed their opinions on a Likert scale from 1 to 7 where 1 means the lowest suitability and 7 means the highest rate of suitability. The second round of Delphi questionnaire was redesigned based on the feedbacks received. In third round of Delphi survey, all attributes with relative rating of more than five were gathered and they were summarized in a separate questionnaire. The proposed study used analytical hierarchy process to prioritize all important factors based on pair-wise comparison. We have also used geometric mean to find the average of comparisons and all computations have been performed using Expert Choice software package.

3. The results

In this section, we present details of our survey on ranking for different criteria influencing management of this oil-based company including internal processes, stakeholders, employee management, service quality and social responsibility.

3.1. Internal process

Internal process is the first main component of our proposed study and it includes four sub criteria including organizational value creation, increase in customer satisfaction, improved operating performance and acting as a good citizen in terms of environment. To reach these components we have subdivided each category into more details categories and the results are presented in Table 1.

Table 1Internal process components and their relative importance

Main factor	Sub-factor	Weight	Weight
	Return on investment on new projects	0.443	0.011
Organizational value creation (0.198)	New ISO certifications	0.169	0.004
	The level of product and service acceptability	0.387	0.010
	The quality of services provided by sales representative	0.443	0.014
Increase in customer satisfaction	On time delivery of products and services	0.669	0.022
(0.248)	Reduction on unexpected interruption on products and services	0.146	0.004
	Having appropriate level of inventory of necessary goods	0.124	0.003
Improved operating performance	Comparative cost of goods and services	0.220	0.006
(0.209)	On time delivery of goods and services	0.290	0.008
	Supply chain management	0.220	0.006
	Reduce the environmental disaster led to work stoppages	0.167	0.007
Acting as a good citizen in terms	Reduction in safety incidents resulting in damage to the work	0.667	0.030
of environment (0.345)	force		
	Number of days away from work due to employee accidents	0.167	0.007
Total			0.134

As we can observe from the results of Table 1, acting as a good citizen in terms of environmental issues (0.345) plays the most important role while organizational value creation plays the least important (0.198) role.

3.2. Stakeholders

Stakeholders is the second main component of our proposed study and it includes four sub criteria including Identifying and anticipating customer needs and expectations, Identifying and anticipating the needs and expectations of managers and employees, Identifying and anticipating the needs and expectations of government and identifying and anticipating the needs and expectations of society. To reach these components we have subdivided each category into more details categories and the results are presented in Table 2. Among components of stakeholders, identifying and anticipating customer needs and expectations (0.297) comes as the first priority followed by anticipating the needs and expectations of society (0.293). The other two attributes in this category, identifying and anticipating the needs and expectations of managers and employees (0.207) and identifying and anticipating the needs and expectations of government (0.207), maintain the same rates of importance.

Table 2

Stakeholders components and their relative importance

Main factor	Sub-factor Sub-factor	Weight	Weight
	Receive products and services as needed	0.149	0.011
Identifying and anticipating customer needs and	To provide information in connection with the services provided	0.069	0.005
	To provide a mechanism for registering customer complaints	0.086	0.006
	Provide mechanisms to deal with problems and complaints	0.098	0.007
expectations (0.297)	Quality products and services	0.221	0.016
	Variety of methods to receive services	0.104	0.007
	Suitability for service	0.098	0.007
	Organization's efforts to improve services	0.176	0.013
Identifying and anticipating	The presence of a representative of the employees participating in the	0.260	0.014
the needs and expectations of	decision-making and decision making		
managers and employees	Learning and growth opportunities	0.327	0.017
(0.207)	Individual and team goals aligned with organizational goals	0.413	0.022
Identifying and anticipating	Respecting the laws and regulations	0.298	0.016
the needs and expectations of	Transparency in contracts	0.246	0.013
government (0.207)	Internationally accepted standards	0.210	0.011
	increasing organizational accountability	0.246	0.013
Anticipating the needs and	Awards received relevant to social activities, cultural and environmental	0.138	0.010
expectations of society (0.293)	The low number of legal rulings in the courts in relation to organizational	0.288	0.022
	performance		
	The amount and percentage of investment in different sectors of society	0.449	0.034
	Recruitment of staff, religious minorities, ethnic and gender	0.126	0.009
Total			0.262

3.3 Employee management

Employee management is the third main component of our proposed study. It includes four sub criteria including empowering employees, employee participation, employee satisfaction and employee motivation. To reach these components we have subdivided each category into more detailed categories and the results are presented in Table 3. Employee management has four components and in terms of their priorities employee satisfaction (0.333) and motivation (0.333) are equally more important than employee empowering (0.167) and participation (0.167).

Table 3

Employee management components and their relative importance

Main factor	Sub-factor	Weight	Weight
	Planned projects for the empowerment of employees	0.188	0.007
Empowering	Systematic staff training and development through work experience	0.198	0.008
employees	The average training hours per person	0.123	0.005
(0.167)	Adaptation of knowledge and competencies with the competencies required of staff	0.434	0.017
	Number of letters of appreciation received by employees	0.058	0.002
Employee participation	Provide opportunities to encourage participation and support of innovative and creative behavior	0.333	0.013
(0.167)	Encourage employees to work together in teams	0.333	0.013
	Encouraging and supporting individual and team participation in improvement activities	0.333	0.013
Employee	Complaints and objections of employees	0.125	0.010
satisfaction	Service continuity in the organization's staff	0.186	0.015
(0.333)	Employee satisfaction in each survey	0.353	0.029
	Causes of workplace absence	0.186	0.015
	Shift in the composition of its staff separately (resignation, end of contract, dismissal, etc.)	0.150	0.012
Employee	Reward systems, and encouraging transparency and systematic	0.137	0.011
motivation	The promotion of employees and management	0.241	0.019
(0.333)	Logical connection between performance and pay levels	0.220	0.018
	Percent of employee benefit and welfare of recreational facilities	0.074	0.006
	Equal opportunities in the organization (non-discrimination)	0.223	0.018
	Growth rate of employee evaluation scores	0.105	0.008
Total			0.247

3.4. Quality of services

Quality of services is the fourth main component of our proposed study and it includes four sub criteria including tangibles, reliability, responsiveness, assurance and empathy. To reach these

components we have subdivided each category into more details categories and the results are presented in Table 4.

Table 4Ouality of services components and their relative importance

Main factor	Sub-factor	Weight	Weight
	Growth rate of employee evaluation scores	0.105	0.008
Tangibles (0.175)	Update and modern equipment	0.288	0.008
	Attractive appearance of physical facilities	0.169	0.005
	Having staff with appropriate dress and appearance	0.205	0.017
Reliability	Regular service environment, sort and clean	0.338	0.009
(0.198)	Accomplishing the promised works or services	0.210	0.006
	Willingness of employees to solve customer problems	0.246	0.008
	Fast and reliable service	0.246	0.008
Responsiveness	Complaints and objections of employees	0.125	0.010
(0.198)	Service continuity in the organization's staff	0.186	0.015
	Employee satisfaction in each survey	0.353	0.029
	Causes of workplace absence	0.186	0.015
	Shift in the composition of its staff separately (resignation, end of contract, dismissal, etc.)	0.150	0.012
Assurance	Reward systems, and encouraging transparency and systematic	0.137	0.011
(0.232)	The promotion of employees and management	0.241	0.019
	Logical connection between performance and pay levels	0.220	0.018
	Percent of employee benefit and welfare of recreational facilities	0.074	0.006
	Equal opportunities in the organization (non-discrimination)	0.223	0.018
	Growth rate of employee evaluation scores	0.105	0.008
Empathy (0.198)	Permanent staff willing and eager to help customers	0.190	0.006
	Availability of staff to answer customer	0.234	0.007
	Create confidence in customers	0.176	0.006
Total			0.166

In terms of quality of services, assurance comes as the most important item, while tangibles (0.175) and empathy (0.198) represent the least important factors.

3.5 Social responsibility

Social responsibility is the last main component of our proposed study and it includes four sub criteria including enhance social conditions, customer service and community organizations, organizations involvement in solving social problems and allocation of resources to environmental protection. To reach these components we have subdivided each category into more details categories and the results are presented in Table 5.

Table 5Social responsibility components and their relative importance

Main factor	Sub-factor Sub-factor	Weight	Weight
	Education and culture (health promotion)	0.327	0.015
Enhance social conditions (0.246)	Equality and justice in the distribution of services	0.413	0.019
	To increase citizen confidence in government	0.260	0.012
Customer service and community organizations	Fast service delivery to clients	0.271	0.120
(0.290)	Flexibility and diversity in service	0.120	0.006
	Continuity of services to clients and customers	0.191	0.010
	Utility service	0.418	0.023
Organizations involvement in solving social	Institutionalization of ethics in society	0.327	0.013
problems (0.210)	Active participation in solving community problems	0.413	0.016
	Employees interested in social activities	0.260	0.010
Allocation of resources to environmental	Waste management	0.143	0.006
protection (0.246)	Establishing quality control standards	0.429	0.020
	Protect health and the environment	0.429	0.020
Total		•	0.190

In terms of social responsibility, customer service and community organizations (0.290) maintains the most important impact followed by enhance social condition (0.246) and allocation of resources to environmental protection (0.246).

4. Discussion and conclusion

The main goal of creating a culture of performance management is to improve processes based on the responsibility of individuals and groups for the continuous improvement of business processes, and to contribute to their skills. In this paper, we have discussed all related issues and decided to indentify the most important aspects and components of performance management.

In summary, stakeholders (0.262) are the most important components of our survey followed by employee management (0.247), social responsibility (0.190) comes in the third position and quality of services (0.166) and internal process (0.134) are two less important factors in this survey. Among components of stakeholders, identifying and anticipating customer needs and expectations (0.297) comes as the first priority followed by anticipating the needs and expectations of society (0.293). The other two attributes in this category, identifying and anticipating the needs and expectations of managers and employees (0.207) and identifying and anticipating the needs and expectations of government (0.207), maintain the same rates of importance. Employee management has four components and in terms of their priorities employee satisfaction (0.333) and motivation (0.333) are equally more important than employee empowering (0.167) and participation (0.167). In terms of quality of services, assurance comes as the most important item, while tangibles (0.175) and empathy (0.198) represent the least important factors. In terms of internal processes, As we can observe from the results of Table 1, acting as a good citizen in terms of environmental issues (0.345) plays the most important role while organizational value creation plays the least important (0.198) role. In terms of social responsibility, customer service and community organizations (0.290) maintains the most important impact followed by enhance social condition (0.246) and allocation of resources to environmental protection (0.246).

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