Analyzing the Effectiveness of Reward Management System on Employee Performance through the Mediating Role of Employee Motivation
Case Study: Isfahan Regional Electric Company

Amin Karami
Department of Management and Accounting, Najafabad Branch, Islamic Azad University, Najafabad, Iran

Hossein Rezaei Dolatabadi
Assistant Professor, Department of Management, University of Isfahan
Tel: 98-311-793-5206 E-mail: h_rezaei@ase.ui.ac.ir

Dr. Saeed Rajaeepour
Associate Professor, College of Education and Psychology, University of Isfahan

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Abstract

Purpose: Analyzing the effectiveness of reward management system on employee performance through the mediating role of employee motivation was the purpose of the present survey.
Method and tools: Given that staff department of Isfahan Regional Electric Company was the statistical population under study simple random sampling was used in this survey. Sample size was determined by means of Cochran formula (140 persons). Historical study and field study methods were the most important methods of data collection and data analysis was performed by means of Amos and Pls software.
Findings: Reward management system has a positive and significant effect on employee motivation. Employee motivation does not have a positive and significant effect on employee performance. Reward management system has a positive and significant effect on employee performance (by the presence of motivation as the mediating variable).
Conclusion: The findings of this survey in the above company show that there is a positive and significant relation among elements of reward management system and motivation and performance. Such positive and significant relation was found among the elements of reward management system with performance too. This is while there was no positive and significant relation among the elements of reward management system, employee motivation and performance. It is notable that the above relations were presented in the framework of a model using structural equations modeling.
Keywords: Reward management system, Motivation, Performance, Job satisfaction, Employee motivation, External motivation, Internal motivation.

Introduction

It is prevalent to use different kinds of incentive schemes and rewards in the corporations regardless of their effects and consequences. Anyway, familiarity with the principles of incentive schemes and reward systems is necessary for corporations. Therefore, some topics related to a reward system such as goals of the reward system, principles of giving reward, different types of giving reward, characteristic of reward and punishment, different types of reward to payment management methods and individual and group incentive systems are investigated in this section.

In the following, concept of the reward system is first explained. Motivation and various types of it and performance will be studied in the next section. Finally the applied studies regarding the effects of rewards and incentive schemes on employees' job performance, job satisfaction, their motivation and other related variables in the conducted studies will be mentioned.

Research literature

Reward

Generally, the reward system is accompanied by several actions both from the viewpoint of the corporation and the individual. It is led to tensions for the corporation. First under similar conditions people intend to refer to the corporations which provide the highest rewards. Thus corporations can attract employees who have competency and qualification by offering rewards. Second, the reward that is given to employees in lieu of service compensation is a tool for receiving feedback from previous performance and third, rewards can be used as a motivational tool to improve future performance.

Hence, it seems that the reward system should be effective and efficient so that such actions are realized in the corporation and this system should be designed in a way that creates maximum return both for the corporation and the individual (Karami, 1998). Paying attention to the principal needs of the individual and enjoying fair reward distribution inside and outside of the corporation are among the major principles in any reward system (Laler et al., 1975). The reward system is one of the basic scopes of human resource management performance and service compensation management as one of the scopes of this task undertakes to design and execute employees’ wage and benefits systems (Bernardin & Russell, 1993).

Reward system and performance

Appropriate, effective and timely reward increases employees and managers' motivation. Researches and experience regarding the concept of performance reinforcement have proved that effective and timely feedback can be regarded as a motivation to increase employees' productivity and spirit (Cock, 2008). The studies reveal that there is a significant relation among the extant resources of employees, service compensation, the exchanged information, degree of stress and job burnout in the workplace (Schaufeli, 2004). Corporations usually focus on what managers and employees referred to as reward and emphasize a special value and direct their behavior towards those values (Podhame, 2004).
Managers should try to build a suitable value-based corporation and use it as an important goal for short-term and long-term goal of management (Hammel, 2007). Change in management has taught us many points including that managers should not only focus on production (service) increase but also they should think how to choose suitable people for the corporation's success (Wren, 2005). If employees are given a suitable reward for their ethical behavior and a fair wage for their performance, the manager has the chance to bind his/her employees to ethical act. In addition to conformation of employees' perception, characteristics such as fairness of the reward and wage system are regarded as legal standards in any country to provide their needs (Carico & Mujtaba, 2008). If corporations and managers give the reward of product (service) quality and quality improvement fairly and clearly, employees are constantly thinking to enhance the quality of their work that might be led to better work methods (Mujtaba, 2010).

In the event that corporations reward the customer's intimacy and satisfaction, they are more probably prepared to regulate and change behavior in order to establish a good relation with customers and satisfy their needs (Mujtaba, 2006). One of the important characteristics of human resources managers regarding employees' perception is to make a good relation among all managers and employees which guarantees the success of the corporation (Carico & Mujtaba, 2009). An appropriate reward system for all employees and sellers as a part of performance management plan can be resulted in increasing of efficiency and productivity at the workplace. Performance management is a secure way for assessment which conforms the corporation's activity to mission, perspectives and purposes and harmonizes them (Mujtaba, 2010).

The concept of motivation

The term motivation for the first time came from the Latin term move 1 that means movement. Motivation is referred to the reason for a particular behavior. In other words, a person does not perform any behavior for which there is no motivation or need as a stimulant. Human's motivation such as conscious or unconscious is arising from his/her needs. Therefore, in defining motivation it can be said that motivation or need is an internal state and a shortage or deprivation that obliges the person to perform a series of activities (Seyyyed Javadin, 2008, p 455). Another definition of motivation is as below: "intention towards abundant attempt to provide purposes of the corporation so that such attempt is prompted to satisfy some individual needs" (Robins, 1999, p 326).

Providing employee motivation at a high level of performance is one of the primary tasks of managers. It means that the manager should ensure that people are working, they go to work regularly and have a positive portion of the corporation's mission. Job performance is related to ability, environment as well as motivation (Mohammadzade & Mehruzhan, 1997, p 120).

Motivation is a chain process that begins with need or shortage and deprivation, then it is led to demand and causes tension and action towards a purpose that behavior of gaining the purpose is its result. Sequence of this process might be led to satisfaction of needs. Therefore, motivations encourage and stimulate the individual to perform a task or behavior. While motivation reflects a general demand, punishment and encouragement are still regarded as very strong motivations in all motivation studies. In this regard, money is considered as a tool to grant reward but it is not the only motivational factor (Seyyyed Javadin, 2008, p 456).
Conceptual model  
Variables and the proposed model  
The variables in this study were classified into three classes. Performance is the dependent variable and reward management system with its dimensions (financial reward, inherent reward and non-financial reward) is the independent variable. Also employee motivation with its dimensions (job satisfaction, internal motivation and external motivation) is the mediating variable. The conceptual model of the survey is displayed in Figure 3-1.

![Conceptual model diagram](image_url)

**Figure 3-1- Conceptual model**

**Statistical population, sampling method and sample size**  
Simple random sampling method was used in this study. Staff department of Isfahan Regional Electric Company constituted the statistical population under study and totally 150 questionnaires were distributed among which 130 were returned. The following relation was used to determine the sample size (140 persons). Historical study and field study methods were the most important methods of data collection.

\[
n = \frac{z^2pqN}{d^2(N-1) + z^2pq} \\
N = \frac{1}{96^2 \times 0.5 \times 0.5} \times 220 \\
n = \frac{0.05^2 \times (220 - 1) + 1}{96^2 \times 0.5 \times 0.5} = 140
\]

**Hypotheses**

1. Applying reward management system in Isfahan Regional Electric Company has a positive and significant effect on employee performance.
2. Employee motivation in Isfahan Regional Electric Company has a positive and significant effect on employee performance.
3. Applying the reward management system in Isfahan Regional Electric Company has a positive and significant effect on employee performance.
positive and significant effect on employee motivation.

Data analysis
Inferential statistics

Figure 1 and Table 1 show the factorial load related to each question.

Figure 4.1 The measurement model

All questions in the measurement model have factorial load more than 0.5, thus the analysis process is continued.

Composite reliability indexes were used to study reliability and the results are shown in Table 4-3. Reliability means that there is a similar perception of questions among different respondents under study. The composite reliability coefficient in structural equations modeling was more than 0.7 that shows suitable reliability of each structure.
Table 4.3 Studying values of AVE and composite reliability

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial reward</td>
<td>0.625</td>
<td>0.869</td>
</tr>
<tr>
<td>Inherent reward</td>
<td>0.47</td>
<td>0.721</td>
</tr>
<tr>
<td>Non-financial reward</td>
<td>0.50</td>
<td>0.799</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>0.630</td>
<td>0.901</td>
</tr>
<tr>
<td>Internal motivation</td>
<td>0.606</td>
<td>0.821</td>
</tr>
<tr>
<td>External motivation</td>
<td>0.47</td>
<td>0.778</td>
</tr>
<tr>
<td>Employee performance</td>
<td>0.643</td>
<td>0.899</td>
</tr>
</tbody>
</table>

Table 4.4 Studying values of root mean square of the variance with correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Financial reward</th>
<th>Inherent reward</th>
<th>Non-financial reward</th>
<th>Job satisfaction</th>
<th>Internal motivation</th>
<th>External motivation</th>
<th>Employee performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial reward</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inherent reward</td>
<td>0.640</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-financial reward</td>
<td>0.450</td>
<td>0.463</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>0.097</td>
<td>0.089</td>
<td>0.068</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal motivation</td>
<td>-0.362</td>
<td>-0.301</td>
<td>0.563</td>
<td>0.092</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External motivation</td>
<td>0.416</td>
<td>0.431</td>
<td>0.475</td>
<td>0.146</td>
<td>0.479</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Employee performance</td>
<td>0.511</td>
<td>0.488</td>
<td>0.362</td>
<td>0.169</td>
<td>0.363</td>
<td>0.428</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Evaluation of the structural model (testing and analyzing the hypotheses)
Figure 4-3 shows the summary of results obtained from PLS analysis to test the structural model especially the standardized path coefficient (β) and T-statistic.

Figure 4.3 The tested model of the survey (path coefficients)
Table 4.4 Results of testing the modified model

| Hypothesis                              | Original sample (O) | Sample mean (M) | Standard Deviation (STDEV) | Standard Error (STERR) | T Statistics (|O/STERR|) |
|-----------------------------------------|---------------------|-----------------|----------------------------|------------------------|-----------------|
| **Independent variable**                | **Dependent variable** |                 |                            |                        |                 |
| Reward management system                | Employee motivation | 0.546           | 0.497                      | 0.206                  | 3.949           |
| Employee motivation                     | Employee performance| 0.126           | 0.188                      | 0.129                  | 0.978           |
| Reward management system                | Employee performance| 0.486           | 0.480                      | 0.114                  | 4.257           |
Table 4.5 Results of testing the hypotheses

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Path coefficient (beta)</th>
<th>T</th>
<th>Result of the hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward management system</td>
<td>Employee motivation</td>
<td>0.546</td>
<td>3.949</td>
<td>It is confirmed</td>
</tr>
<tr>
<td>Employee motivation</td>
<td>Employee performance</td>
<td>0.126</td>
<td>0.978</td>
<td>It is not confirmed</td>
</tr>
<tr>
<td>Reward management system</td>
<td>Employee performance</td>
<td>0.486</td>
<td>4.257</td>
<td>It is confirmed</td>
</tr>
</tbody>
</table>

Value of beta coefficient for the first hypothesis is equal to 0.55 that shows effectiveness of reward management system on employee motivation is 55%. This means that 55% of motivation changes in employees is related to reward management system and since the calculated t-value in this hypothesis is equal to 3.95 and larger than 1.96 it can be stated that there is a positive and significant relation between reward management system and employee motivation.
motivation. About the second hypothesis it can be stated that employee motivation has no effect on employee performance, as the calculated t-value in this hypothesis is equal to 0.98 that is lower than 1.96. Finally value of beta coefficient for hypothesis three is equal to 0.49 that shows effectiveness of reward management system on employee performance is 49%. It means that 49% of changes in employee performance is related to reward management system. As the calculated t-value in this hypothesis is equal to 4.26 and larger than 1.96 it can be stated that reward management system has a positive effect on employee performance. Therefore, hypotheses one and three were confirmed given to the comparison of calculated t-values. In order to study the direct and indirect effect of independent variables on the dependent variable it is necessary to calculate total, direct and indirect effects for variables of the model.

Table 6.4 Separation of direct, indirect and total effects

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee performance</td>
<td>Reward management system</td>
<td>0.486</td>
<td>0.07</td>
<td>0.556</td>
</tr>
</tbody>
</table>

Given that $R^2=32\%$ that is calculated for employee performance variable, it is concluded that the proposed model contained 32% of effective factors on employee performance (Table 4-7)

Table 4.7 Values of $R^2$

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward management system</td>
<td>0.00</td>
</tr>
<tr>
<td>Employee motivation</td>
<td>0.299</td>
</tr>
<tr>
<td>Employee performance</td>
<td>0.321</td>
</tr>
</tbody>
</table>

Conclusion

Findings based on hypothesis one: Reward management system has a positive and significant effect on employee motivation. The standardized regression coefficient for this hypothesis is equal to 0.546 that is more than the related T-value equal to 1.96. It can be concluded that this hypothesis is accepted with 95% confidence. In other words, reward management system has a positive and significant effect on employee motivation with 95% confidence.

Our findings about this hypothesis are consistent with results of Wordack and Reck (2002). In their conclusion they stated that there is a positive and significant relation between total reward and employee motivation and satisfaction. Our results about this hypothesis confirm
Kamo and Niaribo’s results too. They found out that the reward system has a positive relation with creating motivation. Also Marco Fanharin et al. (2005) stated that perceiving characteristics of total compensation system (reward) has a direct and positive effect on internal motivation. Similarly Hua Hessie (2011) mentioned that arrangements of the reward system have a positive effect on employees’ character and job satisfaction and this is consistent with the results of our survey. Also our results confirm the results of Kaplan’s MA thesis (2007). In the same vein they are consistent with results of Ziar Rahman et al.’s research (2010). In their research they perceived that work reward has a positive and significant relation with job satisfaction. Our results confirm the results obtained by Chad Harry and Begium (2012). In their study they perceived the offered reward bound with respect increases employee motivation in different corporations and his/her understanding about reward.

Findings based on hypothesis two: Employee motivation does not have a positive and significant effect on employee performance. The standardized regression coefficient for this hypothesis is equal to 0.126 that is less than the related T-value equal to 1.96. It can be concluded that this hypothesis is rejected with 95% confidence. In other words, employee motivation does not have a positive and significant effect on employee performance with 95% confidence.

Our findings about this hypothesis are not consistent with results of Kuwas and Dissuic's study (2009). In their results they suggested that internal motivation has a positive and significant effect on job performance. Also Grant (2008) stated that motivation has a significant effect on employees’ productivity performance that is not consistent with our conclusion about this hypothesis. Similarly our results about this hypothesis are not consistent with those of Demercy's MA thesis (2007).

Findings based on hypothesis three: Reward management system has a positive and significant effect on employee performance (by presence of motivation as the mediating variable). The standardized regression coefficient for this hypothesis is equal to 0.486 that is more than the related T-value equal to 1.96. It can be concluded that this hypothesis is accepted with 95% confidence. In other words, reward management system has a positive and significant effect on employee performance with 95% confidence. Our findings about this hypothesis are consistent with results of Nazemi and Ghorbani's survey (2007). In their findings they suggested that the reward status such as internal or external has a positive and significant effect on employee performance. Also our findings about this hypothesis are consistent with the results of Alvani et al.’s research (2012) who found that there is a positive and significant relation among total reward, motivation and performance. Such positive relation also exists among the elements of total reward and performance. Also Asili et al. (2009) confirm our results about this hypothesis. They perceived that total reward system has a positive effect on performance. Similarly, Mujtaba and Shoayb (2010) evaluated a fair approach towards reward payment for performance management and found that reward systems have a direct effect on performance and its management. This is consistent with our findings. Also our results about this hypothesis confirm Pudham's results (2004) who found that how reward is resulted in value creation in the corporation. Similarly our findings are consistent with those of Cock's study (2008) who perceived that appropriate, effective and timely reward reinforces performance and enhances employees' productivity and spirit. In the same vein our results about this hypothesis confirm Carico and Mujtaba’s research results (2008) who stated that fairness of the
reward system and wage is led to value creation in the corporation. Our findings about this hypothesis are consistent with Fatima and Naghavi’s research (2011).

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