



Identification of Effective Factors on Accountants Motivation and Prioritization of Them by Using Fuzzy TOPSIS

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ABSTRACT

Objective: In the global market, modern organizations are faced with high levels of competition. In the wake of increasing competition in the global market, the survival of many companies that depend on human resources. **Methodology:** Performance like abilities, knowledge, skills and other abilities plays an important role in the success of the organization. Hence the human resources management system in any organization due to the continuous changes in the environment cannot be a static phenomenon. Subject of motivation of human resources issues that require special attention in the management of organizations. The aim of this study was to identify and rank the factors affecting the motivation of accountants with the first technique (FTOPSIS). in this study was used Herzberg's two-factor theory. The number of factors identified in this study is its 29 that 15 of health agents and 14 were other factors of motivating factors. **Results:** The results showed that the most important health factors affecting the motivation of accountants was respected and appreciated by management and supervision, the system of payment of salary and fringe benefits and job security. **Conclusion:** Finally 3 of factors" respect and appreciation from the management and supervision", "pay the salary and fringe benefits" and "compatibility with educational background and skills working jobs" are the highest priority at the motivation of accountants.

1. Introduction

Motivation was the basic concepts and issues in human capital management and many writings about the motivation of the scientists mentioned that they both theoretical as well as experimental, motivational techniques used by managers to improve performance, has been discussed. Motivation from the perspective of management science today is the most important field of work in organizations and, ultimately, productivity. Theorists know effective management of human resources as the key to organizational and they are very fast-moving organizations toward technology role of human as a vital and strategic organization is more and more considered. Thus, satisfaction and motivation and they are more interested in the job tenure and therefore it is important to meet the organization's objectives. One of the most important management tasks in organizations, identify talented potential employees and providing opportunities for promoting productivity growth and prosperity of those who provide. . Studies show an increase in labor productivity linked incentive. The performance is a function of ability and motivation. . Today, not without considering productivity, and without the knowledge of the factors affecting the increase, towards sustainable development. Since man has a key role in development and development is done by human, psychological and spiritual needs of the people is very important. So one of the important duties of the manager is motivation of people, people with multiple needs to achieve organizational goals. In a general classification of motives into three groups (physical, social and psychological) is placed. As part of the humanitarian needs in the workplace, such as workplace facilities (the perfect place to work, air, light, etc.) refers to the physical incentives. The category

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of the needs of people relate to the behavior of others, especially the management and eliminates many social needs say social motivations and those that satisfy spiritual needs of people with it, is the psychological motivations (Asgharpour, 2006).

The nature of the accounting profession is such that a set of tasks to be done routinely and regularly (Alvani, 2007). Due to the nature of the accounting profession is that by repeating a series of tasks, aspects of mental and specific motivational aspects are of great importance. Given the importance of motivational and psychological factors among accountants, the aim of this research is to identify and prioritize the factors that affect motivation accountants, with knowledge and manage it accountants have been in a good condition mentally and motivation.

2. Materials and methods

2.1 background research

Abzari and Sadri (2010) in a study titled "prioritize factors affecting job motivation a military base in the Analytic Hierarchy Process (AHP)", to investigate the factors affecting job motivation of employees have a military center. The sample size in this study was 135 and has been used Herzberg's two-factor theory in the questionnaire. The results show that components of job security and decent salary are in the first and second and components of the communication and policy and environment are the priorities (Akbari and Salehi, 2014).

Ansari, Dehghan Anari and Shahbazi (2011) in a study entitled "Understanding the factors that influence employee motivation Oil Products Distribution Company in the headquarters in Tehran" to review the factors influencing employee motivation. The population consisted of all personnel of the National Oil Products Distribution in every job category. The number of samples with limited sample size formula and simple random sampling were estimated 100 people. Statistical analysis showed that the study's assumptions base on significant and positive relationship with spiritual, material and organizational factors accepted and the factors of moral, material and organization has the greatest impact on increasing staff motivate. The results on the material showed that job security, amenities and privileges to have the greatest impact on increasing the motivation of employees.

Hafeznia (2008) in a study entitled "The success of the superego and its impact on the motivation and performance of the National Iranian Gas Company workers" to check the success of the superego and its impact on the motivation and performance of employees in order to increase motivation and improve the functioning of National Iranian Gas Company they paid. In this work, the success of the superego as the independent variable and the dependent variable was introduced as a motivation and performance. The population of 150 staff of National Iranian Gas Company by Cochran and through random sampling, 110 samples were selected. To achieve validity, content validity and construct validity and reliability using The obtained using Cronbach's alpha coefficient 0/941, which was confirmed. . Also in this study to test hypotheses of linear regression and Spearman correlation coefficient and structural equations model was used to determine the fitness of variables. The results show that the success of the superego by a factor of 0/885 on the motivation and performance of National Iranian Gas Company employees have a positive impact.

Gandalf (2005) in a study entitled "Explaining the process of motivation (motivators) and its relation to ethical behavior in sport and youth workers of West Azarbaijan province" to investigate the relationship between motivation process (motivators) and ethical behavior in sport and offices West Azarbaijan province's youth. The results showed that between triggers and ethical behavior of employees there is a significant and negative relationship. Therefore, the more factors to stimulate certain behavior in a person grows, so does the priority of these fits your needs falters and less adherence to ethical behavior from their shows.

Mehregan (2004) in an article entitled "Measuring employee motivation by using statistical analysis Multi-Agent" by which he was released were examined staff motivation and training issues. The main motivations identified in this study, as independent work, at rest, interpersonal relations in the workplace, a high degree of personal responsibility and good working environment.

Zimmermann (2000) In his article analyzes the factors affecting the motivation of human resources in the public sector. Their aim is to analyze the factors affecting the motivation of human resources in the public sector in order to strengthen the effectiveness of tasks and procedures. In this study, several aspects including analysis of theoretical basis, systematic and comparative analysis, qualitative and mixed methods research and analysis documents have been used.

2.2 Research questions

The research questions include the following:

2.2.1 The key questions

1 based on theoretical research, what are the factors influencing motivation of accountants?

2.2.2 Sub questions

1. What are the factors affecting on motivation of accountants from health factors?
2. What is the prioritize the factors affecting on motivation of accountants from motivated and health factors?

2.3 Research Methodology

Choose appropriate research methods depends on target and the nature and subject of research and administrative facilities (Khaki, 2005). This research is descriptive research from method in the branches and sub-fields are case study. Descriptive research includes methods that aim to describe a situation or phenomenon of interest (Ashish and Zachary, 2004).

Descriptive studies can be run only for a better understanding of the situation or to help the decision making process. descriptive research divided 6 subcategories of survey, solidarity, action research, case studies, Causal, comparative.

The purpose of this research is applied research. Applied Research are research's that theory, the rules, principles and techniques that are developed in basic research to solve real problems and to apply executive (Gay, 1992).

2.4 Methods and tools for data collection

To collect data in this research used the library and field methods. The authors of the theoretical foundations of the library and through the study of books, scientific journals and scientific databases on the Internet is used. Statistics data of this study, using field collected through questionnaires distributed among them (Chang and Lee, 1994).

In summary, in this study the following two methods and tools used for data collection:

1-library: literature and theoretical foundations of reading books in English and Farsi issues and issues related to motivation and extraction of articles can be obtained.

2-Questionnaires: to collect data in this research is questionnaire. The purpose of this questionnaire is to determine the priority factors influencing the motivation accountants.

2.5 Community and sample

In this study worker city of Yazd are working in government agencies, as the population are considered. The statistical sample of the population is selected and to calculate the sample size of the sample used Cochran formula.

2.6 Methods and tools to analyze the data

At the beginning of this study is to examine the theoretical foundations of the employee motivation. After reviewing the literature, factors affecting the motivation of accountants in the organization are identified. After identifying the factors influencing the motivation, the survey questionnaire is designed based on these factors. The questionnaire must be filled by a sample of accounting and the results is analysis by the fuzzy technique (FTOPSIS). Finally, the results of data analysis with the fuzzy technique shows the priority factors influencing the motivation accountants (Chen and Huang, 2006).

2.7 Descriptive statistics

Demographic information of respondents.

In order to better understand the nature of society in research, studies and learn more about the variables, the analysis of statistical data, it is necessary to describe this data. As well as data describing a step in the direction of the pattern recognition and the basis for explaining the relationship between the variables that are used in research. In this section, demographic characteristics of respondents described using descriptive statistics.

3. Discussion and results

3.1 Gender of respondents aluminum

Most responsive accountability in this study were male. The results show that in a sample of 27 of them was men means 90% of the total sample and women of 3 people, 10% of the total sample (Herzberg, 2003).

Table 1. Distribution of respondents according to their gender

Gender	Distribution	Percentage
men	27	90
women	3	10
Total	30	100

3.2 Age of respondents

As the data show that 30 percent of respondents in this study are in 46 to 50 years. The lowest prevalence of people aged more than 51 years that only 4% of the total sample included.

Table 2. Distribution of respondents according to their age

Percentage	Distribution	age
10	۳	25-30 year
20	۶	30-35 year
16	۵	35-40 year
20	۶	40-45 year
30	۹	45-50 year
4	۱	50-55 year
100	۳۰	Total

3.3 work experience of respondents

As the information provided shows that the highest frequency of between 11 and 20 years of experience. The lowest frequencies of between 31 and 35 work experience that only 6% of the total sample included (Gabčanová, 2011).

Table 3. Distribution of respondents according to work experience

Percentage	work experience	work experience
16	5	5-11 year
24	7	11-15 year
24	7	16-20 year
16	5	21-25 year
14	4	26-30 year
6	2	31-35 year
100	30	Total

3.4 Statistics Analysis

Prioritization of factors with the fuzzy technique (TOPSIS)

In this step of research, the factors affecting the motivation accountants are prioritized. Priority factors to be carried out 3 as follows (Jibowo, 2007).

1) prioritize health factors affecting on motivation Accountants

A) a decision tree

At this stage, decision tree is the framework in the first technique used to prioritize, to be traced. The decision tree This research is presented in the figure below.

B) Summary of responses and decision matrix

In this field of research, the results of the questionnaire responses will be summarized and then a decision matrix that is considered input TOPSIS technique, caused. Decision matrix, the matrix is composed of decision criteria and options. In this study, the option of decision, factors influencing the motivation and decision making are accountability. The decision matrix is presented in the table below. The decision matrix for triangular fuzzy numbers fall.

Respondent 30			Respondent 29			...	Respondent 3			Respondent 2			Respondent 1			Criteria Options
0.4	0.5	0.6	0.7	0.8	0.9	...	0.7	0.8	0.9	0.7	0.8	0.9	0.8	0.95	1	١
0.5	0.65	0.8	0.7	0.8	0.9	...	0.7	0.8	0.9	0.7	0.8	0.9	0.7	0.8	0.9	٢
0.4	0.5	0.6	0.8	0.95	1	...	0.4	0.5	0.6	0.5	0.65	0.8	0.5	0.65	0.8	٣
...
0.7	0.8	0.9	0.8	0.95	1	...	0.7	0.8	0.9	0.8	0.95	1	0.7	0.8	0.9	٢٧
0.4	0.5	0.6	0.8	0.95	1	...	0.8	0.95	1	0.8	0.95	1	0.8	0.95	1	٢٨
0.4	0.5	0.6	0.8	0.95	1	...	0.8	0.95	1	0.8	0.95	1	0.7	0.8	0.9	٢٩

C) the calculation of fuzzy techniques TOPSIS and prioritize options

In this step-by-step techniques based on fuzzy TOPSIS, the options are prioritized. TOPSIS fuzzy calculation results are presented in the following breakdown.

4. Conclusion

4.1 Prioritize health factors affecting motivation Accountants

In this section the results of prioritizing health factors are provided in the questionnaire. the number of agents are 15 that can be seen in the table below.

Table 4. Prioritize health factors affecting motivation Accountants

Rank	CCi	D-	D+	Factor	Row
1	0.787	0.929	0.251	Respect and appreciation from the management and supervisors	۱
2	0.786	0.960	0.261	Pay wages and benefits	۲
3	0.718	0.725	0.285	Job security	۳
5	0.713	0.921	0.371	Culture and values of the organization	۴
6	0.694	0.793	0.350	Work environment	۵
10	0.674	0.411	0.199	Relations between staff	۶
8	0.675	0.804	0.387	Reward and punishment	۷
15	0.261	0.162	0.459	Sports and recreational facilities	۸
14	0.522	0.360	0.330	Equality and equity between staff	۹
9	0.675	0.760	0.366	Participatory Management	۱۰
11	0.673	0.656	0.318	Policy of Organization	۱۱
4	0.713	0.958	0.386	The prestige of organization	۱۲
12	0.659	0.425	0.220	organizational structure	۱۳
7	0.679	0.692	0.328	According to the organization's performance	۱۴
12	0.659	0.353	0.183	The quality of relationships with supervisors	۱۵

Analysis of the results of the analysis of data

4.2 health factors

Based on the results of data analysis with the first technique, the health factors 5 factors that accountants are in the motivation of the other factors are more important, is provided in the table below.

Table 5. Most important health factors affecting the motivation of Accountants

CCi	Factor	Row
0.787	Respect and appreciation from the management and supervisors	۱
0.786	Pay wages and benefits	۲
0.718	Job security	۳
0.713	The prestige of organization	۴
0.713	Culture and values of the organization	۵

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