

Evaluation of the Impact of Change Management Dimensions on Increasing Organizational Human Resource Performance (Case Study: Central Organization of University of Applied Sciences)

Behnam Ghashangi¹., Esmail Ebrahimi²

¹Department of Business Management, Abhar Branch, Islamic Azad University, Abhar, Iran.

²Department of Geography Rural Planning, Abhar Branch, Islamic Azad University, Abhar, Iran.

Received: December 10, 2014

Accepted: March 12, 2015

ABSTRACT

The present research aims to investigate the influence of dimensions of change management on increasing human force performance. The statistical population of the present research included all employees of central organization of university of applied sciences. Questionnaire was used for data collection. The questionnaires were distributed randomly among respondents. Correlation coefficient test was used for data analysis. Findings showed that the dimensions management of demand volume for purchase, administrative process time management, expertise of supplier experts, and elimination of commercial intermediaries had relationship with employees' performance promotion but the relationship between cost of goods purchased and performance promotion was not significant. from among dimensions of organizational change, the dimension management of demand volume for purchase ($r=0.658$) had the strongest relationship with employees' performance promotion.

KEYWORDS: change management, organizational performance, human force

INTRODUCTION

In order to have successful and long-lasting organizations, managers must have special features, capabilities, long experience and socio-communicational skills. To have an effective management, we must start from targets and they should rely on human force to implement their programs (Rahnama et al, 2011). Organizations and offices are important pillars of human society. Management and leadership are important factors for survival, dynamism, development or annihilation of them. Advancements in science and technology have changed traditional form of management into dynamic modern management. Today, organizations should respond effectively to their internal and external society demands and criticisms as well as their natural and traditional duties. Along with dynamic management science and up-to-date advancements, organizations should implement useful innovations and knowledge. The influence of organizational changes requires new methods for coordination with them. Dynamic and efficient managers should be aware of organizational changes in addition to their main duties like planning, organizing and supervision. Today, not all organizations are prepared to deal with changes. Therefore, management should be flexible and compatible to changes and be able to use organizational changes programs (Sanjari, 2000). organizations are dynamic environmental processes and must be able to adapt to environmental changes. Identification and clarification of organizational problems is one of the causes for need for changes. Since economic shocks threaten organizations and competitions are also changing, a successful organization is one which expresses pre-planned responses to changes and get adapted to future changes in order to survive. Change path starts from cultural preparation and ends with concentration on working process implementation. The reasons for employees' resistance against changes are getting used to present trends, absence of occupational security feeling, economic factors, fear from income reduction, ambiguity and uncertainty about new substitute methods, and differences between new trends and previous trends. These cause negative responses and attitudes in employees. Sometimes, organizations fail to make employees aware of the necessity of change. Change is successful when leadership feels that change is necessary. And this happens when most managers accept that organizational activities are no longer acceptable. The basic question of this research is that "what are the solutions for increasing human resource performance based upon change management?"

*Corresponding Author: Esmail Ebrahimi, Department of Geography Rural Planning, Abhar Branch, Islamic Azad University, Abhar, Iran. Email: Ebrahimi634@yahoo.com

THEORETICAL LITERATURE

Organizational culture, the base of organizational change

Change in any organization (small or large) is affected by its culture. Culture in any organization involves values, norms, beliefs and symbols which are shared by members. Successfulness of any behavior or action in organization depends on its coordination with cultural values and norms of that organization (Gannon & Martin, 1994). Therefore, any organization requires change in its organizational culture. In other words, organizational culture should be prepared for change (Richard L. Daft, 2001).

The role of human resource in organizational changes

Organizational change and improvement is a novel and multidimensional cycle which is managed by humans and they should express necessary energy, power and flexibility for its implementation. Its main factor in change is behavioral maturity in individual and group level. In systematic attitude, improvement is considered as the positive resultant of changes which cause organizational survival. The term "organizational change" is a comprehensive term and refers to changes in more than one organizational dimension (human, technology and structure). Since organizations are created by humans and they have the main roles in survival of organizations, the basic factor in organizational change is human. An organization is made up of different human factors with interests, priorities, criteria and performances. Beneficiary factors in an organization are important forces for creating changes. In general, special changes or innovations involve modifications in one or several key elements. Key elements in organizational changes are:

1. organizational structure: it is a model of interactions designed by management for linking individuals' duties in order to achieve organizational goals.
2. technology: it includes knowledge, instruments and methodologies for doing work which are used by organizations to produce its products and services.
3. human force: by changing individuals in working environment we mean modification of skills, perceptions, and behaviors necessary for doing working tasks. In order to increase the influence of changes on other organizational elements like organizational structure and technology, it is necessary to change human force.
4. organizational culture: by organizational culture, we mean a set of values, commitments and common beliefs which link members of an organization (TaheriLari, 1998).

Targets of organizational change:

Organizational change is a planned planning across an organization which is administered by high rank management. It increases organizational effectiveness and health via planned change programs in organizational processes using behavioral sciences. Organizational change targets include:

1. Increase in compatibility between structure, processes, strategy, individuals and organizational culture;
2. Development of new and creative solutions in an organization;
3. Development of organizational ability to innovate (Alvani, 2006).

Targets and advantages of change in public organizations

Four main targets for changing public organizations include:

1. Establishment of simple and efficient public management
2. Establishment of a kind of public management which allows employees to be more creative
3. Establishment of free and certain public management
4. Establishment of public management with high efficiency in service-providing

Another researcher believes that public management change targets include: freedom of public departments from bureaucratic limitations, increase in responsiveness, re-structuring, higher freedom of action and making public activities more transparent. In general, it can be said that improvement of public organizations performance is the ultimate goal of change programs (Samadi, 2001).

Improvement of organization and management

Management improvement has a background equal to management science. "Fredrick Taylor" also emphasized on necessity for management training. Organizational improvement is a new subject but there are common points in these two concepts. Management improvement is a set of attempts aimed at improving managers' efficiency. In organizational improvement, training is used as an important tool. Both concepts have some preconditions like: organizational members' efficiency depends highly on training but there are some differences between organizational improvement and management improvement. These differences include targets, tools and methods, role and conditions of executors and execution issues.

Performance evaluation

Performance evaluation is a subject which has received a lot of attention by researchers and many models and frameworks have been presented for this subject. Organizations believe that human resource is the main resource of creating value within organization and is a means of achieving competitive advantage. Therefore, it seems necessary to maintain valuable human resource and try to increase productivity at work by means of rewarding and other mechanisms. It is a process by which a manager evaluates an employee's working performance via comparing with pre-defined criteria and registers the results and provides organizational human resource with the results (Haji Karimi, Rangriz, 1999).

The present era is the age of unpredictable changes and companies are confronted with difficult unprecedented competitive conditions because of the presence of factors like unclear borders of markets, fragmentation of markets, short products life cycles, rapid changes in customers' purchase patterns and awareness of customers (Tavanazadeh and Aligholi, 2014). Today, organizations pay especial attention to their employees because experience has it that as material or the very external needs is satisfied, psychological and physiologic needs are also satisfied. Dissatisfaction of these needs reduces efficiency and effectiveness of employees considerably and makes employees alienated with their work and show lower tendency to do work (Khoshpanjeh et al, 2012). Continuous improvement of organizational performance brings synergy and this in part can lead to organizational development and excellence. Governments and organizations and institutes try to reach this end. Persistent performance improvement will not be reached without investigation of challenges ahead of organizations and acquisition of feedback and awareness of level of implementation of policies and issues which need to be enhanced. All aforementioned items are not possible without measurement and evaluation (Ghanbari, 2011).

Performance evaluation and measurement provides necessary feedback in the following items:

1. when we investigate enhancement towards preplanned targets we can specify whether the provided policies have been implemented successfully or not.
2. when we measure targeted organizational results and evaluation of customers' and employees' satisfaction we can specify whether policies have been prepared correctly or not.
3. performance evaluation and measurement makes it possible to identify the fields which require more attention by management and contributes to identification of opportunities and limitations.
4. performance evaluation provides managers with information for decision-making. This is because a large part of information necessary for managerial decision-making is provided by means of measurement and evaluation of performance system.

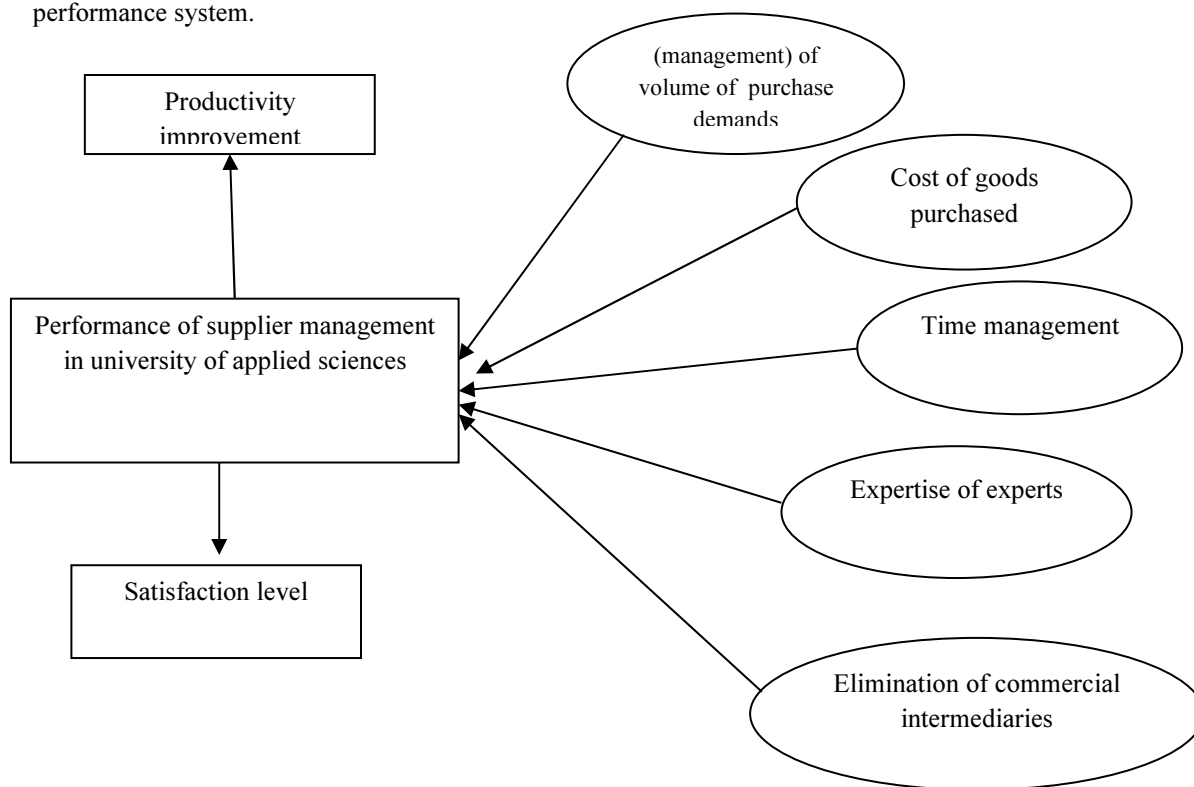


Figure 1: research conceptual model

Research hypothesis

1. (management) volume of demand for purchase influences employees' performance.
2. cost of goods purchased influences employees' performance improvement.
3. (management) administrative process time influences employees' performance improvement.
4. Expertise of supplier experts influences employees' performance improvement.
5. Elimination of commercial intermediaries (distributors, wholesalers, retailers and shops) influences employees' performance improvement.

MATERIALS AND METHODS

Questionnaire

In the present research, data were collected by means of questionnaire. Questions were based on 5-point Likert scale (1=completely disagree to 5=completely agree). 25 questionnaires were distributed among statistical population members as pretest and for measurement of reliability. In order to measure reliability coefficient, Cronbach's alpha was used. The results of reliability evaluation are summarized in table 1.

Table 1: questionnaire reliability

Cronbach's alpha coefficient	variable
0.794	performance
0.782	Management of organizational change

As it can be seen in table 1, Cronbach's alpha for both variables is above 0.7. this indicates that the questionnaire is appropriate enough and can be distributed among members.

The sample

Statistical population of the present research included all employees of supplier department in the central organization of Tehran University of applied sciences. They were 540 in number. Considering the limited size of the statistical population, sample size was calculated by means of the following formula:

$$n = \frac{N \cdot Z_{\alpha}^2 \cdot p \cdot (1-p)}{e^2(N-1) + Z_{\alpha}^2 \cdot p \cdot (1-p)} = \frac{540 \cdot 1.96^2 \cdot 0.5 \cdot 0.5}{(0.05^2 \cdot 539) + (1.96^2 \cdot 0.5 \cdot 0.5)} = 224.71 \sim 225$$

in the formula above, N= population size (540), e is the precision of estimation=0.05, alpha=0.05, and p is the probability of success=0.5.

in the present research, simple random sampling method was used.

The questionnaires were distributed among employees in 3 weeks. Table 2 depicts demographic information of respondents.

Table 2: demographic variables

Frequency percentage	frequency	dimensions	variable
55.5	126	female	gender
43.2	98	male	
1.3	3	Without response	
32.6	74	Below 30	age
46.3	105	30-40	
21.1	48	above 40	
25.1	57	Associate's degree	education
44.5	101	bachelor	
26.9	61	Master degree	
3.5	8	PhD	
7.9	18	Below 5 years	Working experience
27.8	63	5-10 years	
31.3	71	11-15 years	
18.5	42	16-20 years	
14.5	33	Above 20 years	

Data analysis and research hypotheses test

Kolmogrov-Smearov test

Kolmogrov-Smearov test was used to investigate normality of data distribution. Results of this test are summarized in table 3.

result	Significance level	k.s statistic	variable
normal	0.485	0.837	Management of volume of demand for purchase
normal	0.593	0.770	cost of goods purchased
normal	0.640	0.742	Management of administrative process time
normal	0.841	0.617	Expertise of supplier experts
normal	0.766	0.666	Elimination of commercial intermediaries
normal	0.473	0.845	performance

Correlation coefficient test

Correlation coefficient test was used to analyze data and test the hypotheses and investigate relationship between the two dimensions of organizational change management and employees' performance. Correlation analysis is a statistical means for determination of the type and intensity of relationship between two variables. correlation coefficient is a criterion for determination of correlation between two variables.

Significance of correlation coefficient means whether the calculated correlation between two variables can be considered as random or real. Therefore, the following hypothesis must be tested.

H_0 : $p=0$ there is no significant correlation

H_1 : $p \neq 0$ there is significant correlation

SPSS22 was used for analyses. We use correlation coefficient test in order to test research hypotheses.

Hypothesis 1: management of demand volume for purchase has a direct relationship with employees' performance.

Results of correlation coefficient test for the second hypothesis have been presented in table 4.

Table 4: correlation coefficient for the first hypothesis

variable	Correlation coefficient	sig	result
---Management of volume of purchase demand performance	0.658	0.000	presence of significant relationship

Considering table 4, significance level of the test is equal to 0.000. this value is smaller than 0.05. therefore, it can be said that there is a significant relationship between the two variables: management of volume of demand for purchase and improvement of employees' performance. Considering the positive value of correlation coefficient, it can be said that there is a positive correlation between the two variables.

Hypothesis 2: cost of goods purchased has a direct relationship with improvement of employees' performance.

Results of correlation coefficient test for second hypothesis have been summarized in table 5.

Table 5: correlation coefficient of the second hypothesis

variable	Correlation coefficient	sig	result
performance----cost of goods purchased	0.106	0.379	Absence of significant relationship

Considering table 5, significance level of the test is equal to 0.379 and this value is smaller than 0.05. Therefore, H_0 is not rejected and it can be said (with 95% of certainty) that cost of goods purchased does not have any significant relationship with improvement of employees' performance in supplier department of university of applied sciences.

Hypothesis 3: management of administrative process time has a direct relationship with improvement of employees' performance.

Results of correlation coefficient test for the third hypothesis have been summarized in table 6.

Table 6: correlation coefficient test for the third hypothesis

variable	Correlation coefficient	sig	result		
---Management of administrative process time performance	0.593	0.000	presence	of	significant relationship

Considering table 6, significance level of the test is 0.000 and this value is smaller than 0.05, it can be concluded that there is a significant relationship between administrative process time management and performance enhancement. Considering the positive value of correlation coefficient, it can be said that there is a positive correlation between the two variables.

Hypothesis 4: expertise of supplier experts has a direct relationship with improvement of employees' performance.

Results of correlation coefficient test for the fourth hypothesis have been summarized in table 7.

Table 7: correlation coefficient test for the fourth hypothesis

variable	Correlation coefficient	sig	result		
performance---Expertise of supplier experts	0.648	0.000	presence	of	significant relationship

Considering the above table, it can be said that significance level of the test is equal to 0.000 and this value is smaller than 0.05. therefore, it can be said that there is a significant relationship between the two variables expertise of supplier experts and performance improvement. Considering the positive value of correlation coefficient, it can be said that there is a positive correlation between the two variables.

Hypothesis 5: elimination of commercial intermediaries (distributors, wholesalers, retailers and shops) has a direct relationship with employees' performance improvement. Results of the correlation test for the fifth hypothesis have been summarized in table 8.

Table 8: correlation coefficient test for the fifth hypothesis

variable	Correlation coefficient	sig	result		
---Elimination of commercial intermediaries performance	0.531	0.000	presence	of	significant relationship

Considering the table 8, it can be said that significance level of the test is equal to 0.000 and this value is smaller than 0.05. therefore, it can be said that there is a significant relationship between the two variables of elimination of commercial intermediaries and improvement of performance. Considering the positive value of the correlation test, it can be said that there is a positive correlation between the two variables. table 9 summarizes the results of research hypotheses tests.

Table 9: summary of the results of research hypotheses tests

hypothesis	Correlation coefficient	Significance number	result
Management of demand for purchase—performance improvement	0.658	0.000	supported
performance improvement---cost of goods purchased	0.106	0.379	Not supported
Management of administrative process time---performance improvement	0.593	0.000	supported
Expertise of supplier experts---performance improvement	0.648	0.000	supported
Elimination of commercial intermediaries---performance improvement	0.531	0.000	supported

DISCUSSION AND CONCLUSION

The present research aimed to investigate the influence of dimensions of change management on increasing human resource performance. The research was conducted in central organization of university of applied sciences. Correlation coefficient test was used for data analysis. Findings showed that management of volume of demand for purchase, management of administrative process time, expertise of supplier experts, and elimination of commercial intermediaries have direct relationship with improvement of employees' performance. However, the relationship

between cost of goods purchased and performance improvement was not significant. Management of volume of demand for purchase ($r=-0.658$) had the strongest relationship with employees' performance improvement. Considering the results of the research, the following recommendations are presented to improve employees' performance.

REFERENCES

- Ghanbari, Vahid (2011), systems for employees' performance evaluation and promotion, student site.
- Ganon, Martin. Understanding Global Cultures. Sage. Thousand Oaks, 1994
- Khoshpanjeh, Mahsa., Rahnama, Afshin., Seyyed Kalan, Mir Mohammad., *Hoseinpour, Ali.*, 2012. "Evaluating the Role of Spiritual Leadership Dimensions in Employee Empowerment and their Effect on Workforce Productivity" *Journal of Basic and Applied Scientific Research*, 2(8), 7681-7689.
- Rahnama, Afshin., Mousavian, Seyed Javad., Alaei, Abbas., Salimi Maghvan, Tavakkol., 2011. "THE SURVEY OF RELATIONSHIP BETWEEN CREATIVITY OF STAFFS AND ORGANIZATIONAL EFFECTIVENESS" *Australian Journal of Business and Management Research*, Vol.1 No.6 [97-104].
- Richard L Daft, "theory and design of organization, translated by Parsiyan, cultural studies office press, 2002
- Samadi, Abbas (2001). Administrative change, why? With what aim? And how? *Quarterly of administrative change*: seventh year: number 33.
- Sanjari, Ahmad Reza (2000), teaching change factors: two combinational models of theory and action, *Tadbir monthly*, number 104.
- Tavanazadeh, Somayeh., Aligholi, Mansoureh., (2014). "Investigation of Relationship between Service Quality Dimensions and Customers' Satisfaction (case study: Saderat Bank Branches in Tehran City, Iran)" *Mediterranean Journal of Social Sciences*, Vol 5 No 20, 3116-3120.