

## **IMPACT OF SUGGESTIONS SYSTEM ON THE SPEED OF ORGANIZATIONAL CHANGES (CASE STUDY: GREEN PIPE INDUSTRIES IN ISFAHAN PROVINCE)**

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### **Abstract**

Problems related to changes have been increased along with ever-increasing changes in the surrounding environment as well as inside of the organizations. On the other side, speed of implementing changes is an important factor in measuring effectiveness and efficiency of changes. Therefore, it has been tried in this survey to apply suggestions system as a tool to accelerate the change process. Obtained results in the framework of Kurt Lewin's change management model reveal suggestions system could act as a facilitating factor in change management and increases change speed in all three phases of unfreezing, changing and refreezing. It is noteworthy that respondents' demographic factors don't create a significant difference in responses.

**KEYWORDS:** SUGGESTIONS SYSTEM, UNFREEZING, CHANGING, REFREEZING, KURT LEWIN'S CHANGE MANAGEMENT

### **1. Introduction**

The modern world is the world of changes, threats and opportunities. Technology and information progress in the modern world is to the extent that it is called the information age (Keohane & Nye, 1998). Managers should have sufficient power and strength to confront changes under such conditions that they are faced with immediate changes in all affairs (Hardy, 1996).

Change speed is one of the important issues in change, because newer changes are always occurred. On the other hand, there must be speed and superiority in the scope of changes to obtain competitive advantage (Kettinger & Grover, 1995). Problems of encountering with change process are one of the issues that could decrease change speed and change quality and employees' resistance is the most important of them (Dent & Goldberg, 1999). Managers and scholars in management field have represented several solutions to decrease the impact of such

problems. It has been tried in this survey to study the impact of suggestions system on decreasing problems due to change and finally change speed increase.

## **2. Change**

Various definitions have been proposed for change but the common ground of all these definitions is moving from one status towards another status. This movement must be purposeful and be managed to utilize all potential benefits of change (Raineri, 2011).

Change leadership is a model that intends to prepare employees and the organization for learning and permanent growth using a combination of leadership styles. This style is different from traditional leadership model which considers controlling of employees by managers (Anderson & Anderson, 2011). Change leaders are those who think about the future, know the destination, have self-confidence to create change in themselves and also are patient to help others or direct them in creating change (Larry, 2011).

An efficient manager uses different styles and skills under various conditions. When change speed is increased and affects the organization highly, the required skills to direct the organization become increasingly important in the process of change. Change leaders need to identify appropriate points and incorrect cases of their organization and other organizations (Herold et al, 2008).

### *1.2 Kurt Lewin's change management*

Numerous models have been represented for change in organizations and managing them. The most famous model among change management models is related to Kurt Lewin. This model is one of the most fundamental models about change that was formed by Kurt Lewin, the well known social psychologist. He predicted three phases in his model for planned changes which describe how to begin, manage and stabilize a change. According to him three phases of change are unfreezing, changing or rehearsing the new behavior and stabilization of the new behavior or refreezing (Burnes, 2004). Many researchers conduct their studies based on this model. Kurt Lewin's model is the basis of practical researches in the present survey.

## **3. Participatory management and suggestions system**

Information sharing is needed in order to have access to an effective and efficient hierarchical structure (Timon et al, 2011). Employees' participation was occurred in its primary forms by separating ownership from management and changing the organizations towards management

orientation and its more advanced forms were appeared along with advancement of techniques and enhancement of organizational and management studies. Two classes of preconditions are needed to establish healthy participation. First are national (macro) preconditions that necessitate supplying suitable political, social and cultural substructures and then are organizational preconditions. According to this precondition organizations must attract individuals and employees' attention towards the company in decision-makings and planning (Cornforth, 1995).

There are several methods to create participatory management climate in the organizations. Four major methods in this regard are information division, evaluation of the feedback, nominal group method and using suggestions systems. Using a specific tool depends on type of change in the organization and organizational conditions. Applying suggestions system in dynamic and active organizations has a high effectiveness (Miller & Munro, 2004).

History of suggestions system predates to the period after the middle ages. Documents of the period before this are related to the 1700's in Sweden, Italy, England and Japan. Suggestion is a new plan or idea to achieve defined purposes in suggestions system. Indeed any new idea and thought that could be led to create a positive change, improve methods, increase quality and production, decrease expenses and enhance employees' spirit is regarded as a suggestion (Chang, 2010).

### ***6. Resaearch problem***

It is not possible to find a starting point for change in management history, because change management has been existed since the primary days. But today it has more importance and has attracted many scholars' attention to itself as speed of changes has been increased more than the past. Problems due to facing with new conditions have been increased simultaneously with increasing of changes and their variety. Employees' resistance, nonexistence of appropriate substructures, lack of time, lack of expenses and the like are reasons of such problems. All these issues decrease change speed and reduce effectiveness and efficiency of change.

Therefore helpful methods to confront problems due to increasing changes and increased speed of change are highly needed which enhance change efficiency. Another aspect of this survey that is important is losing work spirit, confidence and loyalty to the organization under changing conditions which would have adverse impacts on the organization's purpose.

### **7 . Research objectives**

Primary objective: determining the impact of using suggestions system on increased speed of organizational changes

Secondary objectives

- 1- Determining the impact of using suggestions system on the increased speed in unfreezing phase
- 2- Determining the impact of using suggestions system on the increased speed in changing phase
- 3- Determining the impact of using suggestions system on the increased speed in refreezing phase
- 4- Determining the difference among respondents' views about the impact of suggestions system on the increased speed in three phases of Kurt Lewin's change management

### **8 . Research questions**

Primary question: could suggestions system increase change speed?

Secondary questions:

- 1- Could suggestions system increase change speed in unfreezing phase?
- 2- Could suggestions system increase change speed in changing phase?
- 3- Could suggestions system increase change speed in refreezing phase?
- 4- Is there any difference among respondents' views about the impact of suggestions system on the increased speed in three phases of Kurt Lewin's change management?

### **9 . Research methodology**

This survey is descriptive-field that has been conducted among all employees of eight pipe line factories in Isfahan province in 2012. The statistical population was equal to 3750 persons that volume of the statistical sample was determined equal to 213 persons using a sample consisted of 30 persons.

Historical study and questionnaire were used to collect data. Researcher self-made questionnaire was based on Likert five-option scale which studied three components of Kurt Lewin's change management (unfreezing, changing and refreezing). The questionnaire consisted of 48 questions and questions were divided based on research questions.

Ideas of six experts in the field of organizational culture were used to study validity of the questionnaire. Cronbach alpha was used to measure its reliability that was equal to 0.85 and showed high reliability of measurement.

## 10 . Results of the survey

Research findings are according to research questions and result of statistical analyses obtained through questionnaires distributed among employees of green pipe plants in Isfahan province.

Question 1: Could suggestions system increase change speed in unfreezing phase?

Table 1- One variable t-test related to unfreezing phase

Explaining the component	X	S	CV	t
Unfreezing phase	3.87	0.535	13.82	15.16

Given to the observed t at error level 5% and that the obtained mean (3.87) is higher than the assumed mean (3) it could be concluded that effectiveness degree of suggestions system on speed increase in unfreezing phase is higher than the average level.

Question 2: Could suggestions system increase change speed in changing phase?

Table 2- one variable t-test related to change phase

Explaining the component	X	S	CV	t
Changing phase	3.11	0.640	20.57	1.60

Given to the observed t at error level 5% and that the obtained mean (3.11) is higher than the assumed mean (3) it could be concluded that effectiveness degree of suggestions system on speed increase in changing phase is higher than the average level.

Question 3: Could suggestions system increase change speed in refreezing phase?

Table 3- One variable t-test related to refreezing phase

Explaining the component	X	S	CV	t
Refreezing phase	3.81	0.537	14.09	14.13

Given to the observed t at error level 5% and that the obtained mean (3.81) is higher than the assumed mean (3) it could be concluded that effectiveness degree of suggestions system on speed increase in unfreezing phase is higher than the average level.

Question 4: Is there any difference among respondents' views about the impact of suggestions system on the increased speed in three phases of Kurt Lewin's change management?

Table 4- Mean comparison of scores of change management components given to employees' education level

Components	Diploma and lower		Associate		B.A and higher		F	P
	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$		
Unfreezing	0.564	3.75	0.577	3.89	0.487	3.96	1.51	0.226
Changing	0.743	3.11	0.533	3.16	0.597	3.08	0.069	0.933
Refreezing	0.557	3.87	0.531	3.82	0.533	3.77	0.302	0.740

Given to table (4) the observed F at level  $P \leq 0.05$  is not significant. Therefore there is no difference among employees' views given to their education degree.

Table 5- Mean comparison of scores of change management components given to employees' gender

Components	Male		Female		t	P
	S	$\bar{X}$	S	$\bar{X}$		
Unfreezing	0.513	3.88	0.705	3.80	0.469	0.640
Changing	0.655	3.11	0.537	3.05	0.316	0.753
Refreezing	0.495	3.85	0.771	3.55	1.70	0.092

Given to table (5) the observed t at level  $P \leq 0.05$  is not significant. Therefore there is no difference among employees' views in terms of gender.

Table 6- Mean comparison and standard deviation of scores of change management components given to employees' work experience

Components	Less than 10 years		10-20 years		More than 20 years		F	P
	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$		
Unfreezing	0.548	3.96	0.488	3.75	0.533	3.81	1.08	0.342
Changing	0.530	3.05	0.866	3.06	0.672	3.18	0.366	0.695
Refreezing	0.560	3.76	0.368	3.68	0.550	3.92	1.25	0.291

Given that the observed F at level  $P \leq 0.05$  is not significant for components there is no difference among employees' views given to their work experience.

Table 7- Mean comparison and standard deviation of effective factors on change speed increase in using suggestions system

Components	$\bar{X}$	S
Unfreezing	3.87	0.535
Changing	3.11	0.640
Refreezing	3.81	0.537

$$t^2=254$$

$$F= 61.25$$

$$p= 0.000$$

According to table (7) the observed F at level  $P \leq 0.05$  is significant. Therefore the three above components are not equal in determining the impact of suggestions system on change management. The highest obtained amount is related to unfreezing phase and the lowest amount is related to changing phase.

## 11. Analysis and conclusion

Given to the obtained data it could be concluded that suggestions system could increase change speed in all three phases. In unfreezing phase it could increase change speed more than the average level given to the observed t and its mean (3.87). Fifteen questions in the questionnaire are related to this phase that creating innovation and creativity beside suggestions system have had the highest mean among these questions. Fairbank and William's studies (2003) confirm this

issue that employees' suggestions system is an effective method to achieve their creative ideas. Dijk and Ende (2002) too designed and tested a model called creativity transformation regarding conversion of ideas obtained from suggestions system into applied ideas. Thus we can show it would be possible to find solutions and better methods rapidly to begin changes through suggestions system.

Suggestions system in the second phase of Kurt Lewin's change management was effective on the increased speed of changing phase with its mean equal to 3.11 higher than the average level. Among the questions related to this phase obtaining information about employees' readiness to implement change through suggestions system has a higher importance. Other conducted studies in this field reveal that readiness for change could be measured through resistance against change and attitudes and purposes could be described in terms of beliefs of the members in the organization (Armenakis & Harris, 1993). Also McNabb and Sepic (1995) introduced organizational culture and climate and total quality management as factors to measure change.

The final phase of Kurt Lewin's change management is related to refreezing. Suggestions system increases speed of changes higher than the average level given to results of statistical analyses. In this section the question related to the increased speed of change stabilization through receiving feedback from employees had the highest score.

Feedback is returning of the communication message in which the receiver shows reaction to the sender's message intentionally or unintentionally. These messages enable the sender to evaluate his communication status with his addressees. Impact of feedback on decision makings has been proved very effective in a research entitled evidences regarding the impact of feedback on decision-making so that efficiency and effectiveness of a decision depends on providing feedback possibilities even if all necessities of a proper decision are observed (Zeelenberg & Beattie, 2002). It is noteworthy that establishment of a feedback system is implemented through suggestions system.

The fourth question of the survey is related to the impact of demographic characteristics that are related to education level, gender and work experience in the questionnaire. These characteristics don't have a considerable impact on manner of responding to research questions and haven't made a significant difference.



### **Research limitations**

- 1- Statistical population of this survey is limited to employees of pipe line plants in 2012 and thus generalizing its results to other organizations must be conducted cautiously.
- 2- Kurt Lewin's model has been used in this survey to study change phases and therefore interpreting the results is only possible in the framework of this model.

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