

## THE INFLUENTIAL FACTORS IN ORGANIZATIONAL AGILITY OF EMPLOYEES OF SOUTH OIL COMPANY

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### ABSTRACT

The main objective of the present research was to determine the degree and the influential factors of organizational agility among the employees of South Oil Company of Iran. Based on the literature review, seven factors which had the most effects on organizational agility in the governmental unit had been chosen and lined up according to their significance. These factors include: employee flexibility, employee responding, organizational change speed, employee speed in reacting to environmental changes, little integrity and complexity of organizational structure, mutual employee cooperation and their managerial functions. This research was applying research. The population of the present research was consisted of all the employees of National Oil Company of Southern Iran which includes 250 people. Using Crecy & Morgan Table the number of sample was determined as 150 participants. Two hundred questionnaires were distributed among the population sample and by using the structural equations model and the AMOS.18 software, the results were collected. The results of this research showed that all the six factors had a positive and significant effect on employees' organizational agility. And among the studied factors, employees' managerial functions had the most influence on organizational agility of employees of National South Oil Company of Khuzestan Province (Iran).

**Keywords:** Agility, Organizational Agility, National South Oil Company

### INTRODUCTION

The Influential Factors in Organizational Agility of Employees of South Oil Company Today the paradigm of agility has been taken into consideration in order to adapt and conform to the organization and also to react quickly to the needs of market and customers. Through agile making of the employees and on the wake of it, the organization can struggle against its powerful competitors in business. Agile competitor accelerates change and creates new markets and customers that except knowing them from methods in which the needs of customers and markets appear. Although agility allows organizations to react much quicker than the past, but the strength of their agile competitor is in prediction of customer and market's needs before the operation and management in creation of new market through constant innovation. Agility is a comprehensive reaction to a new competition environment which is formed by the forces that have reduced the control of mass production system (Gunasekaran *et al.*, 2001). Sherehiy *et al.*, (2007) state that in the present and future organizations there was no place for obedient employees and the ones who do the permanent and monotonous works. But the organization was a place for innovative and creative people who can react appropriately to the changes. This makes studying the degree of employee agility and also the factors and the organizational and non-organizational hardships influencing agility in order to face the changing environment more important than ever. Findings of a research by Yaghoubi *et al.*, (2012) in an article under the title of "Studying the Effect of Stabilization of Electronics Government on Organizational Agility: A Case Study: Ministry of Science, Research and Technology" showed that stabilization of electronics government, had a direct relationship with increase in organizational agility from the four dimensions of flexibility, speed of action, reacting and competency. Ghasemi (2009) in his research studied the factors effective in employee agility in governmental section. The results indicated that in general employees had a rather desirable condition in their agility. By and large, he comprehended that factors such as a positive attitude toward changes and new technologies, new

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inventions and information systems, reaction to the environmental changes and customers’ tastes and human relations had had an effect on employee agility.

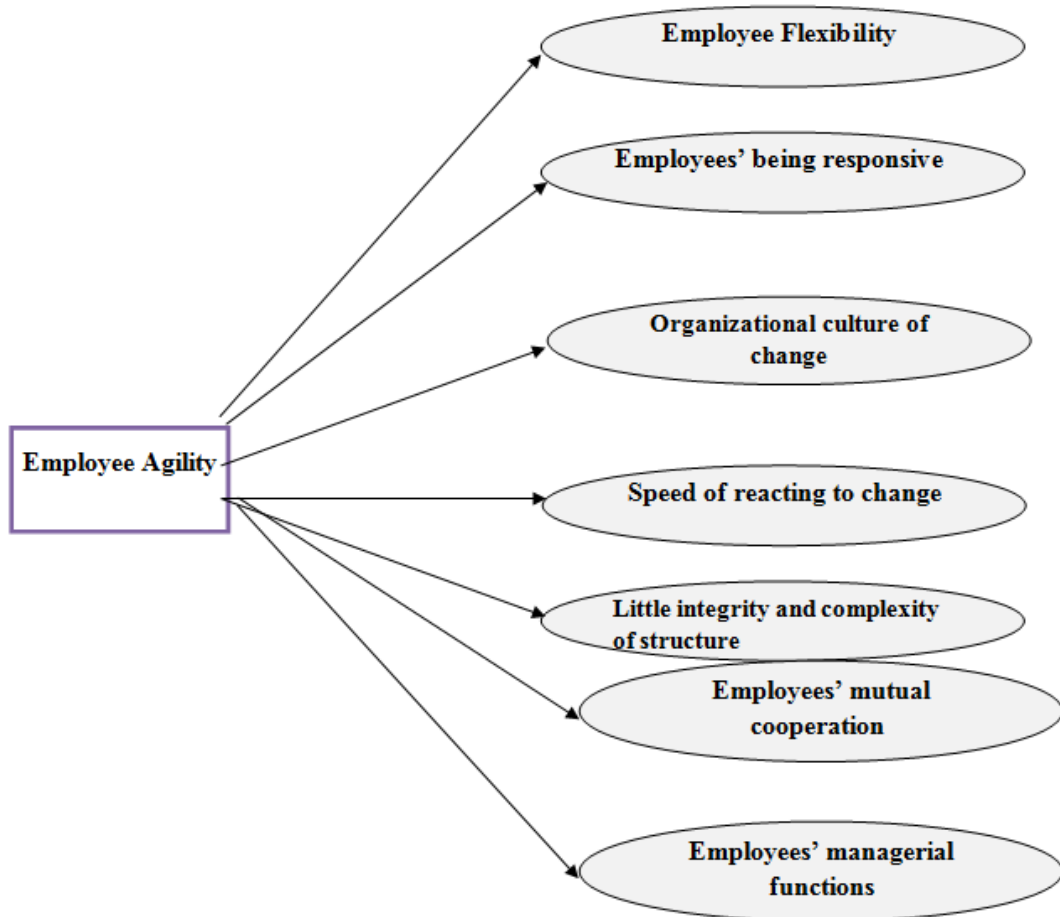
**MATERIALS AND METHODS**

**Research Methodology**

The present research is operationally-oriented regarding its objective, and regarding the collection of data, the library method was used to collect the literature and the field method was used to collect the research data. The population of the current research was all the employees working at national oil company of South of Iran with 150 people. By using the cluster method and Crecy & Morgan Table, 150 people were chosen for sampling. Data analysis was done in two descriptive and analytic parts. Descriptive statistics was used to describe the demographic information of the population. In the analytical part also because the studied model was analyzed using the structural equations model, the AMOS software was utilized in order to check the affecting degree of the factors influencing agility of employees of Iran’s South Oil Company.

**Conceptual Model of the Research**

According to the studies in the literature review, we can propose the following conceptual model:



**Figure 1: Conceptual Model of Research**

**Research Hypotheses**

1. Employees’ flexibility has a positive significant effect on agility of employees of South Oil Company.
2. Employees’ responsiveness has a positive significant effect on agility of employees of South Oil Company.

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3. Organizational culture change has a positive significant effect on agility of employees of South Oil Company.
4. The speed of reacting to environmental changes has a positive significant effect on agility of employees of South Oil Company.
5. Little integrity and complexity of organizational structure has a positive significant effect on agility of employees of South Oil Company.
6. Employees’ mutual cooperation has a positive significant effect on agility of employees of South Oil Company.
7. Managerial employees’ functions have a positive significant effect on agility of employees of South Oil Company.
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**RESULTS AND DISCUSSION**

**Results**

Results indicated that more than 35 % of the employees are males. Also 95 % of them have been married. More than 64 % of the employees being studied in this research had master degrees and above master degrees. Most of them (40.5 %) had from 10 to 15 years of experience and only 4.1 % of them had less than 5 years of experience which certifies that the studied employees had high experiences and the results would be more reliable.

**Table 1: Respondent Frequency Distribution Based on Their Gender**

Gender (%)	Frequency	Marital Status	Frequency (%)
Female	5	Single	16.5
Male	95	Married	83.5

**Table 2: Respondent Frequency Distribution Based on Their Degree and Work Experience**

Degree	Frequency(% age)	Experience	Frequency(% age)
Under Diploma	18.2	Under 5 years	4.1
Diploma & above Diploma	17.4	5-10 years	23.1
B. A.	53.7	10-15 years	40.5
M. A. & Ph. D.	10.7	15-20 years	14
		Over 20 years	18.2

**Table 3: Studying Normality of Variables using Kolmogorov-Smirnoff Test**

Variables	Kolmogorov-Smirnoff	Sig	Status	Test type
Employee Flexibility	1.32	0/061	Normal	Parametric
Employee Responsiveness	3/45	0/086	Normal	Parametric
Employee Culture Change	1.06	0.209	Normal	Parametric
Employee Reaction Speed	1.01	0.255	Normal	Parametric
Integration and Complexity	0.99	0.279	Normal	Parametric
Mutual cooperation	1.31	0.64	Normal	Parametric
Managerial Functions	1.19	0.11	Normal	Parametric
Organizational Agility	0.82	0.50	Normal	Parametric

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Sig amount of all the research variables had been less than 5% thus the normality hypothesis of variables was accepted and as a result one can make use of parametric tests to study the research hypotheses. First among every two variables (according to conceptual model of research) Pearson correlation statistics test was done by SPSS.20 and only if a relationship exists and is significant, then using the equation structures method, with the help of AMOS 18 causal relationship of these variables will be examined. In order to examine the non-existence of lack of multicollinearity among the independent variables and also relationship between the variables in general the Pearson correlation test was used. The total results of the mentioned test are presented in Table 4.

**Table 4: The Results of Correlations among Research Variables**

	Emplo ye Flexibil ity	Employee Responsive ness	Chan ge Cultu re	Reacti ng Speed	Integrat ion & Flexibili ty	Mutual Cooperat ion	Manage rial Function s	Organizati onal Agility
Employee Flexibility	1							
Employee Responsive ness	0.40	1						
Change Culture	0.33	0.36	1					
Reacting Speed	0.41	0.45	0.44	1				
Integration & Flexibility	0.46	0.48	0.47	0.48	1			
Mutual Cooperatio n	0.42	0.31	0.30	0.34	0.33	1		
Managerial Functions	0.31	0.470.37	0.30	0.40	0.44	0.37	1	
Organizatio nal Agility	0.74	0.740.84	0.69	0.84	0.83	0.84	.069	1

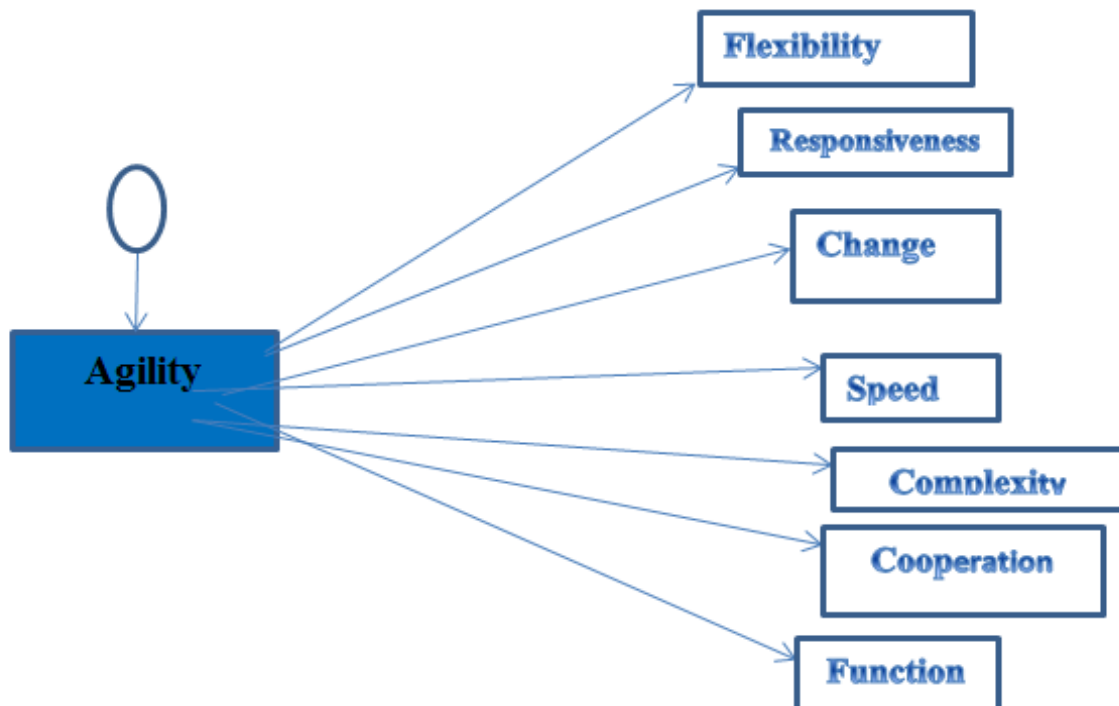
Based on the overall correlation results and also their level of significance which all of them were confirmed at the significance level of 0.99 it can be stated that among the existing variables, correlation was at the desirable level and the desired domain which provided the possibility of further analysis. Considering the critical values of all the variables it became clear that all the questionnaire had been certified because of lacking critical values related to factor loadings range from rejection and thus none of the questions about the variables are omitted. On one side, due to the factor loadings of each index, it is clear that there is an idealistic factorial structure for these variables. After conducting a factorial analysis on the research variables, we investigate fitting indices of the confirmatory factorial analysis model of the research. In this research RMR, GFI, AGFI, IFI, CFI, and  $\chi^2/df$  were used in order to check the fitness of the model. In Table 5, the permitted and acceptable range and also the calculated values of each of above mentioned indices for the variables had been presented.

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**Table 5: The Confirmatory Factor Model Fit Indices**

Index	Acronym	Index Persian Equivalent	Acceptable range	Calculated in the present research
Comparative (relative)	NFI	Softened Fitness Index	>0/80	0/952
	CFI	Comparative Index Fitness	>0/90	0/945
	IFI	Increasing Fitness Index	>0/90	0/923
	RFI	Relative Fitness Index	>0/90	0/902
Absolute	GFI	Good Fitness Index	near1	0/941
	AGFI	Adjusted Fitness Index	near1	0/871
	RMR	Root Mean Residual	Near0	0/088
	$\chi^2/df$	-	>3	2/853

After confirmatory factor fitness model, in this section, the structural model which indicated the relationship between the latent variables, were presented. The structural model of the research has been presented using AMOS 18 software. Figures2 and 3 show the overall standard coefficient and the critical values relating to the research hypotheses respectively. Of course the significant factor values and the critical values should be taken into consideration.



**Figure 2: Standardized coefficients research hypotheses**

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	Estimate	S.E.	C.R.	P	Label
chaboki <--- eneetaf	1.00	.00	63931.21	***	par_1
chaboki <--- pasokhgoi	1.00	.00	86762.61	***	par_2
chaboki <--- taghir	1.00	.00	113613.41	***	par_3
chaboki <--- soraat	1.00	.00	93249.70	***	par_4
chaboki <--- pichidegi	1.00	.00	109402.37	***	par_5
chaboki <--- hamkari	1.00	.00	103388.10	***	par_6
chaboki <--- karkard	1.00	.00	168472.78	***	par_7

**Standardized Regression Weights: (Group number 1 - Default model)**

	Estimate
chaboki <--- eneetaf	.22
chaboki <--- pasokhgoi	.30
chaboki <--- taghir	.39
chaboki <--- soraat	.32
chaboki <--- pichidegi	.38
chaboki <--- hamkari	.36
chaboki <--- karkard	.58

**Figure 3: The Critical Values of the Factor Loadings of the Research Hypotheses**

Considering critical value related to research hypotheses it was clear that all the mentioned hypotheses whose critical values had been out of hypotheses rejection range (between -1.96-1.96), had been confirmed and standard coefficient of these hypotheses indicated that managerial functions of these employees with impact factor coefficient of 0.58 had had the highest impact on organizational agility of National South Oil Company.

**RESULTS AND DISCUSSION**

**Table 6: The Results of the Research Hypothesis**

Hypothesis	Results
Employees’ flexibility has a positive significant effect on agility of employees of South Oil Company	The critical value of this path has been out of hypothesis rejection range (between -1.96 and 1.96) in the structural equations, thus the hypothesis is confirmed and it has been determined that employee flexibility has had impact on organizational agility to the degree of 0.22.
Employees’ responsiveness has a positive significant effect on agility of employees of South Oil Company	The critical value of this path has been out of hypothesis rejection range (between -1.96 and 1.96) in the structural equations, thus the hypothesis is confirmed and it has been determined that employee responsiveness has had impact on organizational agility to the degree of 0.30. This has been consistent with the results of research by Javanmardi <i>et al.</i> , (2011).



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Organizational culture change has a positive significant effect on agility of employees of South Oil Company	The critical value of this path has been out of hypothesis rejection range (between -1.96 and 1.96) in the structural equations, thus the hypothesis is confirmed and it has been determined that organizational culture has had impact on organizational agility to the degree of 0.39. This result is consistent with the results of a study done by Zahedi <i>et al.</i> , (1392).
The speed of reacting to environmental changes has a positive significant effect on agility of employees of South Oil Company	The critical value of this path has been out of hypothesis rejection range (between -1.96 and 1.96) in the structural equations, thus the hypothesis is confirmed and it has been determined that organizational culture has had impact on organizational agility to the degree of 0.32. This result is consistent with the results of a study done by Yaghubi <i>et al.</i> , (1392).
Little integrity and complexity of organizational structure has a positive significant effect on agility of employees of South Oil Company	The critical value of this path has been out of hypothesis rejection range (between -1.96 and 1.96) in the structural equations, thus the hypothesis is confirmed and it has been determined that ideal integrity and complex has had impact on organizational agility of South Oil Company to the degree of 0.38.
Employees' mutual cooperation has a positive significant effect on agility of employees of South Oil Company	The critical value of this path has been out of hypothesis rejection range (between -1.96 and 1.96) in the structural equations, thus the hypothesis is confirmed and it has been determined that ideal integrity and complex has had impact on organizational agility of South Oil Company to the degree of 0.36. This result is relatively consistent with the results of Aghayi's research (2011).

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Employees' mutual cooperation has a positive significant effect on agility of employees of South Oil Company	The critical value of this path has been out of hypothesis rejection range (between -1.96 and 1.96) in the structural equations, thus the hypothesis is confirmed and it has been determined that ideal integrity and complex has had impact on organizational agility of South Oil Company to the degree of 0.58. This confirms the greatest role of employees on the organization agile manufacturing.
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One of the mechanisms that the managers can make use of to take better advantage is agile-manufacturing. Nowadays agility paradigm has attracted great attention for adjusting and having consistency with the changes in business environments and also for empowering employees to make quick reactions to the needs of markets and customers. In the present research the impact of seven different factors on agile-manufacturing of employees of South Oil Company of Iran had been dealt with. The findings of the research contained reflection-provoking points for the employees which are taken into consideration. Taking the confirmation of all the seven hypotheses of the present research it became clear that different factors can impact on employee agility and because of this considering just one or two factors can not seriously guarantee the agility of the employees. Regarding the 0.58 impact of managerial functions of employees on organizational agility, it can be stated that the most important role is on employees themselves for organizational agile-manufacturing through application of the required policies that can facilitate the trend of agile-manufacturing in companies. Of these policies, one can refer to using moral and material incentives, improving technical infrastructures, evaluating and continuous improving of managerial performance, and reducing administrative complexities.

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