## **Information Technology Effect on Human Forces' Efficiency**

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Abstract: In achieving the role of information technology in efficiency with the aim of promoting the efficiency level of human forces, this study follows this question to answer, i.e. whether the information technology in promoting the efficiency of Saderat bank branches of Ardabil province staffs is efficiency or not? This study is descriptive correlative and the collection technique is measurement based, the participants were the staffs of Saderat bank branches of Ardabil province 256 people where based on the Morghan's table 151 subjects were choose randomly and proportionally. The data collection instruments included the researcher-made questionnaire which its content and face validity studied and confirmed by specialists, also its reliability based on the Cronbach Alpha coefficient estimated %81. the data analysis performed by using the SPSS software, descriptive statistics, Pierson's correlation coefficient test and regression. The result show that, there is a direct and meaningful correlation between the level of familiarity with information and communication technology (ICT), its usage and attitude to information and communication with efficiency of human forces.

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### 1. Introduction

It is about two decades that information and communication technology noticed as one of main factors of efficiency growth by economists (Elson, David, 1998:368). And since the human resources have the most effects of information and communication technology, it is clear that the countries that can prepare the developed human resources, can have the static and continuous wealth (Karampour, 2003:32). Now, the main issue witch this research tries to answer is this that, whether the information technology in promothing the effective of Saderat bank branches of Ardabil province staffs is effective or not?

Paying attention to the previous researches and studies, show that the role of information technology in efficiency of human forces is undeniable. Information technology in Iran's administration system, in recent decade has taken these different names as, electronic government, administrative automation, smart, standardize, internet, electronic mail, website, weblog and ... . Accessing to some levels of these technologies for the human resources of some organizations is and different training

courses with different topics as information and communication technology and some related subbranches were held for the staffs of organizations, and having or getting these training certificate in some of these branches like ICDL for office workers are necessary. By developing the electronic banking system, applying of this technology for the staffs and authorities of banking affairs is possible and today banks in giving the various and different electronic service invest and compete with other banks. So it is considered that, there is a need in doing this current study with this sample.

Sarboland in a research studies the evolution route of governmental management and administration of electronic government projects in Iran's government organizations, he results that the implemental and performing the electronic government project in Iran based on the some variables were effective however depend on some other variables they were ineffective (Sarboland, 2012:135). Hejazy and Nazary in the results of a study with the little of the evaluation of the information and communization technology role in teaching performance and research efficiency of the scientific council members of the agriculture in Tehran university show that the applying of bases and software In teaching performance and research

efficiency of scientific council members of the agriculture, increased about 27 percent (Hejazy and Naszary, 2010:2-15). Ahmady in a research as, the effect of information and communization technology on the efficiency growth of work forces of Iran's economy, took this result that the effect of human investment and information and communization technology investment on the efficiency of work forces is positive and meaningful (Ahmady, 2010: 46-52).

Pourhassan Harzandy in a study as, the effect of applying the information technology on the efficiency of Sistan and Balojestan province district power company, had this result that applying the information technology caused the efficiency promotion in Sistan and Balojestan district power company (Pourhassan Harzandy, 2006:1).

Kianfar in a research about the applying of information technology in training and its effect in the efficiency of Karaje tele-communication Company staffs takes this result that the use of the both method i.e. internet, intranet and extranet in training of Karaj's tele-communication company staffs efficiency were most effective (Kianfar, 2004:1-12). In the results of mentioned study, the information technology itself is an effective instrument and methods for training and efficiency promotion of human forces (Duvalier, 2009, 1-30). Another study also shows that, applying the information and communication technology in America country during 1973-95 caused the increase of 1.4 present efficiency of work forces (Jorgencon and stiroh, 2000: 451-476).

By investigating the studies and researches in this field, the results and finding show that, there is a meaningful relation between information technology and human forces efficiency.

Noticing to the importance and role of information technology in promotion of staffs' efficiency, the necessity for more researches in confirming or refusing of previous studies are felt. Therefore, in this

current study we want to study the relationship between information technology and human forces efficiency in Saderat bank branches of Adrabil province Based on this, the following hypothesizes are formed.

#### Main hypothesis

There is a relationship between information technology and human forces efficiency in Saderat bank branches of Ardabil province.

### **Secondary hypothesizes**

- 1. There is a relationship between familiarity with information technology and human forces efficiency in Saderat bank branches of Ardabil province.
- 2. There is a relationship between applying the information technology and human forces efficiency in Saderat bank branches of Ardabil province.
- 3. There is a relationship between the attitude to information and communication technology and human forces efficiency in Saderat bank branches of Ardabil province.

### Materials and methods

Based on the purpose, this research is operational, its method is descriptive-correlative and survey-based. The data collection instrument in this study are a researcher-made questionnaire for measuring the information and communication technology and another researcher-made questionnaire by following the Hersy and Gold smith's (1980) standard questionnaire for the efficiency of human forces. The participants were the staffs of Saderat bank branches of Ardabil province 258 people where 236 people were the branches' staffs and 22 were the staffs of central branches. Based an Morghan's table 151 subjects were choosed proportionally and randomly by noticing the number of staffs in each branch. The content and face validity of questionnaire confirmed by specialists, the reliability of Cronbach Alpha coefficient:

<b>Table(1):</b> Cronbach Alpha coefficient
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Total of	The level of	The rote of	The attitude to	Efficiency
questionnaire	familiarity with	applying the	information and	
	information and	information and	communication	
	communication	communication		
%95	%74	%89	%89	%91

The data analysis performed by using the SPSS software. The assessment of the research hypothesizes have done by statistical measurements as Kolmograph and Seminoph, pearson and regression.

# The results

For data analysis by paying attention to the Kolmograph and Seminoph measurement results the meaningful level was greater than 0.5 which shows the normality of data distribution, we used the pearson's parametric assessment. The results of the measurement depend on the research hypothesizes are in the following table.

	The research innames bused of			
Test results	The efficiency of	Variables		
	human forces			
Confirmed	% 643	Pierson's correlation	Information of	
		coefficient	communication	
	0.000	Meaningful level	technology	
Confirmed	%275	Pierson's correlation	The level of familiarity	
		coefficient	with information and	
	0.001	Meaningful level	communication	
Confirmed	%542	Pierson's correlation	The rote of applying the	
		coefficient	information and	
	0.000	Meaningful level	communication	
Confirmed	%210	Pierson's correlation	The attitude to	
		coefficient	information and	
	0.010	Meaningful level	communication	
205		No		

**Table(2):** The research findings based on the results of hypothesizes measurement

Noticing the table results, the research findings based on the results of hypothesizes measurement, are the following:

- Paying attention to the meaningful level of 0.000 there is a meaningful relationship between and communication technology with the efficiency of human forces in Saderat bank branches of Ardabil province.
- 2. Paying attention to the meaningful level of 0.000 there is a meaningful relationship between the familiarity with information and communication technology with efficiency of human forces in Saderat bank branches of Ardabil province.
- Paying attention to the meaningful level of 0.000 there is a meaningful relationship between the applying of information and communication technology with efficiency of human forces in Saderat bank branches of Ardabil province.
- 4. Paying attention to the meaningful level of 0.000 there is a meaningful relationship between the attitude to the information and communication technology with efficiency of human forces in Saderat bank branches of Ardabil province.

#### **Discussions and results**

The studies show that the relationship between information technology and efficiency of human forces (staffs) is reciprocal and correlative. It means that form on point, without having the skilled human forces who are familiar with methods, literature and computer or other practical skills, achieving the actual development and efficiency, and national establishment based on the knowledge is impossible. From another point the information technology itself

is an effective instrument and way for training and promotion of human forces. Based on the results of this study in the first hypothesis, the results are in the same way as the finding of Gaedy (2007)m Hejazy and Nazary (2010), Rajaby Jozany (2008), Behan and Holms (2001) and Piatekosky and Won Ark (2005). But it is not in the sabe way with the studies of Brayan Jolpsen and Hit (2000) where they refuse the relationship between information technology and efficiency in the short-term.

In the second hypothesis the results show the similarity with the research findings of Mahdavi (2006), Ahmadi (2010), Abedi Jaffary (2011), Pourkiany and Farahbash (2012) and Jorginsoun and Stiro (2000), it is in the different way in veddrick (2003) study. In the third hypothesis the findings are, corresponded with Hegazy and Nazari's (2010) research also with the other studies like Rahmany and Hayaty (2007), Ahmadi (2010) is in the same way noticing the direct relationship between information and communication technology and human forces efficiency the following points are suggested for the promotion of the bank human forces efficiency:

- Increasing the ability, insight and culture of using the information and communication technology by holding the continues training courses for bank managers, and with accurate understanding of the knowledge and information needs of managers and users.
- 2. Equipping the banks with information and communication technology for giving different electronic services for customers.
- 3. Compiling and designing of organizational laws for applying the encouragement policies for staffs in using the information and communication technology.

4. Doing the separate and corresponded research, about using the information and communication technology in different banks and the effect of information technology in empowering of banks managers.

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