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Research Article

DISCUSSING THE EFFECT OF NEW TECHNOLOGIES OF INFORMATION SYSTEMS ON IMPROVING FINANCIAL MANAGER'S DECISION MAKING

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ABSTRACT
The purpose of this research is to investigate employee's perspective in the context of effects of new technologies of information systems on improving financial manager's decision making in Urmia's marking office. The population of research includes Urmia's marking office financial managers as 71 individuals and with respect to the fact that population is limited; the entire population is selected as the sample too. This research is a descriptive- survey research. For data collection the questionnaire of Moghimi and Ramezan was used. For the purpose of data analysis also the Pearson correlation test and regression test are used. Results indicated that there was a significant relation among new technologies of information systems and financial manager's decision making. In addition, results showed that there was no significant relation among new technologies of information systems and each of peremptory, advisory and collaborative decision making styles.

Keywords: *New Technology of Information Systems, Peremptory Decision Making, Advisory Decision Making, Collaborative Decision Making*

INTRODUCTION
Efficient and integrated information systems that can cover an organization's entire activities and tasks and provide necessary information for users in time, are beneficial instruments which are used by organizations in order to increase their capabilities, optimize their performance, make better decisions and obtain competitive advantage (Poorkiani and Farahbakhsh, 2012).
Previous researches indicate that pressure on financial managers for making correct decisions based on managerial information is increasing, because resources are limited and organization's financial managers are forced to prioritize their numerous goals in different time tables (Jafarnejad, 2010). In such a situation, decision making usually becomes the most challenging role of a manager and management of information systems makes managers able to adopt effective decisions (Elmi, 2012). On the other hand, making a correct decision needs 90% information and 10% insight (Rezaeian 2002). Also for collecting data, 87 percent of time and 67 percent of manager's work are used for communicating and data exchange (Mintzberg, 1980).
Results of previous researches have shown that information technologies are effective on individual's decision making. The research conducted in Bahman group indicated that information system of accounting is effective on improvement of decision making (Dastgir *et al.*, 2003). In another research that was conducted regarding the relation between information systems and decision making process of middle managers in Saman Bank, results indicated that obtaining general, in time, correct and relevant information and possibility for systematic repeated controlling are related to effectiveness of decisions made by middle managers (Tabarsa and Gilani 2012). Mook (2006) showed that implementing accounting information systems play constructive roles in control, planning and managerial decision making. Findings of research conducted by Onaolapo and Odetayo (2012) indicated that accounting information system leads to appropriate financial statements and ultimately leads to better decision making.
Sultan (2012) showed that there is a significant statistical relation between components of marketing information system such as internal records, marketing researches and marketing intelligence and decision making. Results of research conducted by Samson (2013) showed that most participants were

extremely agreed with the help of managerial information systems for production companies in decision making. It was also stated that implementing managerial information systems was highly helpful in making beneficial decisions and maintains the relations between employees and customers. In another research conducted by Olumoye (2013) most respondents believed that information systems had significant effects on management of decision making in insurance section and also relevant, exact and in time information are crucial for decision making. In addition, results indicated that establishing optimized information systems lead to improvement of quality of decision making with higher efficiency. In this research there was a relation found between information systems and decision making management (Olumoye, 2013).

In general, old mechanisms of managerial information are not able to comply with current complex situations and in case of critical problems; we cannot rely on limited reports and imaginations. Effective administration of affairs requires several processing of different information which grow rapidly and become harder to analyze.

In the current century, organizations can not be operated based on employee's personal thinking and verdict, rather they need decision makings that are backed with scientific structures and related information should also feature precision and accuracy and also should be performed according to specific methods.

Complexity of modern organizations, high deployment of operations and also high costs of traditional methods forces managers to use new and appropriate decision making processes in order to adopt adequate and appropriate decisions. What helps managers in reaching this goal, is implementing a convenient, trusted and scientific apparatus. One of the groups of managers who are exposed to different decision makings regarding their tasks, are financial managers. On this basis with respect to provided content the purpose of this research is to discuss the relation between information technology and financial manager's decision making in Urmia's marking office.

MATERIALS AND METHODS

Methods

The present research is an applied study and in terms of research method it is a descriptive-survey research. The population of this research is consisted of Urmia's marking office employees as 71 individuals. With respect to the fact that population is limited, the entire staff of Urmia's marking office are selected as the sample too. For the purpose of data collection, the questionnaire of Moghimi and Ramezan is used (Moghimi and Ramezan, 2011). This questionnaire includes two segments. The first segment includes 21 questions regarding technology of information systems. The second segment includes 15 questions regarding decision making styles in which 5 questions are related to peremptory decision making style, 5 questions are related to advisory decision making style and the last 5 questions are related to collaborative decision making style. Also the questionnaires were arranged in 5 degrees Likert scale. Validity of questionnaires was determined by a supervising professor and seven other professors of management. In order to check the reliability of questionnaires, the Cronbach's alpha was used. On this basis, the value of Cronbach's alpha was calculated as 0.74 with assurance coefficient of 95%. This value shows the desirable reliability of the questionnaires. For data analysis, the Kolmogorov-Smirnoff, Pearson Correlation and Regression tests are used.

Table 1: Determining the value of Cronbach's alpha

Type of factor	Factors mean	Factors variance	correlation	Cronbach's alpha
New technologies of information systems	43.8732	24.6548	0.598	0.742
Decision making	12.9718	17.685	0.598	

RESULTS AND DISCUSSION

Results

Demographic Findings

Findings have shown that among the 71 individuals of selected sample, 38 individuals (53.5%) were male and 33 individuals (46.5%) were female. 29.6% (21 individuals) were between 18-28 years, 50.7% (36 individuals) were between 29-38 years and 12.7% (9 individuals) were between 39-48 years and 7% (5 individuals) were older than 48 years. 9.9% (7 individuals) held a diploma and lower degrees, 22.5% (16 individuals) held semi B.A, 60.6% (43 individuals) held B.A and 7% (5 individuals) held an M.A or higher degrees. 12.7% (9 individuals) were single and 87.3% (62 individuals) were married.

Inferential Findings

In this research the Kolmogorov-Smirnoff test is used to determine the normality of population. Results have shown that the population was normal (Table 2)0 on this basis, the Pearson Correlation and regression tests are used for data analysis.

Table 2: Kolmogorov-Smirnoff test

	New technology of information systems	**Peremptory decision making**	**Advisory decision making**	**Collaborative decision making**	**Total decision making**
Kolmogorov-Smirnoff test	0.801	1.091	1.227	1.068	0.941
P value	0.542	0.185	0.099	0.204	0.338

Main Hypothesis: there is a relation between new technologies of information systems and financial manager's decision making in Urmia's marking office.

Table 3: Pearson correlation test between information systems and manager's decision making

variable	**statistic**	**Decision making**
New technologies of information systems	Pearson correlation coefficient	0.282
	Significance	0.017
	Number	71

Significant at 0.05

For the aforementioned hypothesis the Pearson's correlation test is used. With respect to Pearson correlation coefficient (0.282) and significance level (0.017) it may be concluded that there is a significant and direct relation between new technologies of information systems and financial manager's decision making. It means that by increase in implementing new technologies of information systems, decision making of financial managers in Urmia's marking office is improved.

First hypothesis: there is a relation between new technologies of information systems and financial manager's peremptory decision making in Urmia's marking office.

Table 4: Pearson correlation test between information systems and manager's peremptory decision making

variable	**statistic**	**Peremptory Decision making**
New technologies of information systems	Pearson correlation coefficient	0.04
	Significance	0.783
	Number	71

Significant at 0.05

With respect to Pearson correlation coefficient (0.04) and significance level (0.783) it may be concluded that there is no significant and direct relation between new technologies of information systems and financial manager's peremptory decision making. On this basis the first hypothesis is denied.

Second Hypothesis: new technologies of information systems are effective on improving advisory decision making of financial managers in Urmia's marking office.

Table 5: Pearson correlation test between information systems and manager's advisory decision making

variable	statistic	Advisory Decision making
New technologies of information systems	Pearson correlation coefficient	0.117
	Significance	0.331
	Number	71

Significant at 0.05

With respect to Pearson correlation coefficient (0.117) and significance level (0.331) it may be concluded that there is no significant and direct relation between new technologies of information systems and financial manager's advisory decision making. On this basis the second hypothesis is denied.

Third Hypothesis: new technologies of information systems are effective on improving collaborative decision making of financial managers in Urmia's marking office.

Table 6: Pearson correlation test between information systems and manager's advisory decision making

variable	statistic	Advisory Decision making
New technologies of information systems	Pearson correlation coefficient	0.214
	Significance	0.073
	Number	71

Significant at 0.05

With respect to Pearson correlation coefficient (0.214) and significance level (0.073) it may be concluded that there is no significant and direct relation between new technologies of information systems and financial manager's advisory decision making. On this basis the second hypothesis is denied.

Discussion

The purpose of this research was to assess the effect of new technologies of information systems on decision making of financial managers of Urmia's marking office. Results indicated that there was a significant relation between new technologies of information systems and improving the decision making of managers. These findings are in the same line with the findings of other researchers (Onaolapo & Odetayo, 2012; Sultan, 2013; Samson, 2013; Olumoye, 2013; Mock, 2006). They are also consistent with findings of Tabarsa and Gilani (2012). As a result, related authorities should perform new technologies of information systems in order ti improve manager's decision making.

Also results of data analyses showed that there was no relation between new technologies of information systems and improving manager's peremptory decision making. One reason for this fact may return to studied population and cultural differences. Cultural differences have always been an effective element which influences the results of every research.

Also results of data analyses showed that there was no relation between new technologies of information systems and improving manager's advisory decision making. One reason for this fact may return to studied population and cultural differences. Cultural differences have always been an effective element which influences the results of every research.

Also results of data analyses showed that there was no relation between new technologies of information systems and improving manager's collaborative decision making. One reason for this fact may return to

studied population and cultural differences. Cultural differences have always been an effective element which influences the results of every research.

Applicable recommendations

1- taking help from skilled and expert forces in the context of new technologies in employee's decision making or establishing in-service training courses regarding how to desirably implement new technologies; because successful employees are the ones who are able to manage information for in time and effective decision making.

2- Appropriate contexts should be made ready for institutionalization of culture of using the capabilities of new technologies of information systems.

3- In order to notify beneficiaries from the benefits of using new technologies of information systems in decision makings, not only there should be emphasis on saving time and supplication of appropriate information, but also there should be emphasis on its other benefits such as improving efficiency.

4- With respect to importance and role of managerial contexts in developing the implementation of information system's new technologies, it is recommended to improve the level of risk taking among employees for benefiting from new technologies of information systems in decision making.

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