

Studying the Use of Information Technology in Presenting Accounting Reports for Decision-Making by Iranian Managers

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Abstract: In this research, we studying the amount of information technology(IT) use in order to present accounting reports for decision makings by the managers. In this assessment, we will use statistical correlation and regression to discuss this issue. We will investigate about the amount of technology use by the managers in their companies and also about the existence of a meaningful relationship between the accounting reports presented to the managers to make decisions and using information technology. Thus, the research sample for this paper was selected randomly from among managers of firms accepted in Tehran Stock Exchange. The results showed a meaningful relationship between using information technology and presenting accounting reports in managers' decision-makings.

Keywords: Information Technology, Accounting Data System, Accounting Reports, Managers' Decision-Making

1. Introduction:

Today, organizations act and compete in information era and information has been changed into a key resource for most organizations. In fact, the competition base has changed from tangible to intangible data. Software movement and changes in the new era has forced the authorities in management science's fields and accounting and reporting to the owners to find resolutions for the rapid development and promotion. Decisions made by the managers have a direct and significant role in this trend. Thus, the accessibility of appropriate data (correct, in time, and related) can help management in this situation. Additionally, regarding that the economic relationships between business entities have become very competitive and sophisticated the survival of a business entity is affected by its accessibility to the data. In the past, getting correct and in time data in different companies was a laborious and costly action. Accounting and management sciences helped organizations achieve their goals by using automated systems. Today we confront the information boom and data anarchism and information technology is used as a resolution to avoid such problems. However, organizations need data systems which satisfy their needs and organizational structures [10].

The accelerated and astonishing advancement of information technology has increased the permeability range of information in movement and survival of the organizations and different foundations. Even ordinary people can not make decisions in everyday life without the permeability and optimization of information and achieve their goals. Accounting as an informing system, is considered to be an agent or element of an organization which presents decision making information through the processing of financial events and alarming data.

2. Research Methodology:

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This research involves a set of business, service and manufacturing companies in which accounting system is organized by a credited reference and they are among firms accepted in Stock Exchange. Accordingly, 50 companies were selected as our statistical population. This number was due to the limitations and the lack of responding by other organizations to our questions. In this research, questionnaires were used to collect data and to measure the amount of using information technology by the managers, we have used Likert's criterion.

2.1. Data Collection:

The questionnaire in this research involves 1 main and 7 subordinate questions. The main question is related to the effect of using information technology in presenting accounting reports on managers' decision-making and the subsequent 7 questions are presented about the minor hypotheses of this research. Also our goal in assigning questions 1 through 7, was to study the effect of these factors as independent variables on information technology, i.e. assigning the results of answers to question number 1 as the dependent variable of the research and the amount of relationship between each dependent and independent variable was studied separately. Then, each score is considered to be a value for independent variable "Xi" and after that each set of scores related to each question, in 50 different questionnaires, were tested separately with the dependent variable of Y (extracted from question number 1) for the whole sample.

2.2. Data Analysis:

In analyzing the results and testing the hypotheses we have used different analysis methods of statistical data analysis such as regression and coefficient correlation. We used coefficient correlation to determine the toughness of correlation and identification coefficient was used to determine the changeability amount of the dependent variable Y in a linear equation. The averages related to the Y's value were extracted for the 50 questionnaires and regarding the distance they were classified within the range of 1 to 5, which will result in acceptance or rejection of the main hypothesis. Also we will study the t-test with the help of SPSS software by using regression analysis table in order to prove the existence of a meaningful relationship between each of the dependent and independent variables of Y.

3. Research Hypotheses:

3.1. Main Hypothesis:

Using information technology in presenting reports and outputs of accounting data systems has a positive effect on managers' decision-making.

3.2. Minor Hypotheses:

- There is a meaningful relationship between using information technology and supplying and in time presentation of the data.
- There is a meaningful relationship between using information technology and managers' reliability about the appropriateness of the system.
- There is a meaningful relationship between using information technology and the convergence of accounting data with changing economic conditions.
- There is a meaningful relationship between using information technology and the ease of outputs' interpretation.
- There is a meaningful relationship between using information technology and form variety and format of the outputs.
- There is a meaningful relationship between using information technology and the qualitative desirability of the outputs.
- There is a meaningful relationship between using information technology and data interference related to decision-making.

4. Analyzing the Main Hypothesis of the Research:

Regarding the main hypothesis, weights 1 to 3 approve the zero hypothesis, which means the rejection of the relationship between the variables and weights 4 and 5 reject the main hypothesis which means that the

relationships between the variables are approved. Then the average of answers to the first question by the managers are calculated and compared with the items mentioned above. Also the 7 minor hypotheses were utilized to study the meaningfulness of these relationships by regression analysis and through coefficient tests to determine the amount of the relationships.

Main Hypothesis: Using information technology in presenting reports and outputs of accounting data systems has a positive effect on managers' decision-making.

$$H_0: m \leq 3$$

$$H_1: m > 3 \quad m: \text{Average of 1-5}$$

Table 1: the results of main hypothesis

	Sample's number	average
The main research hypothesis	50	3.3

This average is more than the presupposed average (3). Thus, we can not accept zero hypotheses. This means that the main hypothesis in this research is accepted and we can claim that information technology is effective on reports resulted from managers' decision-makings.

5. Analyzing the Minor Hypotheses of the Research:

Table 2: The main output of regression analysis test for research minor hypotheses

Hypothesis No.		Not-standardized coefficient	Criterion error	Standardized coefficient	t	sig	Hypotheses result
1	Fixed coefficient	1.903	.209	-----	9.091	.000	Approved
	Data are in time (timeliness of the data)	.421	.061	.706	6.916	.000	
2	Fixed coefficient	2.250	.305		7.384	.000	Approved
	Managers' reliability amount	.250	.071	.455	3.539	.001	
3	Fixed coefficient	2.383	.125		19.129	.000	Approved
	Convergence with economic conditions	.417	.052	.758	8.054	.000	
4	Fixed coefficient	1.500	.356		4.214	.000	Approved
	The ease of interpreting the outputs	.429	.083	.596	5.136	.000	
5	Fixed coefficient	2.257	.154		14.612	.000	Approved
	The form variety and outputs' format	.386	.054	.721	7.201	.000	
6	Fixed coefficient	2.296	.078		29.610	.000	Approved
	Qualitative desirability of the outputs	.433	.030	.901	14.372	.000	
7	Fixed coefficient	2.249	.177		13.710	.000	Approved

	Data interference amount	.245	.047	.604	5.245	.000	
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6. Conclusions:

The results of the 7 minor hypotheses show a meaningful relationship between information technology use and each of the factors mentioned. Also the hypothesis in this research shows that the relationship between using information technology to present the reports and accounting outputs on the managers' decision makings has been meaningful. Thus, we can say that using information technology to present reports with the 7 characteristics investigated in this research has been indirectly effective on managers' decision-makings and they should be taken into consideration. The broader researches about more use of information technology in managers' decision-makings can identify the present problems and determine the necessity of gaining more knowledge about this issue by the managers of the companies and entities.

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