

Effect of Office Automation on Improving the Decision-Making in Sorinet Kish Managers

Rogayehrezaeeglo, Minababazadehfarokhran

Young Researchers and Elite Club, Germe Branch, Islamic Azad University, Germe ,Iran

*Corresponding Author

Minababazadehfarokhran

E mail: minafarahzan@gmail.com

Abstract: Office automation is a topic that has recently been noticed in the field of information technology. Due to the fact that office automation is the best means for achieving effective strategies to save time and optimal use of existing facilities in the organization that helps managers to make optimal decisions. Therefore, this study investigates the effect of office automation in improving the decision making in Sorinet Kish managers. To analyze the data obtained, the descriptive and inferential statistical methods were used. The data was collected through a researcher-made questionnaire with a Cronbach's alpha of 0.811 from 77 managers in Sorinet Kish and to describe the responses to the research questions, the frequency distribution table and percentage of responses to each question were used and histograms were used to show some of the statistical data consistently and at inferential level, Spearman correlation test was used to test the hypotheses.

Keywords: e-government, decision making; office automation; process, quality policy.

INTRODUCTION

With increasing communication and emergence of various forms of communication, communication networks cover everyday life of human and trade that is seen in different methods (production of goods or services) is no exception. With commercial communications getting more sophisticated and advanced, organizations developed systems within themselves not to lose one of the inputs (information) to take advantage of the information available in the surrounding area and provide the data to clients and to satisfy them by proper processing of them. In fact, the competitive business environment and changes in the environment in 1990s (globalization of economies and changing industrialized societies and economies to knowledge and information-based service economy) added to the importance of considering information systems. Facing environment and realizing their organizational goals by considering the environmental variables, the managers should analyze the environment necessarily and identify its variable and adopt appropriate measures to deal with them. This requires to have timely information within and outside the organization and also possibility to use them optimally which these information are obtained by automation systems. Therefore, the subject of office automation system which is kind of the information systems is becoming more significant.

Decision making in organizations

Information is organized data that has meaning and value. In other words, it is a set of significant elements or events that transfer understanding and interpretations to individuals[1].

Any organization that has exact, accurate, timely and comprehensive data and can achieve the required data at the minimum time is more successful. Data and information role in the management of organizations is critical. The more detailed, transparent, consistent and systematic is the organization information, the better organization can achieve its goals. Presence of inadequate, dull, confused, contradictory, unstructured information space are the main reasons for lack of progress in organization management and wrong decision-making[2].

In determining the organization policy, in formulating objectives, organizational design, selection, and evaluation and in all actions and actions, decision making is the main part and fundamental pillar. So, managers need to be familiar with the decision-making process in order to recognize people, group and organizational systems from organizational behavior perspective and to make efficient and effective decisions based on the knowledge[3].

All people should evaluate various solutions when deciding and most decisions are related to future

events that are not easy to predict. That is why the conditions of decision-making are put on a range that on one end is confidence and on the other end is tension situation[4].

Range of decision making condition can be stated as follows.

1. Confidence
2. Risk
3. Uncertainty
4. Tension

Organizational behavior theorists considered two theories for decision: classical and behavioral. Describing each of them is very effective in understanding the processes through which managers can decide[5].

1. Classical theory (prescriptive) of decision making
2. Behavioral theory (descriptive) of decision making

Chester Barnard advised that decisions are divided into two categories: organizational and personal. Organizational decisions are decisions that managers make within their legal and formal authority that such decisions may be delegated to subordinates. But personal decisions are relating to an individual, not as a member of the organization. Such decisions cannot be transferred and also they will not be affected by superior managers[6].

Office automation

Office automation includes all formal and informal electronic systems, which is related to communication between people inside and outside the organization and vice versa. The main word that distinguishes office automation from data processing, management information systems and decision support system and office automation communications to facilitate both oral and written communication[7] of office information systems support administrative affairs through information technology. Modern information system is one of the elements of management information system (MIS) which provides tools for communication and coordination among knowledge workers by providing effective management of documents and messages and electronic meetings[8].

Advanced information technology can give all kinds of information about customers, markets, services and performance of the unit or organization to employees and some organizations use this new technology to increase the office hierarchy, centralizing decision making process and uniform work. But in most cases, organizations use the technologies to decentralize the organization and its effects can be observed on the management process and organization design[9].

Office automation includes all electronic systems both formal and informal which is related to communication between people inside and outside of the organization and vice versa. The main word which distinguishes office automation from data processing, management information systems and decision support systems is communication. Office automation is in both oral and written forms to facilitate communication[7].

Hypotheses

First hypothesis: office automation system has a positive impact on increasing the accuracy of management decision making.

Second hypothesis: office automation system has a positive impact on increasing the timeliness of management decision making.

Third hypothesis: office automation system has a positive impact on management decision making being economic.

Fourth hypothesis: office automation system has a positive impact on increasing the accuracy of management decision making.

RESEARCH METHODOLOGY

The first step determines the percentage of participants in terms of sex. As shown in Table 1, most of the sample (more than 90%) were male. The results are better shown in Fig 1.

Table 1: Sex of sample

Sex	Frequency	Frequency percentage	Cumulative relative frequency
Male	71	92.2	
Female	6	7.8	92.2
Sum	77	100	100

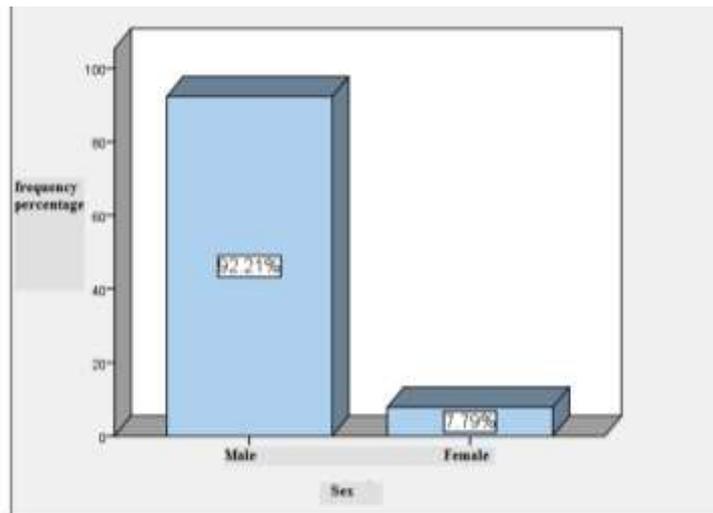


Fig-1: Bar graph of sample sex

Age

Table 2 shows the descriptive statistics on the age of the sample. Using the table, we can say that the

mean age of the sample is 39.38 (with SD 7.56), also the minimum age for participants is 30 and the maximum 59.

Table-2: Descriptive statistics of the sample age

Mean	Standard deviation	Minimum	Maximum
39.38	7.56	30	58

Education

From among the respondents, 16.9% had an under diploma degree, 23.4% had a diploma, 18.2% had

an associate, 35.1% bachelor degree and 6.5% had a master's degree or higher. These findings are presented in Table 3 and Figure 2.

Table-3: Education level of samples

Education level	Frequency	Frequency percentage	Cumulative relative frequency
Under-diploma	13	16.9	16.9
Diploma	18	23.4	40.3
Associate	14	18.2	58.4
BA.	27	35.1	39.5
MA.	5	6.5	100
Sum	77	100	

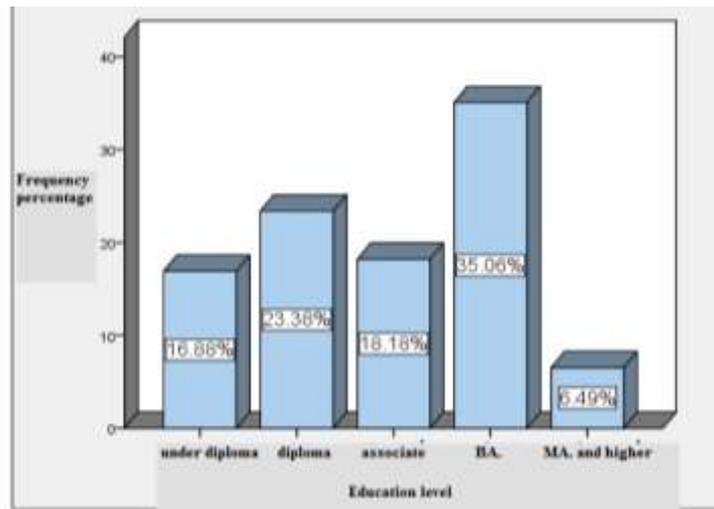


Fig-2: Bar graph of the sample education level

Management experience

According to Table 4, it can be said that 19 subjects (24.7%) had less than 5 years of management experience, 23 (29.9%) had a management experience between 5 to 10 years, 17 (22.1%) between 10 to 15 years of management experience, 10 (13%) had a management experience between 15 to 20 years and 8 (10.4%) had a management experience of 20 years and higher. (Table 4 and Figure 3)

Table-4: Management experience of sample

Management experience	Frequency	Frequency percentage	Cumulative relative frequency
Less than 5 years	19	24.7	27.4
5 to 10 years	23	29.9	54.5
10 to 15 years	17	22.1	76.6
15 to 20 years	10	13	89.6
20 years and higher	8	10.4	100
Sum	77	100	

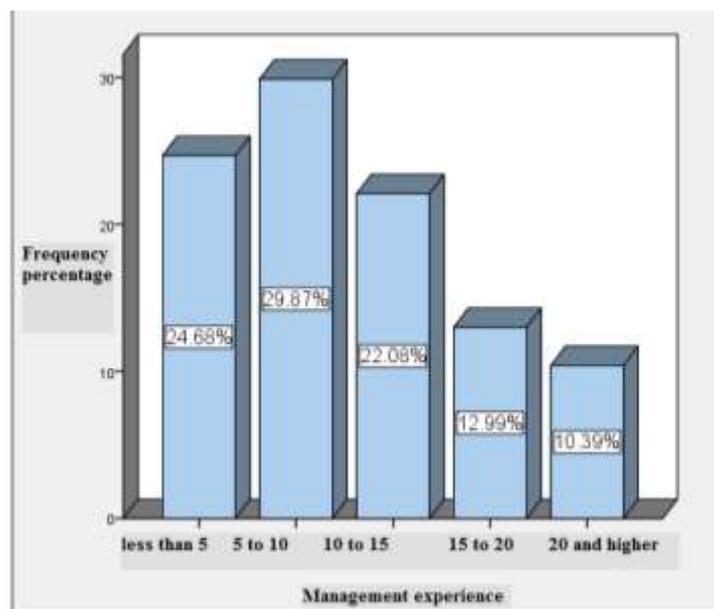


Fig-4: Bar graph of sample management experience

Hypotheses testing

Hypothesis 1-1: Office automation system has a positive impact on increasing the accuracy of management decision making.

Spearman correlation coefficient value between the office automation and accuracy of decision making is equal to 0.464 and the significance level is equal to 0.000, which is smaller than 0.05. Thus,

with 0.95 statistical null hypothesis ($H_0: \rho = 0$) that there is no significant relationship was rejected. So, given the positive sign and correlation coefficient significance, we can say a direct and significant relationship exists between office automation and accuracy of decision making. In other words, the hypothesis 1-1, "office automation system has a positive impact on increasing the accuracy of management decisions" is approved. Data is shown in Table 5.

Table 5: Spearman correlation coefficient between office automation and accuracy of decision making

	Coefficient value	Sample size	Significance level
Spearman correlation coefficient	0.464	77	0.000

Hypothesis 1-2: Office automation system has a positive impact on increasing the timeliness of management decision making.

According to Table 6, the correlation coefficient between office automation system and increasing the timeliness of management decisions is 0.674. The possibility relating to examining the significance of correlation coefficient is 0.000 which is smaller than 0.05, so with 0.95 confidence, the null statistical hypothesis ($H_0: \rho = 0$) that there is no significant relationship was rejected. In other words, the hypothesis 1-2, "office automation system has a

positive impact on increasing the timeliness of management decision making" is confirmed. Considering the positive sign of the correlation coefficient, it can be said that a direct relationship exists between two variables of office automation system and increasing the timeliness of management decision making. In other words, increasing or decreasing each of the variables of office automation system, increasing the timeliness of decision making by managers, other variables also increase or decrease.

Table 6: Spearman correlation coefficient between office automation systems on increasing the timeliness of management decisions

	Coefficient value	Sample size	Significance level
Spearman correlation coefficient	0.674	77	0.000

Hypothesis 1-3: Office automation system has a positive impact on the management decisions making being economic.

Spearman correlation coefficients between office automation system on increasing the management decisions being economic is 0.419 and the value of its significance level is 0.000, which is smaller than 0.05. Thus, with 0.95 confidence, statistical null hypothesis ($H_0: \rho = 0$) that there is no significant

relationship was rejected. So, given the positive sign and significant correlation coefficient, we can say a direct and significant relationship exists between office automation system and management decision making on being economic. In other words, hypothesis 1-3, "office automation system has a positive impact on increase the economically of management decision making." is approved. Data is shown in Table 7.

Table 7: Spearman correlation between office automation system and increasing economic management decision making

	Coefficient value	Sample size	Significance level
Spearman correlation coefficient	0.419	77	0.000

Hypothesis 4-1: Office automation system has a positive impact on increasing the accuracy of management decision making.

Spearman correlation coefficient between the office automation on increasing the accuracy of management decision making is equal to 0.515 and its significance value is 0.000, which is smaller than

0.05. Thus, with 0.95 confidence, the statistical null hypothesis ($H_0: \rho = 0$) that there is no significant relationship was rejected. So, considering the positive sign and significant correlation, we can say that a direct significant relationship exists between office

automation and increasing the accuracy of management decision making. In other words, Hypothesis 1-4, "office automation system has a positive impact on increasing the accuracy of management decision making" is approved. Data is shown in Table 8.

Table 8: Spearman correlation coefficient between office automation systems on increasing the accuracy of management decision making

	Coefficient value	Sample size	Significance level
Spearman correlation coefficient	0.415	77	0.000

CONCLUSION

This research was conducted aiming to examine the effect of office automation on the improvement of decision-making in Sorinet Kish managers. Therefore, the nature of research was applied and histograms were used to analyze the statistical data coherently and at inferential level, Spearman correlation test was used to test the hypotheses. According to the results, a significant relationship exists between the office automation and improving management decision making.

REFERENCES

1. Parkinson Restom J; Management skills. Translated by: Iran NejadParizi, Tehran, Azade Publication, 1997.
2. Javadkar WS; Management information systems. Translated by: Dr. Ahmad Sardar. Tehran, SAMT Publication, 2000.
3. Mahdi H, Hossein AH; Management Information Systems, Tehran: Pardis Press, 2010.
4. Knight, FHRisk , Uncertainly and profit, NewYork : Harper & Brothers; 2000
5. Caroline Z, Roy BC, Gray K; A literature review of Analytical and Naturalistic Decision Making Final Technical Report; Klein Association Inc, 2008
6. Silk L; Henry and others: organization (uth Ed), South western, 2010
7. Raymond ML; Management Information Systems" translated by Mehdi Jamshidian, Akbar Mahdi-poor, AttaAbadi, Isfahan University, Isfahan, Plan and Budget Organization of Isfahan, 2008
8. Zwass Valdimi R; Management Information System, WM, C, Brown, 1992 (Information society Commission 2,003) www.iscie/downloads/egovernment
9. Richard DL; Ttheory and organization design. translated by: Ali Parsaeian and Seyyed Mohammad Arabi, Tehran, Cultural Studies publication, 1988.