Indian Journal of Fundamental and Applied Life Sciences ISSN: 2231– 6345 (Online)
An Open Access, Online International Journal Available at www.cibtech.org/sp.ed/jls/2014/04/jls.htm
2014 Vol. 4 (S4), pp. 1279-1288/Hosseinian et al.
Research Article

STUDYING THE EFFECT OF OFFICE AUTOMATION ON MANAGERS AND EMPLOYEES' PERFORMANCE OFGRAINS COMPANY AND BUSINESS SERVICES IN KOHGILUEH-VA-BOYERAHMAD, FARS, AND BUSHEHR PROVINCES

Reza Hosseinian[1], Sanjar Salagegheh[2] and Abdolkhalegh Gholami[1]
[1]*Department of Management, Science and Research Branch of Kohgiluyeh and Boyer-Ahmad, Islamic Azad University, Yasouj, Iran*
[2]*Department of Management, Science and Research Branch of Kerman, Islamic Azad University, Kerman, Iran*
**Author for Correspondence*

ABSTRACT
Organizations, in today's turbulent and competitive world, are trying to develop new methods to maximize efficiency and effectiveness and in order that global competitiveness can only change their technology. The change chariot is moving with speed and if organizations do not be permanently under development or cannot use advanced technologies and do not appropriately respond to changes in environmental factors, after short its life office will be closed. The aim of this study was to investigate the relationship between office automation and the managers and employees gain company performance and business services in Kohgilueh-va-boyer ahmad, Fars and Bushehr provinces. Sample size 123 subjects was estimate. The random sampling method was used to select samples. Therefore statistical tests such as mean, standard deviation and Pearson correlation were used. Calculated correlation coefficients show that there is a significant relationship between the automation components and performance aspects at 1% level. The correlation coefficient for various aspects of automation with performance is like that (modified work process (48/0), the quality of decision-making 42/0, data analysis 50/0, accountability quality 60/0, new idea entrance50/0). As comes from the results accountability quality automation has the highest impact and correlation and working reform process has the lowest it.

Keywords*: Automation, Grains and Services Company, Pearson*

INTRODUCTION
Organizations in the new era must be applicant advanced computer systems and information technology and media and the future belongs to those who considered with accurately recognition of advantages and disadvantages of these systems are to be critical and learn from the experience of others without having to pay the costs of that experience again. Access to computers and advance information technology and media generating growing momentum and momentum has the effect that each unit of time that would be saved from the previous unit makes it more valuable. Thus, there is a positive feedback loop is created that accelerates acceleration (Roshan, 2005). Office automation is the best tool to achieve effective solutions for saving and efficient use of time in the organization. The mechanized solutions accelerate correspondence workflow and allow managing the flow of work. In the process, remove paper correspondences, time-saving and an efficient use became practical and in fact the official automation is a mechanism in order to improve the efficiency of the correspondence of the organization, easily search for stored information, quick and prompt response to a clients, remove the paper from the cycle of office correspondence ,proper control over users, optimal registration and maintenance and improvement of communication within the organization (Golmohammadi, 2005).Computer expanding in recent decades is major changes in the intelligence system of the invention from printing machine in the fifteenth century or even the invention of writing. Parallel with this extraordinary change, expand networks and new media that is equally amazing and its job is move knowledge and constituent elements i.e. the data and information. What managers do at different levels and always move in the space, decisions can be considered as data collection and process (Sarrafzadeh, 2001). Most managers and employees consider

decision making as a single event that happening in a definite moment of time. But in fact, the decision-making process associated with the final game of power, politics, personal conflicts and organizational history. Leaders who have the power to detect it, making decisions much better than those who continue the emphasis on the notion that decision is event only in their control. Therefore have been said that some of the decision making process are more effective and efficient than others (Garveen, 2001). Now large computer facilities and advanced communications reduce administrative problems and provided to think and make decide on the space for planners and implementers. Small computer entrance opens a new window to the automation world and provides many administrative and application facilities. These tools can increase speed and accuracy and greatly promoted performance ability of administrative units in terms of quantity and quality.

Performance is the result of an employee activity in terms of the performance of assigned duties after a certain time that can have the production aspect as the number of books that the binder bind during a day or aspect of the service as the number of clients who are serving throughout the day by an office worker (MesbahRaad, 2004).

The use of these tools in addition to the increased speed and accuracy, the effective allocation of employee's performance and dramatically raises proper facilities for the directors and office when you require so that they can easily achieve accurate information, move information any way they want, mix and easily analyze and printed reports or through the network provide for planners and managers. Use this report is based on true and correct information is supplied. Also enables administrators to evaluate the performance of the units under its management, many of the problems and shortcomings identified and with full awareness of its strengths and weaknesses make appropriate decisions and greater oversight of their programs.So the automation question becomes more significant day-to-day, if organizations can present itself at the highest level of preparedness to deal with internal and peripheral equipment that have benefited from a high degree of automation. Many scholars believe that every decision depends on information about the subject and even some said 90 percent of any decision is the information. So a person as the decision maker in the organization or in the community must has appropriate accurate and timely information that cannot make proper decisions in performing their duties and finally into action and evaluation.

In this case the informational systems helps to individual obtain more quickly detailed information and with the advantage of them, to obtain maximum efficiency and effectiveness.

Digital tools raise our special capabilities to high level :thinking ability, forming ideas and collaborate on the implementation of what we have thought. The spread of computer in the office with the increasing spread of new communication product of computing and information storage associate with changes in the method of administration. The initial work of the computer system was used for correspondence independently.But over time computers were connected to each other. This connection allows users to not only use the internal correspondence jointly but also they can send messages to each other. Nowadays there are many types of office automation systems. Course management information system of the organization and with the benefit of modern tools can collect and process data management in order to achieve goals, and support for help. Computer, increase speed, accuracy of decision making and therefore increase the level of speed, accuracy and efficiency of the organization. Automation system has a great impact on the validity, accuracy, performance, economy and timeliness and decision making of employees and managers, so in this study the impact of office automation system performance and improve staff decision to be reviewed.

Review of the Research Literature

Internal Investigation

Moussaoui and Nowruzi (2009) during his study entitled "The effect of automation systems on organizational communication," according to the results of the study can be observe that there is an office automation system based on some aspects of effective organizational communication. This more effective in the areas of organizational communications and public relations and corporate communications office observed. The office automation system has a major role in the ease and speed of information exchange

and has been successful to create new channels of communication. Preventing some unnecessary communication at work time is the results applying this system in organizations. So it could be said that this system have a positive impact on communication within organizations and has been increase the speed and ease of communication channels and organizational.

Chaman (2010) investigate the effect of improving office automation on governor and ministerial level manager's decision making. In recent years, wave of use and take advantage of our administrative automation system dominated in our country and many organizations have a tendency to take advantage of the use of these systems. But it should be investigated to what extent such information systems managers are able to assist in improving decision making and whether such systems could meet the expectations of managers in decision making. The main goal of this study was to investigate the effects of office automation system to improve management decisions making and ministerial of Guilan Province and secondary goal such as identification of a complex automation system for informing the manager's office investigation and analysis of the effects and results of management decision making and investigate and identify the factors influencing the success of information security such as office automation system in terms of accuracy, opportune and economic effects of office automation on improving decision-making process for managers. Automation solutions to improve performance are to exploit. Office automation system with features such as the number of incoming letters, perception, using time as the independent variable and the improvement of management decisions making with characteristics such as accuracy, opportune and economical is considered as the dependent variable .

Casual- comparative is methodology of the research and results of the study showed that automation system have a positive effect on the increasing the accuracy of management decisions making.

Yazdani and Others (2010) in a study investigate the impact of administrative automation to reduce cost breakeven analysis (case study: Mazandaran Wood and Paper Industries). Management information system is the organization's formal system that provides reports for decision making in different levels. Today, the success of an organization depends on organizing and using the proper data and information resources management organizations. On the way to optimal utilization of resources the use of tools such as office automation, in addition to facilitating communication and information transmission raised the speed and accuracy of message exchanges and can play an effective role in reducing administrative costs. With a study in Mazandaran Wood and Paper Industries Co. establishment of office automation project and its results as an appropriate way to increase the speed and reduce the costs of information exchange was developed. Application of the decision in question, have interesting and valuable results that can be generalized to other industries as valuable experience with real results and reliable use. The breakeven analysis, return on investment and profitability of this technology, has a desired effect and the calculation and analysis of the project, has endorsed its value.

Saadinezhad and Barzin (2007) also in their study entitled "provide a fuzzy model to evaluate the efficiency of workflow automation system communication" conclusion that the flow of communication in evaluating the productivity of office automation systems, some indicators are qualitative. So, the use of fuzzy models increases the accuracy of the results.

-In Aligholi Roshan's study (2005) as titled "analytical approach based on office automation and its impact on the productivity and automation applying effect on productivity" has been determined that automation increases productivity.

-In another study by Taghizadeh (2005) the impact of information technology on organizational efficiency, work speed, on time recovery and quick access to information before the application of information technology in comparison with the results of the increase in the size of the effect .The accuracy in comparison with the previous work in data storage and application of information technology systems has increased but would not the effectiveness of the organization.

-In a study to investigate the mechanization research staff efficiency by Makvandi (2002) was concluded that the mechanization of factors such as speed, accuracy, and on time decision making and job satisfaction, only have a significant effect on speed of mechanization and job satisfaction. In Mohseni's research (2002) evaluate the impact of office automation on the performance of the employees of all the

factors ,easy access to data and information, uniformity in all things, speed and accuracy in performing the operations have a significant effect on employee performance as a result automation increase employee performance.

External Research

-Kavi (2004) in a study entitled "Analysis and design of automation system" in the University of California state that recently, the design automation system in order to optimize the various levels of administrative work and save costs, manpower and time, more and more. Automation facilitates the services and increase productivity. Automation of the process requires the instructions preparation and a diagram for the operation of the system

-Liukhtry (2003) to assess the impact of IT on the productivity of industrial activities. The results showed that the positive effects of IT on productivity growth, but like many developing countries, this effect is not significant.

-Basanini and Askaripta (2002) study the performance and productivity growth in OECD countries .

The results are among the countries that have shown high growth in the 1990s, there are several common factors that lead to their achievement: improvement in the employment of labor, human recourse increasing and use of information technology resources. They have shown that there is a positive relationship between the quest for innovation that is shown by the increase in labor productivity and investment in information technology.

Hypothesis

There is a significant relationship between managers and employees administrative automation of the performance (quality of decision making).

-there is a significant relationship between managers and employees automation of the performance (quality, data analysis).

-there is a significant relationship between managers and employees automation with performance (new incoming ideas).

-there is a significant relationship between managers and employees automation with performance (quality of response).

- There is a significant relationship between managers and employees automation with performance (improve work procedures)

MATERIALS AND METHODS

To gather information in the field of theoretical and research literature on the subject library resources, articles, was used .To collect data and information to analysis the questionnaires were used .

The questionnaire consists of 30 items and five dimensions of quality of decision-making, quality of information analysis, the entry of new ideas, processes, quality, accountability and reform work processes.

Reliability and validity of the questionnaire by the researchers and experts with using Cronbach's alpha will be approved .

The statistical population in this study consisted of managers and all employees of the Commercial Service of the grain in kohgiloyeh-va-boyerahmad, the number of people is 186 that through random sampling by Morgan table, 165 person were evaluated. Demographic data describing the sample as frequency tables and frequency percentage and related diagrams to each are performed .

Statistical methods used in this research to be done in two approaches. They are descriptive Statistical methods and inferential statistical methods.Although the data that was collected as a sample and its purpose is to generalize the results to the entire community, the emphasis on statistics is inferential. But to provide an overview of the data and summarize it, descriptive statistics are used. Major component used in descriptive statistics are using frequency tables and diagrams, which include the mean, variance and standard deviation.

In inferential statistics to determine the correlation between variables, the Pearson correlation coefficient is used to analyze the data, and SPSS Version 21 software was used.

Demographic Indicators Description

Table 1 shows the demographic characteristics of the study population. According to that it is deduced that the overall average age of respondents is 45 years, with a standard deviation corresponding to 147/1 . The results showed that 24 persons (19.5%) were female and 99 (80%) male .Based on obtained information from the respondents' level of education ,16 persons (13 %)have Diploma, 57 (3/46 %) bachelor degree, 20 persons (16.3 %) M.A and 28 persons equal to 8.22 have associate degree. It can be argued that the different level of education, undergraduate education is the most prevalent .The analysis of work-related experience showed that 64 persons equivalent to 58 percent of studied people have 1 to 15 years record and 36 persons equivalent to 23 percent 16 to 20 years and finally, 17 persons equivalent to 19 percent more than twenty years of record service .

The following Table 4-1 diagrams are related to demographic characteristics.

Variable	Different levels	Excess	Percentage	Mean	Standard deviation	Minimum	Maximum
Gender	Male	99	80.5	-	-	-	-
	Female	24	19.5	-	-	-	-
	Total	123	100	-	-	-	-
Age		123		36.7			
Level of education	Diploma	16	13				
	Assistant	28	22.8	-	-		
	Bachelor	57	46.3				
	MA	20	16.3				
		123	100	15			
Marital statue	Singular	18	15.5	-	-	-	-
	Marriage	104	84.6	-	-	-	-
	Total	123	100	-	-	-	-

Descriptive analysis of Variables

Table 2: Working process improvement

Item	*Mean	Standard *Deviation
Organization to what extend has ability to update management and performance methods?	3.85	0.79
To what extent clients are satisfied automation compared to manual system?	3.90	0.73
To what extent office automation reduces administrative bureaucracy?	4.23	0.92
To what extent automation prevent increasing employee job rotation and the monotony of work?	3.76	0.60
To what extend automation cause to reduce letter and document simple movements?	4	0.82
To what extent automation have the ability to increase the utility of employee creativity in furthering the organization's goals?	3.74	81
To what extend administrative automation effect on working recognition and improvement?	3.84	0.68
To what extend administrative automation reduce redundence	4.43	0.82
Automation to what extend avoid unnecessarily hitting (outside official positions) when individuals working		

Modification of Work Processes

Table 2 shows the distribution of increasing items in working process. As you can see the item about automation to how extent can reduce the redundant traffic? With an average of 43/4 have the highest scores to be allocated among the responses. Also the lowest level of the automation is item to how extent has the effective utilization ability to increase employee creativity for advancing the organization's goals ? The average is 3.74.

Quality Decision-making

Table 3 shows the distribution of items in the quality of decisions- making .As will be notice question about administrative automation item to how extent has been effect on the speed of decision-making. Coworkers with the highest mean average of 4.24 to be allocated among the responses.The least amount of items related to office automation to what extent effect on the accuracy with the mean of 3.68.

Table 3: Quality of decision making

Item	*Mean	Standard deviation
Office Automation How effective the opportune of decision-making	4.12	0.88
Automation to what extent the effect on accuracy of decision-making	3.77	0.75
Automation extent on the accuracy of decision-making	3.68	0.75
Automation to what extent effect on the precision of decision-making	4.24	0.98
Automation to what extend effect on decisions making be economic	92	0.92

Analysis

Table 4 shows the managers distribution analysis items.As can be observed, the item about how much automation will provide opportune information allocated the highest average in 4.39 among the responses .The lowest extent of the automation items related to items to how extend cause monopoly of information and this information is made public availability? The mean is 3.66.

Table 4: Analysis

Item	*Mean	Standard *deviation
Administrative automation to what extend makes safety of access to information?	4.09	0.61
How much automation causes new features and ease of communication with colleagues and managers?	4.22	0.81
Automation how to increase reporting capabilities and efficient subject indexing?	4.21	0.71
Automation to what extend eliminate the monopoly of information and access to this information?	3.66	0.76
Automation how to increase employees' confidence in the correct information to obtain?	4.01	0.67
To what extend automation will be provided punctual information?	4.39	0.83

Quality of Accountability

Table 5 show the frequency response is quality of accountability items .As can be observe, the item about how much automation cause to create faster and send a quick access to the correspondence? With a maximum allocated average 4.93 among the responses. The lowest of the automation items to what extent the promotion of a spirit of risk-taking and test new ways in staff? With average3.45

Table 5: Quality of accountability

Item	*mean	Standard *deviation
To what extend automation cause faster to create and send a quick access to the correspondence?	4.93	0.61
To what extend automation reduces the time to provide services to referred persons?	4.05	0.80
To what extend automation promotes a spirit of risk-taking and testing new ways of staff?	3.45	0.72
To what extend Automation effect on making easier it to respond to referrals?	3.99	0.78
To what extend Automation effect on develop and diversify in ways that affect interactions with clients?	3.87	0.77
To what extend automation makes easy to follow-up letters?	4.58	0.71
To what extend automation associated with client satisfaction?	3.90	0.73
To what extend automation makes it easy to establish relationships with other entities, despite the physical distance is close?	4.22	0.76

Entrance of New Idea

Table 6 show the distribution of new ideas entrance. As can be observed, the item about the extent to which automation has led to the development of employees' skills with the highest average allocated 4.09 among the responses. The lowest administrative automation related to items-how extend makes use of young and efficient force? With an average of 3.45

Table 6: New Idea entrance

Item	Mean *	Standard deviation *
To what extend Automation motivate employees to improve their internal operations of the organization?	3.83	0.80
To what extent communication systems provide some new features?	3.95	0.91
To what extend automation makes use of efficient and young force?	3.62	1.03
To what extend automation cause to development of staff skills?	4.09	1.01

Inferential Statistics

Administrative automation with managers and employees' performance (improved work processes) have significant relationship. To investigate the relationship between different components of service quality automation Pearson's correlation coefficient was used. Also are used to describe the correlation between parameters of the model of Davis (1971). Based on the correlation model 0.01 – 0.09 = slight, 0.1-0.29 = low, 0.3-0.49 = Average, 0.5-0.69 = top, 0.7-0.99 = very high and 1 = complete, were describe .

To assess the relationship and impact of the reform process by working with various automation components of Pearson's correlation coefficient was used.

The calculated correlation coefficients indicate that the reform automation process components working relationship is positive and significant at the 1% level. The correlation between the reform processes had to do with perception, so this is a significant positive correlation between the patterns of Davis in the middle. Furthermore, the correlation between the reform process and working with incoming letters indicate the significance of this correlation. Thus, according to Davis, the correlation pattern is intermediate level. The correlation between the reform process and working hours was also a significant that correlation between these two variables was high.

Table 7: Correlation of the working presses improvement with automation factors

Variable	Pearson correlation index®	Level of significance (p)	Correlation descriptive
Perceive	**0.471	0.000	Medium
Number of incoming letters	**0.393	0.000	Medium
Usage hours	**0.5022	0.000	High
Total automation	0.482	0.000	Medium

*Reference: Pearson correlation coefficient of research findings * $P \leq 0.05$ ** $P \leq 0.01$*

Automation has a significant relationship of the managers and employees' performance (quality of decision making). To assess the quality and impact decisions concerning the different components of the automation of the Pearson correlation coefficient was used. The calculated correlation coefficients indicate that the quality of decision-making automation components of a positive relationship between the level of 1%. The correlation between the decision makings had a significant and positive relationship with Davies pattern understanding. This correlation was high.

Furthermore, the correlation between the qualities of decision-making with the number of incoming letters indicates the significance of this correlation. Thus, according to Davis pattern, the correlation pattern is the intermediate level. Finally, there was also a correlation between the qualities of decision-making and using hours on average, and these two variables was reversed.

Table 8: Quality correlation of decision making with automation factors

Variable	Pearson correlation index®	Level of significance (p)	Correlation descriptive
Perceive	**0.571	0.000	High
Number of incoming letters	**0.343	0.000	Medium
Usage hours	**-0.302	0.000	High
Total automation	0.423	0.001	Medium

*Reference: Pearson correlation coefficient of research findings * $P \leq 0.05$ ** $P \leq 0.01$*

Administrative automation with managers and employees' performance (quality of information analysis) has a significant relationship. For assessment and analysis of data relating to various automation components of Pearson's correlation coefficient was used. The calculated correlation coefficients indicate that the components of the automation of data analysis and positive relationship between the level of 1%. The correlation between data analysis showed a significant positive correlation Perception. Thus, Davis pattern of correlations was moderate. Furthermore, the correlation between the data analysis showed a significant correlation with the number of incoming mail, so Davis pattern of the correlation is at a high level. The analysis of correlations between the data and the number of hours was significantly lower in the correlation of these two variables.

Table 9: Data analysis with automation factors

Variable	Pearson correlation index®	Level of significance (p)	Correlation descriptive
Perceive	**0.441	0.000	Medium
Number of incoming letters	**0.593	0.000	Medium
Usage hours	**0.252	0.000	Low
Total automation	0.500	0.001	High

*Reference: Pearson correlation coefficient of research findings * $P \leq 0.05$ ** $P \leq 0.01$*

Automation and managers and employees' performance (Quality of accountability) has significant relations. The calculated correlation coefficients indicate a significant positive relationship between the components of the equipment with the quality meet at 1%level. The correlation between the responses to the perceived quality had a significant positive correlation between Davis patterns so that was moderate. Furthermore, the correlation between quality of response and the number of incoming letters indicate the significance of this correlation, so the pattern of the correlation Davis is at a high level. Finally, the significant correlation between quality of response and the number of hours indicate that the correlation between these two variables was high.

Table 10: Quality coefficient of accountability with automation factors

Variable	Pearson correlation index®	Level of significance (p)	Correlation descriptive
Perceive	**0.451	0.000	Medium
Number of incoming letters	**0.693	0.000	Medium
Usage hours	**-0.562	0.000	High
Total automation	0.601	0.000	High

*Reference: Pearson correlation coefficient of research findings * $P \leq 0.05$ ** $P \leq 0.01$*

Table 11: correlation of new idea entrance with automation factors

Variable	Pearson correlation index®	Level of significance (p)	Correlation descriptive
Perceive	**0.421	0.000	Medium
Number of incoming letters	**0.693	0.000	Medium
Usage hours	**0.462	0.000	High
Total automation	0.501	0.000	High

*Reference: Pearson correlation coefficient of research findings * $P \leq 0.05$ ** $P \leq 0.01$*

Administrative Automation has (entry of new ideas) a significant relationship with managers and employees' performance. The calculated correlation coefficients indicate that the components of the automation with the introduction of new ideas and positive relationship between the level of 1%. The correlation between the arrivals of the new ideas had a significant positive correlation with perception. Thus, Davis pattern of correlations was moderate. Furthermore, the correlation between the arrivals of new ideas to the number of incoming letters indicate the significance of this correlation, so Davis pattern of the correlation is at a high level. Finally, the correlation between input and new ideas for meaningful were use also these two variables was high.

REFERENCES

Aligholi Roshan (2005). Analysis of office automation and its effect on productivity, MA thesis, Faculty of Management Accounting, Shahid Beheshti University.

Covey Stephen (2004). *The Seven Habits of Successful Men*, translated by Yahya Shams (Elmi publication) Tehran.

Garveen David and Michael Roberto (2001). The article, *Unheard of Decision Making*, translated by Parastoo Moein Aldin, excerpt Management Magazine, No. 13, Tehran, Fara nashr modiriat farda

Makvandi Yasser (2002). Mechanized impact on organizational performance, MA thesis of governmental Management, Faculty of Management and Accounting Trabiat Modares University.

Mesbah Raad and Seyedeh Adineh (2004). Effectiveness of management information systems at Dana Insurance Company. *Insurance Industry Journal* **XIX**(76).

Mohseni Naser (2006). Evaluate the effect of office automation organizational performance, MA thesis, Faculty of Management and Accounting. Shahid Beheshti University

Norouzian Gharah Tekan Majid (2011). Integrated management system (IMS), second National Conference of Industrial Engineering, Yazd industrial University 255-265.

Raymond Mc Lloyd (1999). *Management Information Systems*, edited by Jamshidian Ata-Abadi (Isfahan University Press).
Rahimikia Mohammad (2011). Integrate management system and its role in modern management, *Modern Management Journal*, Normagz Website **45**.
Sarrafzadeh Aaqar and Ali Panahi (2001). *Management Information Systems* (Mir publisher) Tehran.
Sheikh Bakloo Reza (2012). The Impact automation system Oil Products Distribution Company performance on Lorestan erea, *Journal of Modern Management* **68** 115-126.
Taghizadeh Ebrahim (2006). Evaluate the impact of IT system on organizational efficiency, MA thesis, Faculty of Management and Accounting.
Yazdani Ali Akbar (2010). The role of automation in trade promotion, industrial development, *Journal of Industrial Management*, Third National Conference on Marine Safety, community of human science Portal.