

Investigating the Role of Office Automation in Improving Employees Performance



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Abstract

The current era is a wonderful age of information and knowledge; the age of incredible acceleration of technology and creativity. In recent years, a wave of implementation and operation of office automation systems has swept the country and many organizations have shown a desire to use them. The main objective of this study is to investigate the impact of office automation systems on enhancing employee performance at Semnan Province Department of Tax Administration in Iran. This research is a descriptive-survey research in terms of method and classified as an applied research, in terms of objective. The statistical population of this study is all employees of General Department of Taxation of Semnan Province with a degree equivalent to and above high school diploma to 317 people. According to its subject and nature, the statistical sampling method of the research is stratified an appropriate allocation sampling for the employees and educational classes. Cochran formula yielded an estimate of the sample population equal to 174 participants. SPSS is used to analyze the data collected. Diagrams have drawn by EXCEL software and structured equations have calculated by AMOS software. All research hypotheses are verified and the results represent that office automation system is effective in improving employee performance.

Keywords: Automation, Performance, Improving Employee Performance

1. Introduction

Today, advanced computers and communication systems that reduce many administrative problems and provide a different intellectual space for the planners and executives provide a wide range of facilities. The introduction of small computers has opened a new window into the world of automation and provided executive bodies with many facilities. These tools have the power to increase speed and accuracy and improve the performance of administrative units to the highest levels in terms of quality and quantity. In addition to speed and accuracy, these tools are effective in increasing expertise too and can dramatically maximize employee performance. Such systems can provide convenient facilities for the managers and operators to easily access timely and accurate information. Replacing, modifying, combining, and analyzing information is easy, and reports are prepared and published in any way they need, or transmitted to planners and managers over the network. The use of these reports, which are based on correct and incorrect information, enables managers to take appropriate action by identifying problems and shortcomings in addition to evaluating the

performance of the units under management. Decisions with full awareness of the strengths and weaknesses, and take more control over their programs. Henceforth, the concept of automation becomes more and more important day by day. Today, organizations that benefit from a high degree of automation can often see themselves at the highest level of readiness to deal with environmental and internal equipment.

2. Problem Statement

By considering that Tax Affairs Organization of the country is one of the largest organizations in Iran, the method of performing administrative duties and providing services to clients to achieve the main purpose of tax collection is an imaginary task prioritized necessarily. Workflow management, administrative correspondence and time management have completely transformed into organizations and economic institutions. Employing the slow and problematic methods and non-mechanized administration is not acceptable. The excessive volumes of the slowness in the access to information have driven

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officials and managers who care about the management of their organizations toward office automation in its different dimensions. Performance is the result of an employee activities in terms of performing and his / her duties in a certain period of time that can have a productive aspect, such as the number of clients served by an employee throughout the day. Office automation is the best tool to achieve useful solutions for saving and using time optimally in an organization. Despite the fact that Department of Tax Administration was among the first organizations to have access to computers, neglect and dissatisfaction by some managers and employees of past automation procedures made the opportunity to progress slowly.

Following the implementation of government policies to increase the share of taxes in the budget, many actions have been taken to develop office automation in the country's tax administration organizations and relatively large expenditures have been spent on the establishment and use of these systems. But it is not clear to what extent these systems have been able to help organizations improve the performance and whether they have been able to meet the expectations associated with employee performance and, consequently, organizational performance. Given the above importance and the fact that no research in this field has been done in the organization under study, it seems necessary to conduct the present study.

In summary, the present study seeks to answer the question whether the implementation of office automation has an impact on employee performance at Semnan Province Department of Tax Administration or not. If the organization managers and employees embrace the effects and benefits of automation by replacing manual and traditional systems, this will obviously result in the achievement of unity, speed, accuracy and quality in carrying out the tasks as well as the increase of efficiency and employee performance. "If managers think they can manage their firms for the next decade in the same way as they have done in the past decade, they are seriously wrong. They have to transform the status quo to succeed in the next decade" (Benis ,2002). This research and its results can play a pivotal role in detecting the strengths and weaknesses of the system and eliminating potential conflicts in the automation system of this organization. Also, equipping with modern hardware-software technologies can be effective in accelerating the selection and requirements in peer organizations and in larger areas such as the Ministry of Interior and other organizations.

3. Research Objectives

Until about 1980, office automation was seen as a way to improve productivity levels of only secretaries and office staff. Achievements of automation could assist office staff in performing more operations on documents, faster and better. Then, it became clear that creative employees could also use the help of office automation. Automation can make it easier for creative employees to prepare outgoing letters. For example, creative staff members or secretaries can use word processing software to prepare lists, notes and reports.

(Vermeulen&et, 2018) the research objectives are divided into the following two categories:

3.1. Primary objective

Analyzing the impact of implementing office automation on employee performance at Semnan Province Department of Tax Administration

3.2. Secondary objectives

1. Analyzing the impact of office automation on creating uniformity task performance at Semnan Province Department of Tax Administration
2. Analyzing the impact of office automation on speed task performance at Semnan Province Department of Tax Administration
3. Analyzing the impact of office automation on the accuracy and precision of the task performance at Semnan Province Department of Tax Administration
4. Analyzing the impact of office automation on the quality of task performance at Semnan Province Department of Tax Administration.

4. Conceptual Model

First, the conceptual model needs to be displayed, and so the hypotheses can be traced in their due paths:

4.1. Research Hypotheses

Primary hypothesis

The implementation of office automation has an impact on employee performance at Semnan Province Department of Tax Administration

4.2. Secondary hypotheses

1. Implementing the office automation has an impact on creating uniformity task performance at Semnan Province Department of Tax Administration
2. Analyzing the impact of office automation on the speed of task performance at Semnan Province Department of Tax Administration
3. Implementing the office automation has an impact on accuracy and precision of task performance at Semnan Province Department of Tax Administration
4. Analyzing the impact of office automation on the quality of task performance at Semnan Province Department of Tax Administration

5. Literature Review Office Automation

Office automation increases the productivity. When the automation is used as a tool for problem solving, it helps the managers to communicate with each other more conveniently and find the solutions. Improved communication can lead to better and faster decisions. Although automation has been remarkable in the production sector, it has not followed a serious program. As technological innovations developed, factory managers easily took the advantages. A similar situation also occurred in the administration sector.

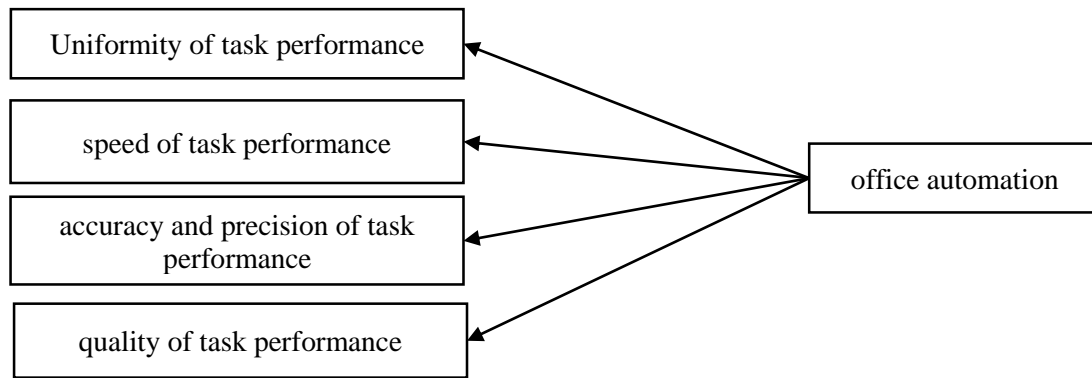


Figure 1: Conceptual Model of the Research

Office automation tasks

Save data

Data storage is an important part of office automation including the things like registering office forms and documents.

Data exchange

Items such as voice mail, e-mail, etc. are electronic data tools that allow the exchange of information between different users.

Data management

Office automation is, mainly used to track different periods for financial plans, investment costs, marketing costs, etc. The task management system monitors and controls various projects and activities of the organization through electronic schedules.

The study intends to clarify that organizations can use computers to avoid the increases in future costs. This is especially true in the case of office automation, since office productivity is a means to delay further recruitment. Although avoiding secretarial costs is a good target, such costs are relatively low when compared to the potential benefits of automation as a problem-solving tool. Advanced decisions by the managers, because of improved communication, can lead to the generation of more revenues for the institution and revenues even so much higher than the benefits of avoiding costs.

The purpose of office automation

Until about 1980, office automation was seen as a way to improve productivity levels of only secretaries and office staff. Achievements of automation could assist office staff to perform more operations on documents, faster and better. Then it became clear that creative employees can also use the help of office automation. Automation can make it easier for them to prepare outgoing letters. For example, creative staff members or secretaries can use word processing software to prepare lists, notes and reports. (Vermeulen&et,2018)

Office and automation

Automation, in short, is "using technology to help manage information." It can be said that office automation is a way of thinking about and working with information

and it should not be confused with the ideal and theoretical concept of future administration. In fact, the difference between these two terms is "practicality". Consequently, the engagement of automated equipment in administrative task will be instrumental in accomplishing organizational goals and enhance administrative performance. According to Ismaily, (2017), computers help to increase productivity among administrative staff.

Literature describes the implementation of Information & Communication Technology (ICT) systems in organizations as an intrinsic factor that may results in technostress (Long, 2018).Technostress is a form of stress that is the outcome of the inability to comply with ICT systems (Mahaptra & Pati, 2018).

Technostress can be emerged due to different factors such as inability to interact and cope with ICT systems, workload overload and new technology act as threat to job security (Hwang & Cha, 2018; Ye, 2018). The presence of technostress among employees may affect their job performance is inversely related to motivation (Effiyanti & Sagala, 2013). The basic question is: what is an office and how did it appear? There is a story in mythology about a city called Utopia in which everyone knows their job well, acts accordingly, and benefits from facilities without egotism. In the real world, there are no such relationships. First, it is unclear whether individuals could use their power by themselves for the benefit and improvement of the public. Secondly, everyone wants to have maximum facilities at their disposal. So, there should be some group to direct facilities towards growth and development by unified management and supervision.

Benefits of office automation

The benefits of a well-run automated office compared with a traditional one can be listed as follows:

Staff Optimization

- A. Improving the ability of individuals
- B. Preventing the squandering of human resources
- C. Compensating human weaknesses
- D. Reducing chores

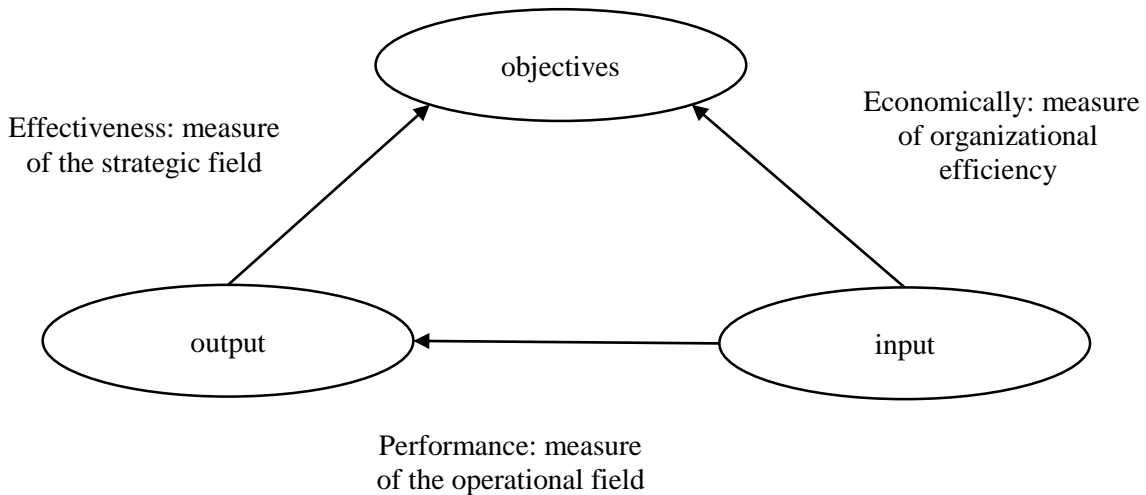


Figure 2: Relationship between performances, effectiveness and economically on the one hand, and performance appraisal on the other hand (Rezaian et al, 2002)

Increasing Efficiency

- A. Increasing precision and reducing duplicate or conflicting functionality
- B. Speed in output
- C. Speed in workflow

Creating Competition

- A. Reducing the time of data processing and transaction
- B. Facilitating correct decisions
- C. Conserving natural resources

Increasing the Degree of Control

- A. Enhancing personal and organizational flexibility
- B. Making data transferrable

Reducing Expenses

- A. Reducing initial investment costs of building the structure (for eliminating unnecessary details)
- B. Reducing current costs

It is worth noting that, because of the above benefits, the automation market had grown by over 300% in the world in 1990. By the emergence of this idea, many offices left the centralized form and became scattered all over the world. Automation caused the integration of different types of information including data, text, audio, and video, besides making it available to all people (Rezaeian., 2002).

6. Performance appraisal

6.1. Definition of performance appraisal

It should be noted that if the expected limit (standard) is specified for each individual in the organization based on the performance management cycle model, individual appraisal will be possible without comparison to the others. Otherwise, individuals are evaluated by comparison with other members of the organization. Performance appraisal is known as the backbone of performance management considering that it is one of the major aspects of performance management.

6.2. Concept of performance appraisal

To clarify this point, it must be noted that performance appraisal is a measure of organizational productivity known as the performance. Therefore, measuring the performance of the operations section is nothing more than measuring the performance of an organization. Performance appraisal of the strategic field where policies are made is a measure of organizational productivity known as effectiveness. Therefore, measuring the performance of the strategic field is nothing more than measuring the effectiveness of an organization. Finally, performance appraisal of the entire organization is a measure of organizational efficiency known as economically. The relationship between performance, effectiveness and economically on the one hand and performance appraisal on the other hand is presented in the following figure.

6.3. New ideas in job performance

In traditional approaches, human relationships used to lead to what is known as economic practices. At the heart of contingency theory lies the proposal that performance depends on the proper balance between the individual and the job. The ability or skill factor is the basis for individual appraisal in the performance equation. The motivating factors are social and environmental conditions that make up the job. Contingency theory forms the theoretical foundation of the performance equation.

The purpose of an organization in using this method is to create a balanced background between the individual and the job. In order to ensure that they have the necessary skills and abilities, the selection and training processes are implemented. Ensuring that the environment is motivating for individuals requires a proper career planning and rewarding the performance of employees appropriately. Achieving effectiveness requires ensuring that competent individuals be employed in appropriate jobs and under appropriate conditions (Jamshidian, 1998).

Table 1: Results of the Cronbach’s alpha coefficient test

Reliability Statistics			
Explanation	Cronbach’s Alpha	Cronbach’s Alpha Based on Standardized Items	N of Item
Items	.922	.921	23
speed of task performance	.817	.820	6
uniformity of task performance	.772	.770	5
accuracy and precision of task performance	.874	.875	6
quality of task performance	.873	.779	6

Table 2: Summary of descriptive statistics of the variables

One - Sample Statistics				
Summary of descriptive statistics				
Explanation	N	Mean	Std. Deviation	Std. Error Mean
Employee Performance Improvement	174	3.8534	.58311	.04421
uniformity in task performance	174	3.8667	.70023	.05308
speed in task performance	174	3.9261	.68643	.05204
accuracy and precision in task performance	174	3.7337	.77504	.05876
quality in task performance	174	3.8836	.65232	.05876

One of the important objectives of industrial organizational psychology is to promote job performance by designing tools and equipment. In order for an organization to reach its goals, the employees must do their jobs upon an acceptable level of performance. This issue is very vital and necessary for manufacturing-service organizations, because poor performance makes them prone to economic failure and bankruptcy, and for educational-service organizations, because poor performance makes them prone to dependence and the regression of society. From a social perspective, the most interesting thing for organizations is to have employees who do their jobs well. Good performance increases organizational productivity which ultimately leads to the improvement of national economy (Hajisharif, 1992).

6.4. Objectives of performance appraisal

Performance appraisal has many functions in organizations. Every manager uses these appraisals to make important decisions such as in case of promotions, transfers and service terminations. Appraisals are to determine the individuals' need for training and development and aimed to identify accurately insufficient abilities and skills. Performance appraisals are used as a measure for choosing and evaluating progress. Performance appraisal can help identify newly hired employees with low performance. Also, appraisals are used for providing employees with feedback on an organization's perception of their performance. All activities of appraisal performance are important. However, the importance depends on our attitude. Some of them are related to decisions by the staff director more than anything else.

6.5. Advantages of performance appraisal

The purpose of evaluating employee performance is to differentiate between employees who perform their duties efficiently and those who are indifferent for reward and punishment policies. This will bring many advantages to organizations; the most important of them are listed below:

- Creating competition and work motivation as well as the achievement of staff security

- applying proper control measures and establishing normative standards for performing tasks, which can alert authorities and determine the quality and quantity of work acceptable for the organization
- Creating a context for the improvement and development of talented employees
- Adjusting the intellectual, emotional and physical conditions of the employees with their jobs by recognizing and measuring their strengths and weaknesses
- Recognizing normal and abnormal behaviors in an organization
- Reducing employees' complaints and criticisms about discrimination, personal interests and biased opinions (Haji Sharif, 1992, 246).

7. Research Methodology

This study is an applied research in terms of its objectives and a descriptive survey in terms of implementation. Using a logical sampling procedure is aimed to generalize the results and findings to the whole population.

It is an applied research because it tries to test practically the theories and claims about the subject of automation performance. In this research, the data is collected through two ways: library and field, each of which has specific components.

The library studies method has been used to collect data related to variables, background and research tools for collecting data by field studies using a questionnaire. The questionnaire used in this study is two parts. The first part includes general questions about the respondents' demographic and overall information; the second part includes specific questions or 23 items assessing "The Impact of Office Automation on Improving Employee Performance at Semnan Province's Department of Tax Administration, Iran" which are rated by respondents on a five - point Likert scale (very low, low, medium, high,

Table 3: Binomial testing of research hypotheses

Binomial Tests						
Binomial Test Results						
Explanation	Group	Category	N	Observe Prop.	Test Prop.	Exact Sig.(2 tailed)
Employee Performance Improvement	Group 1	<= 3	15	.09	.60	.000
	Group 2	> 3	159	.91		
	Total	0	174	1.00		
uniformity in task performance	Group 1	<= 3	25	.14	.60	.000
	Group 2	> 3	149	.86		
	Total	0	174	1.00		
speed in task performance	Group 1	<= 3	16	.09	.50	.000
	Group 2	> 3	158	.91		
	Total	0	174	1.00		
accuracy and precision in task performance	Group 1	<= 3	26	.15	.60	.000
	Group 2	> 3	148	.85		
	Total	0	174	1.00		
quality in task performance	Group 1	<= 3	17	.10	.60	.000
	Group 2	> 3	157	.90		
	Total	0	174	1.00		

very high). In order to test the hypotheses proposed, all employees of Semnan Province's Department of Tax Administration are incorporated into the statistical population of the study by a total number of 317 at the time of investigation. The statistical sampling method of this study, with regard to its subject and nature, is stratified sampling with proportional allocation for employees, with educational levels as the strata. The Cochran formula yielded an estimate of the sample population equal to 174 participants. Finally, 180 questionnaires were administered in the sample population (including employees with high school diploma, associate degree, bachelor's degree, master's degree and higher). 174 questionnaires were completed and returned. Therefore, the questionnaire return rate is 96.48% which is acceptable. The validity of this questionnaire has been approved by professors and experts in the field. In addition, the reliability questionnaire has been calculated by a Cronbach's alpha test, using SPSS software. Hence, it is valid and reliable.

Necessary calculations using SPSS the software yielded a Cronbach's Alpha coefficient of higher than 0.7 for the total scale and four hypotheses, which indicating an acceptable and desirable reliability

8. Research findings

Data analysis is carried out using both descriptive and inferential statistics. In the descriptive statistics section, we have listed the demographic characteristics of the study sample (including gender, level of education, job experience) and in the inferential statistics section, we have tested the main hypotheses using Spearman correlation test.

In the table 2, descriptive indices of the variables including employee performance improvement, uniformity, speed, accuracy and precision, and quality in task performance are presented in the form of four indices. According to respondents, the implementation of office automation at Semnan Province's Department of Tax Administration is highly effective in employee performance improvement,

uniformity, speed, accuracy and precision, and quality in task performance. Dispersion of ideas is relatively low and about average.

To test the hypothesis, binomial tests using inferential statistics and non-parametric methods are used. The results are presented in table 3. Decision: According to the information in the table3 about the hypotheses we have: sig <a = 0.05. Therefore, the null hypotheses are rejected at the 95% confidence interval because of equal values in the two groups relating to null hypotheses. According to the ratio observed, the effectiveness of hypotheses is confirmed. Conclusion: At the 95% confidence interval, the implementation of office automation at Semnan Province's Department of Tax Administration is highly effective in employee performance improvement, uniformity, speed, accuracy and precision, and quality in task performance, according to respondents.

In general, Structural Equation Model (SEM) is a very powerful multivariate analysis form the multivariate regression family. To put it more clearly, it is an extension of the General Leaner Model enabling the researcher to test the set of regression equations simultaneously instead of evaluating only one regression equation. Here, we used this method of analysis besides considering a theoretical model with the purpose of determining the extent to which this model is supported by the sample data. In addition, the relationship between the variables is assessed and the effect of each factor in the confirmed model measured on this basis.

Overall, in order to evaluate the reasonable goodness of fit for the theoretical model, we used a confirmatory factor analysis and goodness of fit indices. Also, to evaluate the direct and indirect effects of predicting independent variable on the dependent variable, we used multiple regression coefficients as well as bivariate and partial correlation coefficients. Before the final assessment of research hypotheses, we analyzed the descriptive

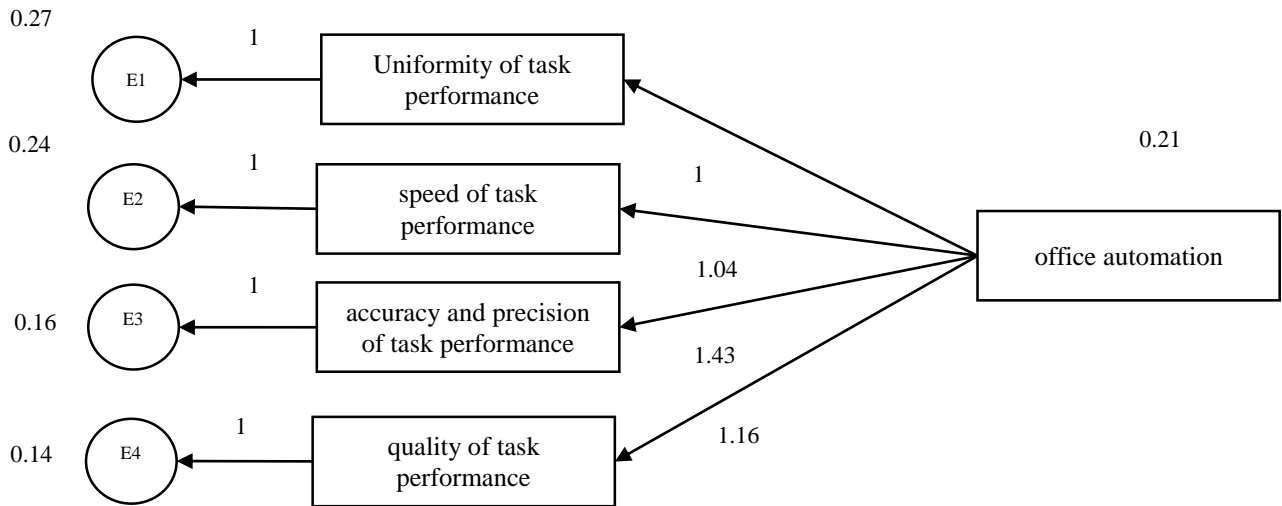


Figure 3: Model 2 AMOS Software Output

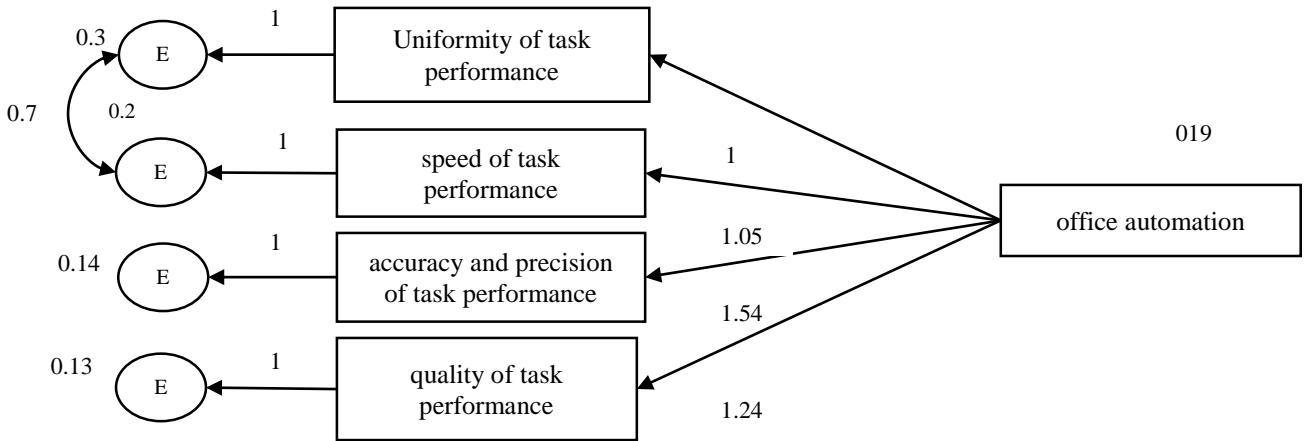


Figure 4: Model 3 AMOS Software Output

parameters of the factors for ensuring consistency with acceptable inputs for SEM analysis. Obviously, given that the validity of the questionnaire has already been reviewed and confirmed, its internal components must be logically correlated with each other because they are designed to measure a variable. The Pearson correlation coefficient is used for this purpose.

As the results indicate, there is a direct relationship between the variables at 99% confidence interval. In other words, all the components have a high positive correlation with each other, significant at 1% level. The following diagram represents the model structure with observed variables in angular form and latent variables in circular or elliptical forms based on the contracts of structural equation methods. The results of investigating the relationships using structural equation modeling are presented in Model 2 in the form of standardized coefficients and significance level of relationships. The results of the analysis and good fit indices do not give a good fit and do not show a significant model. This means that the data of the sample under study do not confirm our theoretical model. Relative chi square, GFI, CFI, AGFI, and RMSEA statistics compare the compliance degree of

variance - covariance matrix of the hypothetical model to the sample matrix. Therefore, we need to make improvements in the model. In this model, indices are applied in office automation variables based on Cadency task bark 16 on corrective recommendations by AMOS software. The final, modified model is as follows. (figure 5)

A second running of the software yields the results of the modified model as follows: Results of the analysis and goodness of fit indices yield a relatively good fit and render the model as significant. This means that the data of the sample under study confirm our modified theoretical model. Relative chi - square, GFI, CFI, AGFI, and RMSEA statistics compare the compliance degree of variance - covariance matrix of the hypothetical model to the sample matrix. In other words, the hypothesis that office automation is linked to the variables is verified. In this model, the degree of correlation between dimensions is significant at the 1% level. After ensuring the accuracy of the measurement model, the next step in the analysis is to obtain estimates of standardized (path) coefficients and the p value of the effect of each regression coefficient in the model.

Table 4: The Pearson correlation test of the hypotheses

Correlations		uniformity in task performance	speed in task performance	accuracy and precision in task performance	quality in task performance
The Pearson correlation coefficient of the hypotheses					
uniformity in task performance	Pearson Correlation	1	.560**	.553**	.505**
	Sig. (2-tailed)		.000	.000	.000
	N	174	174	174	174
speed in task performance	Pearson Correlation	.560**	1	.577**	.566**
	Sig. (2-tailed)	.000		.000	.000
	N	174	174	174	174
accuracy and precision in task performance	Pearson Correlation	.553**	.577**	1	.722**
	Sig. (2-tailed)	.000	.000		.000
	N	174	174	174	174
quality in task performance	Pearson Correlation	.505**	.566**	.722**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	174	174	174	174

** . Correlation is significant at the 0.01 level (2-tailed).

Table 5: Table of confirmation/ disconfirmation of the relationship between variable and standard estimates

Table of confirmation/ disconfirmation of the relationship between variable and standard estimates of maximum likelihood for the theoretical model

Regression Weights: (Group number 1 - Default model)						
Index	Form of the relationship	Index	Estimate	S.E.	C.R.	P
Uniformity in task performance	<---	Office Automation	1			
speed in task performance	<---	Office Automation	1.053	0.127	8.305	***
accuracy and precision in task performance	<---	Office Automation	1.543	0.187	8.237	***
quality in task performance	<---	Office Automation	1.237	0.151	8.205	***

Table 6: Standardized regression weights between variables for the theoretical model

Standardized regression weights: (Group number 1 - Default model)			
Index	Form of the relationship	Index	Estimate
Uniformity in task performance	<---	Office Automation	0.624
speed in task performance	<---	Office Automation	0.671
accuracy and precision in task performance	<---	Office Automation	0.87
quality in task performance	<---	Office Automation	0.829

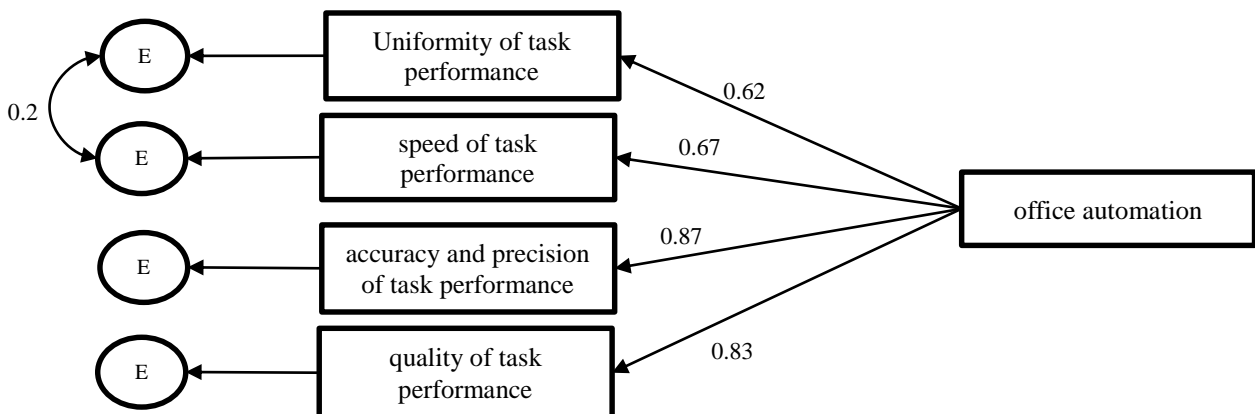


Figure 5: Model AMOS Software Output

9. Interpretation: According to the above results

The critical ratio (CR) is the value obtained by calculating the unstandardized estimate for a parameter divided by the standard error (SE) calculated for the same parameter. This value shows the probability of the error if the null hypothesis, which equalizes this parameter with zero is rejected. Goodness of fit indices for partial least squares (critical ratio and the significance level) indicate the level at which the factor loadings are significant. The results show that there is a significant correlation between most indices with a p value of 0.01 (** significant at the 1% confidence interval). In addition, these results are confirmed by the results of the correlation analysis. In other words, estimates of unstandardized regression weights using the maximum likelihood method represent a significant relationship between uniformity, speed, accuracy and precision, and quality in task performance.

Also, the weights of the values of standardized factor loadings for each variable are presented in the table 6.

Interpretation: According to the above results: it is clear that there is a significant correlation between most indices with p value of 0.01 (* significant at the 1% confidence interval). In addition, these results are confirmed by the results of the correlation analysis. This means that estimates of unstandardized regression weights using the maximum likelihood method indicate a significant relationship between indices of variables at 99% confidence interval. In other words, (0.624 creating uniformity) + (0.671 speed in task performance) + (0.87 * accuracy and precision of office automation) = (0.829 * quality in task performance)

10. Conclusions

According to the main question of this research, whether office automation systems have a positive effect on the performance of employees of General Department of Taxation of Semnan Province, all the hypotheses of the present study are confirmed. Based on these hypotheses, we offer the following suggestions: Recommendations based on the first hypothesis (creating uniformity): It is recommended that business processes be reviewed and designed to be fully integrated with office automation systems. In this way, organizations can use automation. Systems create process stability, uniformity of tasks, integration between units and departments, and improved coordination between employees, so that creating uniformity can prevent conflicting approaches in the performance of duties and different interpretations of laws and regulations.

10.1. Recommendations

- based on the second hypothesis (increasing the speed in task performance):

Invest in the development of IT infrastructure that leads to the development of office automation systems. In turn, this will reduce unnecessary operations and activities and increase the speed of performing organizational tasks. It is also necessary to avoid duplicate functions in the

secretariat, such as creating paper and software records at the same time and only with software records. This will also speed up the processes.

- based on the third hypothesis (increase the accuracy and precision in doing work):

Most of the times, high expenses imposed on an organization are due to the lack of accuracy in performing administrative operations leading to the errors and duplicate functionality. Organizations have to undergo huge costs to overcome and compensate for them. Therefore, strengthening the automation system through warning and control programs in relation to employee can effectively increase accuracy.

- based on the fourth hypothesis (improving the quality of tasks):

Continuous education of employees from the basic level is necessary to enhance the quality of complex office tasks. Managers should also encourage employees to continue using office automation systems and help them replace the traditional system with an automation system to improve the quality of tasks.

10.2. Research limitations

Lack of similar studies in this field due to the novelty of the research topic, the problem of determining indices and turning qualitative factors into quantitative ones such as quality assessment and the limitation of the research topic are the limitations this research. In other words, the researcher has only studied the relationship between office automation and employee performance

10.3. Suggestions for future research

Due to the general policy in the field of E-government and the strategic approach of the ministry of Interior to office automation, the use of an expert team with extensive research facilities and with the help of experienced university professors and experts is recommended. Organizations should use professional researchers instead of amateur researchers to conduct extensive research in this field at the national level.

It is also recommended that:

- This research should be done in other organizations as well as in public and private departments with the necessary corrections.
- Other criteria should be considered in evaluating employee performance.
- Evaluate the impact of automation on employee efficiency, effectiveness and productivity.

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