

Relationship between E-Government and the Performance Improvement of the Employees at Tax Affairs Organization in Ardebil Province

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Abstract

Regarding the purpose, the present study is an applied research and descriptive - correlational in terms of procedure and aims to investigate the relationship between e-government and the performance improvement of the employees at Tax Affairs Organization in Ardebil province. Desk study and a questionnaire were used for data collection. The data collection tools in this study were standardized questionnaires, the validity and reliability of which were confirmed. The statistical population of this study included all male and female employees in Tax Affairs Organization in Ardebil province who were 320 individuals and the simple random sampling method was used to distribute the questionnaires. To investigate the hypothesis and analyze the data, the descriptive and inferential statistics were used in SPSS software. According to the Kolmogorov-Smirnov test results with the significance level obtained for the e-government and improving the performance of employees ($P < 0.05$), the hypothesis of testing the normal distribution of the observations of this study were not confirmed. Based on these findings, the Spearman correlation coefficient was used to examine the hypotheses. The results indicated that there is a significant relationship between the e-government and its dimensions with the performance improvement of the employees in Tax Affairs Organization in Ardabil province.

Keywords: E-government, Performance improvement, Ardabil Tax Affairs Organization.

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Introduction

Due to problems in the traditional administrative systems, especially administrative system of Iran, waste of time, resources, and capital is very high (Sahrayi et al., 2006). Given that a network of long and wide organizations, piles of branches and offices, and an extensive wave of paperwork and documentation make the bulk of Iran's administrative system- which is based on manpower density, concentration, wasting people and authorities' time, repeated and frequent referral of clients and their wanderings, cumbersome administrative rules and lack of utilizing methods and new systems- the necessity of applying new methods without delay is strongly felt.

Currently, with the growth of communication Internet networks and the exponential development of website, the possibility of creation of databases and information is provided and led to unprecedented flow of information. In this regard, many international organizations and institutions have established and created data centers. The implementation of this database and information and the use of information technology in the organization will have developments and changes, and will affect improving performance, growth, shape, organizational pyramid, strategy, and costs of the organization.

Improving the performance of employees in organizations is influenced by various factors. One of these issues is how to employ staff as well as the ability to use the tools provided for them. E-government uses its tools for implementation in its own organizations (Software and Hardware) and affects various organizational factors.

What the organizational performance is, there are different attitudes. Organizational performance can be considered only as the record of the results. Individually speaking, organizational performance is the history of success of an individual. Kane believes that organizational performance is what the person leaves behind and apart from the goal. Bernardini et al. believe that organizational performance should be defined as the results of the work because the results have the strongest relationship with strategic objectives, customer satisfaction, and economic roles.

Thus, organizational performance leads to the conclusion that while managing organizational performance, groups and individuals, both inputs (behavior) and outputs (results) should be considered (Armstrong, 2006, p. 4). Havatel calls this Hybrid Corporate Performance Management model. This model covers level of ability, competence, and success, as well as the goals and objectives of the review.

Thus, the present study aims to investigate the relationship between e-government and improving the performance of the staff in Taxation Affairs Organization of Ardebil, and given the importance of e-government and the need for implementation in governmental organizations, this study seeks to find how much the relationship between e-government leads to achieve improved performance of employees in the organization.

Theoretical Foundations

Electronic government

(Hicks et al., 2007) It seems that the term e-government was used for the first time in the United States and in 1995. Different terms are coined to be used for ICT in government like Online Government, Digital Government and Network Government, of which currently the term e-government has already been accepted by public (Chan et al., 2008).

E-government has increasingly become an important means to provide public services in many parts of governments around the world (Sharma et al., 2007). In fact, this tool provides more and better quality public services, reduces paperwork burden, and helps circulation time in vain and leads to more satisfied citizens. Massive growth and success of electronic commerce in the public sector as a factor has caused the public sector to enter the field and use web technology in health care services.

E-government is a complex socio-technical system that requires a high level of maturity of skills, policies, and legal frameworks and requires a special emphasis on socio-cultural situation (Len et al., 2008).

In fact, e-government does not just mean to use and apply ICT, but a way to re-engineer processes and improve service delivery at different levels (Anderson et al., 2006).

As the intended definition to satisfy this study simply and comprehensively e-government is "the ways for governments to use the new technology that gives the people the necessary facilities for equitable access to government information and services, reform the quality of services, and greater opportunities to participate in the process of illustrations of democracy" (Gold Kohl, 2011).

Dimensions of e-government

1) The extent of the development of Web Features, 2) Internet and intranet development, 3) Web generation time, 4) The amount of support, website development and equipment, 5) development of electronic services, 6) amount of financial support, 7) educational programs for citizens, 8) awareness-raising to introduce e-services website and related facilities.

Employee Performance

Improving organizational performance, systematic application of pre-designed behavioral science application in organizational development, improving and re-strengthening of strategies, structures, and processes are the issues that lead to organizational effectiveness (Thomas et al., 2007). Improving organization is professional background in social activities and research in practice. Improving the organization includes a wide range of the activities that comprise the endless changes. Creating a team with members of senior management, structural changes, and job enrichment are of the examples of organizational performance improvement.

Organizational-job performance assessment at organization aspect is usually synonymous with effectiveness of activities. Effectiveness means the extent of achieving the aims and objectives with the feature of effectiveness of activities and operations. Job performance evaluation in the aspect of the quality of the use of resources is expressed in terms of performance indices. If in the simplest definition, we attribute the ratio of input to output as efficiency, organizational performance evaluation system, in fact, is the performance of management decisions measures the optimal use of resources and facilities. Improving organizational performance is the result of real effort that leads to increased profitability, increased customer satisfaction, and sense of security in customers.

Performance factors

In general, performance factors include behavioral and process factors (Jalali, 1998, p. 133).

Behavioral factors

- Respecting administrative regulations and discipline: the timely presence and accomplishing tasks on time (Jalali, 1998, p. 133).
- Proper attitude with clients: a good behavior, efforts to resolve problems, and follow-up, intimate relationships with colleagues.
- Seriousness at work: Instant execution of orders, following the assignments.
- Efforts to learn things: efforts to increasing job skills, learning different skills, participation in training classes.
- Flexibility: admitting mistakes, refraining too much insisting about one's own opinions on the acceptability of other tips.
- Reliability: mastering the work and doing it without constant supervision, attention to the correctness and accuracy of work, caring at work, feeling responsibility, taking care of equipment.
- Spontaneity: diagnosis of the needs of the unit and providing solutions tailored to meet the needs and motivation to work and to establish constructive work, and welcoming the implementation of activities.

Process variables

- Factors related to working conditions: the provision of equipment, proper equipment, job security, and liability insurance (Jalali, 1998, p. 133).
- Factors related to the respect and prestige: respect by managers, establishing intimate relationships, encouragement among the people, resolving discrimination and injustice.

- Factors related to educational needs and providing promotion conditions: holding re-training courses, providing research and scientific research context, and strengthening informatics.
- Factors related to participation: participation in decision-making, asking for people's opinions on the topic associated with them.
- Factors related to qualified and competent management.

Therefore, as e-government leads to improvement in the performance of employees in the organization, this study will be effective and important, and as today's organizations operate in a competitive environment, carrying out this study becomes even more important.

Review of literature

In the article titled "Model of development of e-government in Iran in 2026" by Faqihi and Memarzadeh (2015), the results and findings showed that for the realization of the model in 2026, all the six components of e-government, especially communication infrastructure and access to digital content must be developed. Based on the results obtained from the model, the highest priority among the components of e-government development is for communication infrastructure.

Mohammadi Banstani (2012), in his master's thesis entitled "The relationship between establishment of e-government with organizational performance (Yazd Regional Electric Company)" concluded that e-government strengthens organizational performance, improves it, and makes it grow, and that e-government has a significant positive correlation with organizational performance.

Zhang et al. (2014), in a study entitled "Assessing e-government performance using fuzzy logic" concluded that for better performance of e-government, the use of expert and enabled operators seems necessary, and among three groups of operators, Ifijum operator has the best performance in matlab Fuzzy Logic software.

Zhang and Chen (2011), in a study entitled "e-government performance evaluation" where they used multivariate regression concluded that by implementing e-government satisfaction with government has increased. However, this relationship between the components of e-government with performance components was weak.

Questions and hypotheses

The main question

What is the relationship between e-government and improvement in employee performance?

Minor questions

What is the relationship between the development of Web Features and improvement in the performance of employees?

What is the relationship between the extent of development of Internet and Intranet and improvement in the performance of employees?

What is the relationship between time of creation of the website and improvement in the performance of employees?

What is the relationship between the support, development, and equipping the website and improvement in the performance of employees?

What is the relationship between the development of electronic services and improvement of employee performance?

What is the relationship between the financial support and improvement in employee performance?

What is the relationship between the educational programs for citizens and improvement in the performance of employees?

What is the relationship between the amount of informing to introduce web site and facilities related to e-services and improvement of the performance of employees?

The main hypothesis

There is a significant relationship between e-government and improvement in employee performance.

Sub-hypotheses

There is a significant relationship between the development of Web Features and improvement in the performance of employees.

There is a significant relationship between the extent of development of Internet and Intranet and improvement in the performance of employees.

There is a significant relationship between time of creation of the website and improvement in the performance of employees.

There is a significant relationship between the support, development, and equipping the website and improvement in the performance of employees.

There is a significant relationship between the development of electronic services and improvement of employee performance.

What is the relationship between the financial support and improvement in employee performance?

There is a significant relationship between the educational programs for citizens and improvement in the performance of employees.

There is a significant relationship between the amount of informing to introduce web site and facilities related to e-services and improvement of the performance of employees.

Research Methodology

Regarding the purpose, the study is applied, considering data collection, it is a field study, and correlation method is used to explain the hypotheses. The statistical population consisted of all employees of Taxation Affairs Organization of Ardebil province- 320 persons. To determine the size sample size, Morgan table is used, according to which, the sample will be 175. The study sample was randomly selected. After the distribution of questionnaires, finally 169 questionnaires were returned.

The most important methods of collecting data in this study are as follows: library studies: to collect data in this part, for data collection in literature review and the theoretical basis, library resources, articles, the needed as well as the Internet are used. Field research: in this part, to collect data and information for data analysis, questionnaire is used to measure the research variables.

In inferential statistical analysis, it is always considered how the results from studying a small group called sample can be generalized to a larger group called population.

In the present study, to analyze the data and verify hypotheses, coordinated by professors, descriptive analysis methods such as the frequency, frequency percent, mean, and graph, and inferential analysis methods such as the normality of the community, correlation, and regression analysis are used and that all the calculations are performed using SPSS version 20.

After identifying the demographic characteristics of the population, descriptive statistics of the variables were mentioned and then using the Kolmogorov-Smirnov test, normality and non-normality of the data were ensured and according to normality test results using parametric tests (in case of normality of data) and nonparametric tests (if abnormal), testing the hypotheses were developed.

Analysis of the findings

The most important and main step in any research is to get the answer the researcher seeks. In this context, data analysis fulfills the ultimate goal of a study. In this study, 175 questionnaires were distributed among the employees of the Taxation Affairs Organization of Ardebil, and finally 169 were returned and entered the final analysis.

Descriptive statistics of the variables

About the score of e-government employees and performance of the employees, there is a total score. Overall, Weighted Mean for each of the variables and dimensions of descriptive data of these variables can be seen in Table 1.

Table 1: Descriptive statistics of variables

Variable	Frequency	Mean	Number of questions	Weighted Mean
Development of Web Features	169	7.804	2	3.902
Extent of Internet and intranet	169	11.136	3	3.712
Time of generation of Web Site	169	10.8	3	3.601
The amount of support, development, and equipping the web site	169	7.1	2	3.55
The development of electronic services	169	14.49	4	3.622
The amount of financial support	169	7.728	2	3.639
The training programs for citizens	169	10.798	3	3.599
Informing about the web site and facilities related to e-services	169	10.65	3	3.55
Electronic government	169	80.065	22	3.639
Employee Performance	169	48.668	14	3.476

Inferential analysis

Before testing the hypotheses, Kolmogorov-Smirnov test was used for each variable. The rationale for using this test is to determine the normality of data, which if normal, parametric tests (Pearson correlation and linear regression), and if abnormal, nonparametric tests (Spearman correlation and linear regression) are allowed to be used. This test data are given in Table 2.

Table 2: Kolmogorov-Smirnov test results

Statistical Index	E-government	Performance
Mean	80.065	48.668
Z	1.109	1.245
Sig	0.171	0.090

In accordance with Table 1.2, significance level for each of the variables of e-government and employee performance is obtained as 0.171 and 0.09. As can be seen, e-government and employee performance variables do not follow a normal distribution (Significance level < 0.05), so nonparametric test and Spearman correlation coefficient must be used for statistical inference. As for the Pearson correlation coefficient both variables follow a normal distribution in all the hypotheses, Spearman correlation coefficient was used.

Conclusion and Recommendations

Descriptive results of the research

The results of the study about the frequency of sex shows 32 women and the rest of the sample (137 people) are men.

- The majority of respondents evaluated in this study have BA (n = 77).
- The age of majority of respondents to the questionnaire (75 people) was between 40 and 50 years.
- The largest number of people regarding work experience was 21 years with 44 persons.
- To determine the mean, regarding the number of questions, Weighted Mean was used, where the results showed that the Weighted Mean of e-government and improving employee performance variables was above average (3). Among the components of e-government, the highest weighted average is related to development of facilities of Web Features and the lowest was related to support, development and equipping the site.

The inferential results of research

Given the significance level obtained for e-government and improving employee performance ($P < 0.05$), assuming the normal distribution of the observations of this study is not approved, and Spearman correlation coefficient was used for all variables.

Testing the results of tests research

To examine the relationship between e-government and improving the employee performance, Spearman correlation coefficient was used, where the correlation coefficient was obtained at (0.708) and significance level of 0.000. This indicates the existence of a significant relationship between these two variables. This means that there is a significant positive relationship between e-government and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between the development of Web Features and improving employee performance, Spearman correlation coefficient was used, and correlation coefficient of 0.48 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between the development of Web Features and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between the expansion of the Internet and intranet and improving employee performance, Spearman correlation coefficient was used, and correlation coefficient of 0.515 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between expansion of the Internet and intranet and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between the time of creating the web site and improving employee performance, Spearman correlation coefficient was used, and correlation

coefficient of 0.507 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between the time of creating the web site and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between support, development, and equipping the website and improving employee performance, Spearman correlation coefficient was used, and correlation coefficient of 0.478 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between support, development, and equipping the website and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between the development of electronic services and improving employee performance, Spearman correlation coefficient was used, and correlation coefficient of 0.668 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between the development of electronic services and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between the financial support and improving employee performance, Spearman correlation coefficient was used, and correlation coefficient of 0.499 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between the financial support and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between educational programs for the citizens and improving employee performance, Spearman correlation coefficient was used, and correlation coefficient of 0.509 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between educational programs for the citizens and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

To examine the relationship between informing about the website and improving employee performance, Spearman correlation coefficient was used, and correlation coefficient of 0.592 at the significance level of 0.000 was obtained indicating a significant relationship between these two variables. This means that there is a significant positive relationship between informing about the website and improving employee performance among employees of Taxation Affairs Organization of Ardebil.

Recommendations

On the variable e-government, it is recommended:

- Using the mechanisms of competition and accountability, the government supports the establishment of civil institutions and increases the power of citizens, support, and in this way contribute to the promotion of tax revenue.
- Governments can create cohesion and enhanced features with representatives of government and parliament, the political stability of the tax system and thus can help to improve earnings performance.
- The great volume of government regulations and the poor quality of their implementation create limitations for economic activity and imposing additional costs to firms and investors. Therefore, it seems revision of economic laws and regulations are of the essential measures to raise tax revenue.
- Efforts to reform the structure of government agencies, eliminating bureaucracy, depoliticisation of the administration and paving the way for active participation of non-governmental organizations and civil society bring about the control of corruption in the society.

Regarding the development of Web Features of e-government variable, it is proposed to add its charm to develop Web Features and electronic publishing of successful employee performance be prepared.

Regarding the extent of Internet and intranet of e-government, it is recommended to conduct office correspondence and any transactions through the website and in the times when there is more need for it no particular problems be faced in its process.

Regarding the time of creating the web site of e-government, it is recommended to improve information quality using improved employee performance.

Regarding the support, development, and equipping of e-government, it is recommended to support staff financially to improve communication among these employees, expansion, and equipping website.

Regarding the development of e-services, it is proposed to implement regulations principally in Tax Office so that the employees become more aware of their responsibility in the organization. People be placed in specialized positions appropriate to the discipline and creativity of individuals to be appointed to the liability not to create crisis.

Regarding the financial support, it is recommended to assign the required funding for the implementation of e-government and enough support is done to support improving employee performance in this area.

Regarding the educational programs for citizens, it is recommended that the state pay attention to mass media to make people aware about E-government programs in Tax Office.

Regarding the extent of informing to introduce web site and related facilities to e-services, it is recommended that Taxation Office provide the necessary financial

assistance to encourage citizens to use electronic services in the form of the activities of e-government.

Moreover, regarding the explanation and prediction of employee performance and effective practical measures that can improve the performance of employees in the future, the following is offered:

- In all things, powers must be given more to the people. Management style should be collaborative, and individuals should be able to work variously on an overall framework. Delegation of authority and emphasis on employee involvement in some work-related decisions are some important strategies. Administration should have the ability to take advantage of proper staff consultation. After consulting and receiving constructive suggestions, uses identification, and accurate identification of force by delegating some of the duties, they have been able to enter the forces to the field of planning, implementing, and evaluating, this work can provide indirect control of the members and increase their job satisfaction.
- Allocating sufficient resources for employees who are facing financial problems to increase staff efficiency.
- Proper rights and benefits to staff according to field and type of work.
- Proper reminding of the wrong actions by the authorities to each employee at the time needed.
- Participation of the staff in agency decision-makings.

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