

Research Article

The Study and Explanation of Effective Factors in Establishment of Electronic Services Management in Golestan Province Transportation and Road Office

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Abstract: Purpose: This paper is a research on the study of effective factors in establishment of electronic services management in Golestan province transportation and road general office in Golestan in 1390-91. Method: The research method is a descriptive survey and the population consists of all the experts of Golestan transportation department which add up to 190 people. The measuring method is a researcher made questionnaire. The sampling method is cluster random. The 127 sample was defined using Kerjici and Morgan table. Descriptive data consisting of mean, standard deviation, variance and inferential statistics consisting of t-test and Fridman were used for analyzing the data. Results: The research results show that financial strength affects the presence of electronic services management. Communicational infrastructures affect the presence of electronic services management. Technical facilities affect the presence of electronic services management. The order of the affecting factors on the presence of electronic services management is: technical facilities, communicational infrastructure, existence of experts, financial strength, employees' education and organizational culture.

Keywords: Communicational infrastructure, financial strength, technical facilities, the presence of electronic services management

INTRODUCTION

Nowadays, a good ruling vision requires a revise through comprehensive ruling model approach which emphasizes comprehensiveness. Informational technologies can be accounted as tools for public accessibility to public services. Society-covering ruling model has provided a general frame for revising about informational and communicational technologies roles in the field of citizen's accessibility to governmental services (Affisco and Soliman, 2006). One of the most important future challenges would be redefinition of citizens role in new government (Belanger and Hiller, 2006). As various periods of government's change, such as Molook al Tavayefi and Feudalism, new democracies and its modern states, decreasing the role of organizations e.g. church and kingdom (monarchy) in governing west government, each causes changes in citizens' duties, it is expected that shifts in electronic government, also, involves such changes. This study seeks to investigate about effective factors on electronic services management in controlling Golestan province transportation and road general office. Electronic government is likely to offer proper fields for the greatest accessibility for citizens to governmental in formations and services, improvement of services quality and giving opportunities to take part in processes which are ruled by people (Arabi, 2005).

Electronic government, is, using informational technology, specially internet for giving information and services to citizens, economic sections' employees and other governmental parts, by governmental sections (Jarahi, 1385). Electronic government means exploitation of information and informational technologies for forming a new form of government which conforms to informational and network community (Deakins and Dillon, 2002). Electronic government can help to provide general information it means it can provide probability of working anywhere and any times and also it can help to create a digital unified era system for government, which finally causes a increase in efficacy and productivity of governments employees, improvement in giving information and services of government, decreasing expenses and increasing cooperation through diminishing time and increasing struggles (Zarei, 1389). Transportation and road general administration like other administrations and state organizations cannot survive, unless their human resources could property use electronic services, one of the barrier which cause problem in using these advanced system efficiently, is, shortage of financial resources that is loss of enough money, that is why, this budget should be a supervision on this process, because electronic service establishment requires investment in the information technology part and on the other hand we will encounter to software and hardware difficulties.

Now for performing this system properly, we need to reproduce some factors and these elements are reasons why we have not been able to exploit these system efficiently until now and if the system run, many problems would have been solved and since this issue is in the ten transitions in administrative reign, legally necessary, it should be performed, we should use trained employees in this field they should be educated in the information technology field and average level employees in organization should be motivated to continue their studies in this field and we should use experienced and exported forces and should pay attention to manager's experts, we should teach employees by using professional professors in this field and there should be a lot of researches about this course (Zarei 1389). Because of largeness of state and work's volume, if electronic system runs, it will give us a big help in our duties and if electronic services management, accepted by human sources, of this company, it will bring a lot of profits to this organization such as, clarifying and answering (Hollden *et al.*, 2003), so, individual's acceptance and their understanding about these Kinds of services is a critical issue and the goal of performing this electronic system is that citizens could exploit these services in the intended way, actually current status in our organizations are manual processes and for achieving a proper status, we need to change the manual and book keeping and computerize them (Farandinejad, 1387). According to what mentioned above, this study seeks to find and explain the factors influencing establishment of electronic management in Golestan province transportation and road general office in 1390-91.

MATERIALS AND METHODS

The current study is applied in terms of objective and descriptive and survey in terms of essence and is a field study in terms of collecting data. This research is grouped into inductive-comparative frame, i.e., theoretical concepts and literature of the research comes from library, articles are comparative and data collection for acceptance or ejection of the hypothesis is inductive answers of the questioner are ranked in 5 choices according to Likret's to decreasing choices, numerical values are considered from one (very small) to five (very high). In current study, statistical community includes, Golestan province transportation and general road administration's experts in 1390-01,

190 of them. The questioner was handed to supervisor, advisor and the other experts in this field and were revised and reviewed and confirmed by them. For evaluating the stability of the questioner, Alpha Korenbakh (87%) was used and stability of questions confirmed to answer the research questions the t-test and Fridman were used. Findings: first research question if financial abilities affect establishment of electronic service management? (Table 1: summary of statistical analysis about first research question).

RESULTS AND DISCUSSION

First research question does financial abilities affect establishment of electronic service management?

Interpretation: According to values in Table 2, the computed t (20.574) in confidence level 95% is ($\alpha = 0/05$) and freedom degree (df) = 126, is bigger that critical t (1.97) with 0/05 probability so zero assumption is rejected and one assumption is confirmed. So we conclude that owning financial abilities is effective in establishing electronic service management, i.e., financial abilities such as financial support toward establishing electronic, needed budget for providing software's and hardwires, needed budget to train the workers, increasing validity and annual budget to employ new expert in technology field, will be essential in establishing electronic services and will contribute to it's conduction. Second research question: if communicational infrastructures affect establishment of electronic service management?

Interpretation: According to values in Table 3, the computed value of t, (21/575) in confidence level is 95% ($\alpha = 0/05$) and df = 126 of critical t of table (1.97) is bigger with probability of 0/05, also acquired meaningful level is smaller than 0/05. So assumption zero (Ho) is rejected and assumption one (H1) is confirmed. So we conclude that existence of communicational infrastructures is effective in establishing electronic service management. Facilities and tools for connecting to internet, Internet high speed, standardized communicational networks in organizations, tools and facilities for networking, preserving and keeping existent datas in systems and networks, these are essential factors in establishing electronic service management. Third research

Table 1: Summary of statistical analysis about first research question

| Significance level | t-critical | t-statistics | df | Mean average | N number | Index |
|--------------------|------------|--------------|-----|--------------|----------|-----------------------------------|
| 0.000 | 1.97 | 20.574 | 126 | 4.1724 | 127 | Telecommunications infrastructure |

Table 2: Summary of statistical analyze related to main research question of the study

| Significance level | t-critical | t-statistics | df | Mean average | N number | Index |
|--------------------|------------|--------------|-----|--------------|----------|----------|
| 0.000 | 1.97 | 20.041 | 126 | 4.1444 | 127 | Question |

Table 3: Summary of statistical analysis about second research question

| Significance level | t-critical | t-statistics | df | Mean average | N number | Index |
|--------------------|------------|--------------|-----|--------------|----------|-----------------------------------|
| 0.000 | 1.97 | 21.575 | 126 | 4.2090 | 127 | Telecommunications infrastructure |

Table 4: Summary of statistical analysis about third research question

| Significance level | t-critical | t-statistics | df | Mean average | N number | Index |
|--------------------|------------|--------------|-----|--------------|----------|--------------------|
| 0.000 | 1.97 | 21.796 | 126 | 4.2165 | 127 | Technical features |

question: if technical facilities affect establishment of electronic service management?

Interpretation: according to value in Table 4, the computed t (21.796) in confidence level is 95% ($\alpha = 0/05$) and $df = 126$ and it is bigger than critical table t (1.97) with probability of 0/05 and acquired meaningful level is smaller than 0/05. So the assumption of zero is rejected and assumption one is confirmed and we conclude that existence of technical facilities is effective in establishing electronic service management. So having facilities such as hardware and software tools, settings and connections for using Internet and interanet, using antiviruses and required settings for updating automatically, fixing antiviruses and fixing internal pieces and computer side tools, fixing needed softwares for running system, all of them are directly effective and important in establishing electronic service management.

Interpretation: according to values available in Table 5 and 6, the computed t is (20/041) in confidence level of 95% ($\alpha = 0/05$) and $df = 126$ is bigger than critical table t (1.97) with probability of 0/05, such as acquired meaningful level is smaller than 0/05. So, assumption zero is rejected and assumption one is confirmed. So it is concluded that above factors, are very effective in establishing of electronic service management in transportation and general road administration. How are the effects of financial abilities factors, existence of communicational infrastructures, existence of technique facilities, in establishing electronic service management?

Since the gained probability is smaller than 0/05, so the assumption zero is rejected and it is concluded that the effects of above elements in establishing electronic service management, were not equal and there are as means in the above table. It means that having technique facilities has the most effects in establishing electronic service management and technical facilities, communicational infrastructures, financial abilities, respectively, are effective in establishing electronic service management. This is how the results of this study relate previous findings: acquired statistical results from experiments and tests of people and doing analyses related to research questions show that, financial abilities are effective in establishing electronic service management these results conform to results of researches done by Rahnavard and his colleagues (1386) in a study with the title of evaluation of electronic government's complementary stages in Iran and researches done by Gholipour (1386) with the title of considering

Table 5: Summary of statistical analyze on feridman's test

| Rank | Mean | Goals | Row |
|------|------|-----------------------------------|-----|
| 3 | 2/58 | Resources | 1 |
| 2 | 2/71 | Telecommunications infrastructure | 2 |
| 1 | 2/79 | Technical features | 3 |

Table 6: Summary of statistical analyze 2 on Feridman's test

| | |
|--------------------|--------|
| Number | 127 |
| Chi-square | 21/113 |
| Degrees of freedom | 2 |
| Sig | 0.03 |

electronic government's barriers in Iran with focus on the money exchanges problems and researches done by Kazemi and his colleagues (1387) with the title of establishing electronic government's obstacles. Such acquired results about second research question indicated that communicational infrastructures are effective in establishing electronic service management. This result conforms with results of Kazemi and his colleagues researches (1387), that has a title of electronic business and also with parhizkare's research with the name of electronic business and it's role in organizing business order in Tehran and with Sarfaraz (1389) research with the title of strategic role of electronic state in achieving electronic city view. This result conforms to research results which are acquired by Sarfaraz (1389) whit the topic of strategic role of electronic. State in achieving electronic city view and research of Pou (2001) white the topic of electronic state on citizens' view toward government and Paxton (1999) by the topic of relationship between electronic state and confidence. Statistical results about fourth research question indicates that, existence of expert. Personnel in establishing electronic service management is essential and effective. These results conform results acquired by Parhizkar's research (1387) about electronic business and it's role in city business order's organization in Tehran and Sarfarazi's research (1389) on strategic role of electronic state in achieving of electronic city view. Statistical gained results about fifth research question shows that, personnel's training is efficient in establishing electronic service management. This result conform quired results by Parhizkar's (1387) research on electronic business and it's rol on organization of urban business order and Kazemi and his colleagues's research (1387) about electronic business and Sarfarazi's research (1389) with the title of strategic role of electronic state in electronic urban view achievement. Statistical results acquired by sixth research question, indicate that, organizational

culture in achieving electronic service management is efficient. This result conform results acquired by Ghlipoor's (1386) research results on evaluating electronic state's inhibitions. In Iran with focusing on problems related to money exchanges and Kazemi and his colleagues's (1387) researches about electronic state achievement and Kazmi and his colleague's (1387) with the title of electronic business and Parhizkar's (1387) research on electronic business and it's role on organization of business order of Tehran. Also, statistical research results gained by Feridman's test showed that the electronic service management achieving elements, did not have similar effects and are existence of communicational infrastructures, Techniqua facilities, financial abilities, expert personnels, personnel's training and organizational culture, respectively. These results conform research results done by Pou (2001) on electronic state on citizen's view about government and Rahnavard and his colleagues' research (1386) about evaluation of complementary stages of electronic state in Iran.

CONCLUSION

The significant and unique finding of this study is that financial abilities are effective in establishing electronic service management and communicational infrastructures are effective in establishing electronic service management. In addition, we can conclude from this research that existence of expert personnel in establishing electronic service management is essential and effective. Therefore, it is advisable to researchers: provide necessary budget for buying software and hardware and personnel's training provide facilities and proper tools for networking completely and standardize communicational network in organization. Fix anti-viruses and needed sitting for updating, automatically, setting connections for using internet and intranet. Preserve and keep available data in networks and systems. Fix internal pieces and side tools for computers and fixing software necessary for running system. Provide needed facilities for performing the duties by personnel also by using human resource management theory, force management to planning for improving the efficacy and force them to apply the human force's suggestions and by using human resource's accounting, give them the necessary information. By using classes during military services, they should provide proper training classes for personnel. Also there should be a validity and budget for employing expert personnel in information technical

field by taking methods such as running group meetings of personnel, they should be familiar with changing deciding trends and manager's cooperation for organizational changes and also they should use organizational changes advisors.

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