

Research Article

THE EFFECTS OF ELECTRONIC SERVICES ON EMPLOYEE'S ANALYTICAL DATA OF BUSINESS IN CUSTOMER AFFAIRS UNIT OF SHIRAZ'S TELECOM IN 2013

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ABSTRACT

The purpose of this research is the effects of Electronic services on employee's analytical data of business in customer affairs unit of Shiraz's telecom in 1392 that 6 hypotheses are tested. The research method in terms of investigating the type of descriptive - survey, In terms of the target, application, in terms of run-time, sectional, according to the performance, quality, and in terms of implementation logic is inductive method. Statistical population of this study, are all of the official staff, contractual and contract of Shiraz's telecom. Sampling procedure was used stratified simple random in this study that the 180 subjects were estimated to collect data. To analyze the data and test hypotheses are used the confirmatory factor analysis method by using structural equation software AMOS 22. Based on the research findings, user satisfaction variables and achieve goals had the greatest impact on electronic services customer affairs of Shiraz's telecom than other variables.

Keywords: *Electronic Services, Analytical Data of Business, User Satisfaction and Customer Affairs in Shiraz's Telecom*

INTRODUCTION

The gradual spread in application of internet among people, providing on-line and circadian services through this new communication port is currently being inclusive, E-government is not just a technology, but advances in technology as a means of transformation of government functions is from the central government to the citizens of the circuit. Today, people expect that public services at the lowest cost and highest speed in accordance with the desires and tastes of their facilities to be provided, hence the government's ability to provide the best services with maximum efficiency and their friendly match will be very important. In an overview e-government will be reviewed from two perspectives, the relationship between the government and the people (Sajedi *et al.*, 2012).

Amazing technology information and communication that historically has been associated with several human and sometimes is in the form of language and symbolism, and another times is in the form of paper and pencil and sometimes is in the form of messages and means of communication, once has emerged the printing press, the telephone, radio, and now with PCs and mobile and data networks, it is making history. At the beginning of the third millennium, many governments to improve their effectiveness make the most use of this technology (Khadad *et al.*, 2010). Development of information technology in the public sector and improve efficiency reduces costs, increase speed of public services to citizens, improved quality, increased access to services and reduce duplicate and inconsistent information in the state sector (Kafash, 2007). Since 2007, tend of global companies managers to use their own data for the purposes of the organization has been proposed. Now the scientific term business analysis indicates a technology that use from analyze the data to understand the business issues to guide decisions. Effective use of business analysis for leading organizations has created a competitive advantage. In recent years, the analysis of the business has been one of the major priorities for corporations and its value is growing increasingly and many managers find tendency to it (Monzavi and Zarei, 2010). In fact, only 3% of the 930 responding to a global survey of Bloomberg Business Week stated that the organizations do not use any form of business data analysis. In the 2009, it is 10 per cent. Business analysis can be a useful

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tool for managers, the analyst of Social and economic systems, the developers of information systems and Mechanization of business processes. In each of these roles required information by using business analysis is based on standard methods at their disposal. Roles such as business analyst, systems analyst, the business architect, the business analyst based the user experience, the engineers of requirements, the analyst of data, Business analyst IT and Business Managers; these are roles that are associated with the field of business analysis. Companies usually do not define analysts of their systems to clear other people who involved in the project. Knowledge of business analysts in all projects which deals with to identification and evaluation system (which mainly leads to the development of mechanization as well), are used (Saidi, 2009). If we want to have a comprehensive understanding of the flexibility of an organization's requirements and to evaluate and improve its performance, we must carefully study the requirements, processes, actors and the business executives and stakeholders, too. Therefore, we Started our activities in the life cycle of a business analysis in the initial phase, and in subsequent phases because of the need to the managing of changes, collection and management of the new requirements and testing and ensure the provision of specified services in accordance with the obtained requirements, it can be used (Sarmadi, 2003).

Literature

E-Services

E-Services are a new concept for management and strengthening innovation and include processes that with the help of the Internet, is distributing innovative appropriate opportunities for personal development with teams worldwide. On the other hand, growth of the Internet, which is characteristic of the information society, and in all aspects of today life, comprehensive and fundamental impact of its shows that our world is changing shape by the new tools, and by this means, virtualization supported in all fields (Hamidzade, 2003).

Analytical Data of Business

E-business is the wider field of E –commerce, which also includes customer service (The customer relationship management) and processes between trading partners (Supply Chain Management). E-business often is using instead of e-commerce and conversely (Torabi, 2010).

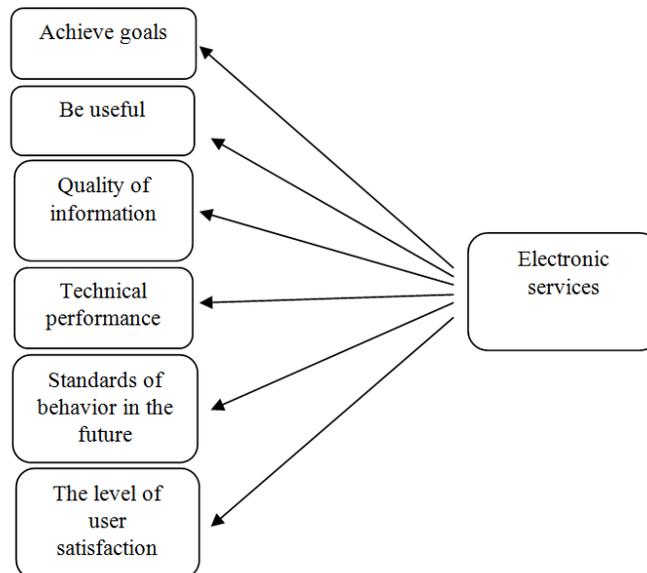


Figure 1: Research conceptual model

Research Hypotheses

1- The Electronic services has positive and meaningful effects on the level of users in achieve their goals of customer affairs unit in Shiraz's telecom.

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- 2- The Electronic services have positive and meaningful effects on Standards of behavior in the future of customer affairs unit in Shiraz's telecom.
- 3- The Electronic services have positive and meaningful effects on useful and application Services of customer affairs unit in Shiraz's telecom.
- 4- The Electronic services have positive and meaningful effects on Quality of information of customer affairs unit in Shiraz's telecom.
- 5- The Electronic services have positive and meaningful effects on technical performance of customer affairs unit in Shiraz's telecom.
- 6- The Electronic services have positive and meaningful effects on the level of user satisfaction of customer affairs unit in Shiraz's telecom.

MATERIALS AND METHODS

The Population and Sample Size

According to the purpose of research this study is functional. This study in terms of logic implementation of research is deductive, in terms of time of research is cross sectional, and in terms of how to run research is the qualitative, in terms of the type of data is descriptive and is the correlation type. In this study, the literature was reviewed by using of library resources, and then the variables through a questionnaire with 48 questions by seven-item Likert-type spectra were measured. Statistical populations of this study are all of the official staff, contractual and contract of Shiraz's telecom. The population is 340 people and by using Cochran formula 180 were selected as the sample size. The number of sample size is calculated and shown in formula (1):

$$n = \frac{N z^2 pq}{N d^2 + z^2 pq}$$

$$n = \frac{340 \times (1.96)^2 \times (0.05)}{340 \times (0.05)^2 + (1.96)^2 \times (0.5)} = 180$$

Reliability and Validity

In this study, the questionnaire was used to collect data. In this questionnaire Five-option Likert spectrum was used that totally agree to totally disagree is classified. To determine validity of the questionnaire is used the opinions of university professors in the field of Business Administration in Azad University of Kermanshah who were familiar with the matter, that validity of the questionnaire was confirmed according to the collected opinions. Cronbach's alpha was used for reliability that the results of Cronbach's alpha for each of the components of the measurement results in table 1 are presented.

Table 1: Cronbach's alpha values in separation of each component

Cronbach's alpha value	Factors
0.767	Achieve goals
0.841	Be useful
0.794	Quality of information
0.897	Technical performance
0.784	Standards of behavior in the future
0.820	The level of user satisfaction
0.704	Electronic services
0.858	Total

Data Analysis Methodology

In this research to test the hypothesis is used the Confirmatory Factor analysis method by using structural equation software AMOS 22.

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RESULTS AND DISCUSSION

Findings

After ensuring that the validity and reliability of indicators collected, in order to test the hypotheses, path analysis was used. Path diagram can be considered as a means to display this article that which variables can lead to changes in other variables. If the model is plotted as a path diagram is confirmed by the indicators of fitness models, confirmatory factor analysis of the diagram can be used to test hypotheses about causal relationships between variables in the path diagram. Figure 2 shows diagrams of the confirmatory factor analysis to the test the hypotheses.

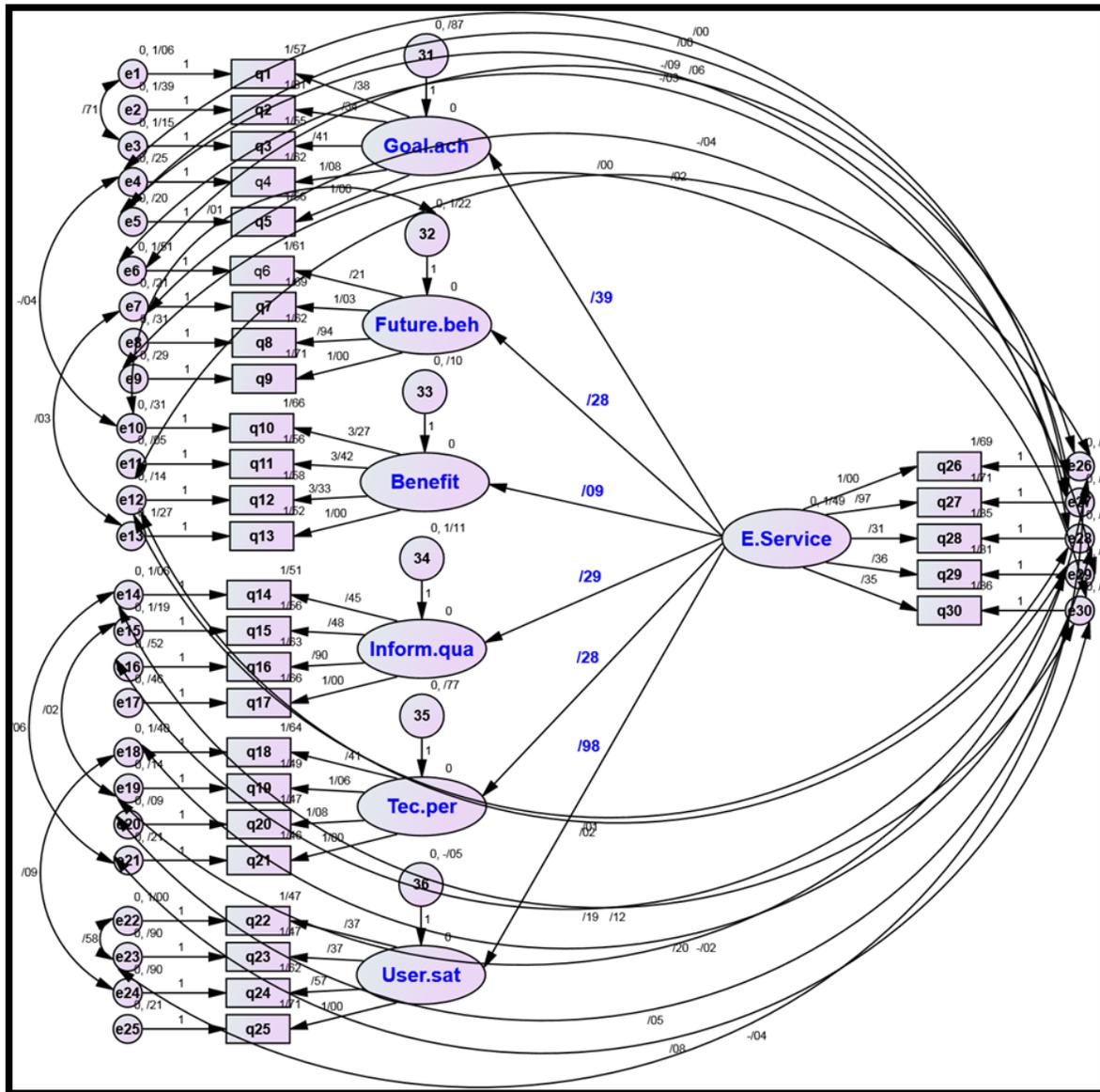


Figure 2: Confirmatory factor analysis to the test of the hypotheses

To the model fitting is a used fit measure which it is in structural equation modeling. Fit measures indicate whether the represented model by the data confirms the measurement model of the research or not. Among the fitting indices, model is an appropriate fit if the ratio of chi-square to degrees of freedom is less than 3. RMSEA index less than 0.05 is desirable. Other indicators are more desirable however be

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closer one. Figure 2 shows Confirmatory factor analysis of the model fitting indicators to the test the hypothesis.

Table 2: Confirmatory factor analysis of the model fitting indicators to the test the hypothesis

PCFI	PNFI	PRATIO	RFI	IFI	CFI	NFI	RMSEA	X2/DF	The general model
>0.50	>0.50	>0.50	> 0.9	> 0.9	> 0.9	> 0.9	< 0.05	<3	Acceptable rate
0.458	0.480	0.92	0.92	0.75	0.85	0.95	0.053	2.98	The calculated values

According to the results that are presented in Table 2, all fitting indicators are acceptable values, which means that the measured parameters (apparent variables) can be well hidden variables measured. After review and approval of pattern to the significance test hypotheses is used two partial index critical value P and CP. According to 0.05 significant levels critical value must be greater than 1.96. Less than the value of the parameter in pattern is not considered important, as well as smaller quantities of 0.05 to the P, and it indicates a significant difference from the value calculated to the regression weights to zero at 0/95. Considering the results of the analysis model has been used to investigate the hypothesis that the results in Table 3 are presented.

Table 3: Partial indicators fitting (The critical ratio and significance level)

Assumptions		Nonstandard Estimation	Standard error	The critical ratio	Sig	The standard estimate	
Achieve goals	<---	Electronic services	0.389	0.053	7.323	***	0.454
Standards of behavior in the future	<---	Electronic services	0.284	0.060	4.741	***	0.300
Be useful	<---	Electronic services	0.085	0.025	3.464	***	0.307
Quality of information	<---	Electronic services	0.295	0.062	4.788	***	0.323
Technical performance	<---	Electronic services	0.282	0.048	5.939	***	0.367
user satisfaction	<---	Electronic services	0.982	0.028	34.900	***	1.016

Conclusions and Recommendations

Hypothesis 1: The levels of users in achieve their goals have positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Zero hypotheses: The levels of users in achieve their goals has a not positive and meaningful effect on the Electronic services of customer affairs unit in Shiraz's telecom.

Research hypothesis: The levels of users in achieve their goals has a positive and meaningful effect on the Electronic services of customer affairs unit in Shiraz's telecom.

According to the results in Table 3, the significance level of the hypothesis is equal to 0.000 and is less than 0.05. Therefore research hypothesis is confirmed, this means that the level of users in achieve their goals has positive and meaningful effects on The Electronic services of customer affairs unit in Shiraz's telecom. This rate is 0.389. Since this factor is positive, its effect is directly. In other words, the Electronic services increases to the rate of 389 percent with the change of one unit (increase) the level of users in achieve their goals.

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Hypothesis 2: Standards of behavior in the future has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Zero hypotheses: Standards of behavior in the future has not positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Research hypothesis: Standards of behavior in the future has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

According to the results in Table 3, the significance level of the hypothesis is equal to 0.000 and is less than 0.05. Therefore research hypothesis is confirmed, this means that the Standards of behavior in the future has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom. This rate is 0.284. Since this factor is positive, its effect is directly. In other words, the Electronic services increases to the rate of 284 percent with the change of one unit (increase) standards of behavior in the future.

Hypothesis 3: Be useful and application Services have positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Zero hypotheses: Be useful and application Services have not positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Research hypothesis: Be useful and application Services have positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

According to the results in Table 3, the significance level of the hypothesis is equal to 0.000 and is less than 0.05. Therefore research hypothesis is confirmed, this means that the be useful and application Services has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom. This rate is 0.085. Since this factor is positive, its effect is directly. In other words, the Electronic services increases to the rate of 085 percent with the change of one unit (increase) are useful.

Hypothesis 4: Quality of information has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Zero hypothesis: Quality of information has not positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Research hypothesis: Quality of information has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

According to the results in Table 3, the significance level of the hypothesis is equal to 0.000 and is less than 0.05. Therefore research hypothesis is confirmed, this means that the quality of information has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom. This rate is 0.295. Since this factor is positive, its effect is directly. In other words, the Electronic services increases to the rate of 295 percent with the change of one unit (increase) quality of information.

Hypothesis 5: Technical performance has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Zero hypotheses: Technical performance has not positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Research hypothesis: Technical performance has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

According to the results in Table 3, the significance level of the hypothesis is equal to 0.000 and is less than 0.05. Therefore research hypothesis is confirmed, this means that the technical performance has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom. This rate is 0.282. Since this factor is positive, its effect is directly. In other words, the Electronic services increases to the rate of 282 percent with the change of one unit (increase) technical performance.

Hypothesis 6: The level of user satisfaction has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

Zero hypotheses: The level of user satisfaction has not positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

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Research hypothesis: The level of user satisfaction has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom.

According to the results in Table 3, the significance level of the hypothesis is equal to 0.000 and is less than 0.05. Therefore research hypothesis is confirmed, this means that the level of user satisfaction has positive and meaningful effects on the Electronic services of customer affairs unit in Shiraz's telecom. This rate is 0.982. Since this factor is positive, its effect is directly. In other words, the Electronic services increases to the rate of 982 percent with the change of one unit (increase) user satisfaction.

Executable Recommendations based on Findings

1. Making culture in the departments and between the employees appropriately.
2. Making culture between people and referrers to government offices appropriately.
3. Providing the telecommunications infrastructure, network and Internet.
4. Confidence in the private sector and its capacities.
5. Sharing successful and unsuccessful experiences in organizations to providing electronic services.
6. Pay attention to scientific standards which offering electronic services.
7. Using the along network with in the creation of the along administrative system
8. Pay attention to security in corporate portals of departments.
9. The importance of interaction between executive agencies to provide electronic services.
10. The need to review the challenges and obstacles facing the implementation of electronic administrative and planning to address these obstacles.
11. Pay attention to the use of electronic administrative system for public participation in the run the country.
12. Review and shaving the process of doing in the executive agencies and process reengineering before making electronic of them.
13. Pay attention to the place of digital signature in the government documents.

Recommendations for Future Researches

- A) Proposed model should be tested for other companies in the public and private sectors.
- B) Due to the limitations of the present study, the possibility of a separate analysis of each of the companies did not provide because of various constraints, to further clarify the topic relation of electronic services should be examined with company Performance In different companies.
- C) By using of different models of electronic services that in the literature mentioned in few cases to improve the performance, efficiency and effectiveness of electronic services in the form of a model should be measured.

Limitations of the Study

- Lack of awareness of audience on the importance of research in the corporate structure.
- Lack of having enough information about the benefits of electronic systems to encourage employees to answer the questionnaire.
- Independent variables of this study are a part of factors influencing that describe the intended use of the electronic system. Whereas other variables such as individual innovation are the perception of enjoyable use of electronic systems and it can affect in actual using intention of employees.
- Alienation of the audience on their importance to make changes to the
- Company by a detailed response to the questionnaire.
- Unwillingness of some managers and officials to answer questions.
- The lack of research culture in some of the organizations and some people who are working in the company has led the negative view of people combined with fear of their research and try to refuse to answer questions or answers differ from what is expressed in the backend.

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