Uncertain Supply Chain Management 4 (2016) 23–28

Contents lists available at GrowingScience

Uncertain Supply Chain Management

homepage: www.GrowingScience.com/uscm

Factors influencing intention to use electronic services on organizational performance

Mohammad Hossein Abadi[a*], Kiamars Fathi[b] and Abdollah Naami[b]

[a]*Department of Management and Accounting, South Branch, Islamic Azad University, Tehran, Iran*
[b]*Faculty member, Department of Management and Accounting, South Branch, Islamic Azad University, Tehran, Iran*

C H R O N I C L E

Article history:
Received April 20, 2015
Received in revised format May 10, 2015
Accepted August 8 2015
Available online
August 16 2015

Keywords:
Organizational performance
Social security organization
Electronic services
Iran

A B S T R A C T

Organizational performance is influenced by several factors including electronic services. In fact, electronic services play essential role on the performance of organizations with significant number of clients. The objective of this study is to determine factors influencing on intention to use electronic services on organizational performance in social service organization in Iran. The study designs a questionnaire in Likert scale and distributes it among 231 randomly selected employees who worked for social security organization in city of Tehran, Iran. Using principle component analysis using varimax rotation, the study determines six factors including culture, communication, customer, employee engagement, learning organization, service management, and usefulness of application, which influence the most on organizational performance.

1. Introduction

Organizational performance is influenced by several factors including electronic services (Kotler et al., 1991; Naumann et al., 2001; Bigdeli et al., 2013). In fact, electronic services play essential role on the performance of organizations dealing with significant number of clients (Tsiknakis & Kouroubali, 2009; Homburg et al., 2013). Ramayah et al. (2016) performed a study to determine critical determinants of Malaysian Small Medium Enterprises (SMEs) intention to continue website as a business innovation. In their survey, CEO information technology (IT) knowledge, firm's size, employee information sharing knowledge, compatibility, security, external pressure and support did not have any effect on the continuance of website adoption. Moreover, the moderator effect of web adoption level is reported to have an insignificant impact. Learning more about the influential factors of websites continuance intention could obviously help prescribe appropriate policies and support programs on promoting IT acceptance and extension among the SMEs. Hernandez-Ortega et al. (2014) studied the effect of contingency factors on the firm's intentions to continue using an inter-organizational information and communication technology (ICT). The effect was mediated by

* Corresponding author
E-mail address: m_hoseinabadi@yahoo.com (M. H. Abadi)

doi: 10.5267/j.uscm.2015.8.002

perceptions and satisfaction with the ICT. The contingency factors analyzed are the firm's environment and ICT adaptability with the organizational culture and perceptions were the usefulness, ease of use and security of the ICT. They reported that contingency factors directly describe the firm's perceptions and, indirectly influence on satisfaction and continuance intentions. Elnihewi et al. (2014) aimed to contribute to the literature that studies the mediating effect of performance measures in the link between institutional factors and organizational performance. They reported the existence of a significant and positive relationship between coercive pressures and organizational performance through non-financial performance measures. Nevertheless, the study did not detect any relationship between normative pressures and organizational performance through non-financial performance measures. Zhao et al. (2012) explored the impacts of service quality and justice on customer satisfaction, which, in turn, influenced continuance intention of mobile services. Yassin et al. (2013) investigated the organizational factors that contribute to successful knowledge sharing using ICT among teachers to get some insight on infrastructure, activities or programmes as well as the system of rewards and recognition, which may increase the implementation of ICT in knowledge sharing and to enhance the profession of teaching. They provided positive and significant correlation between organizational factors and behavioral intention to implement ICT in knowledge sharing.

2. The proposed study

The objective of this study is to determine factors influencing on intention to use electronic services on organizational performance in social service organization in Iran. The study designs a questionnaire in Likert scale and distributes it among 231 randomly selected employees who worked for social security organization in city of Tehran, Iran. Cronbach alpha is equal to 0.784 and Kaiser-Meyer-Olkin Measure of Sampling Adequacy tests yields a Chi-Square value of 1640.01 with Sig. = 0.000, which confirm the overall performance of the survey. Table 1 demonstrates the summary of some basic statistics associated with this study.

Table 1
The summary of some basic statistics

Question		N	Min	Max	Skewness		Kurotosis	
					Statistics	Std.	Statistics	Std.
1	Physical appearance	231	1	5	-0.446	0.16	-0.47	0.319
2	Subjective norm	231	1	5	-0.439	0.16	-0.375	0.319
3	Ecological	231	1	5	-0.344	0.16	-0.593	0.319
4	Education	231	1	5	0.001	0.16	-0.384	0.319
5	Organizational performance	231	1	5	-0.601	0.16	0.093	0.319
6	Service time	231	1	5	-0.82	0.16	0.462	0.319
7	Perception	231	1	5	-0.298	0.16	-0.385	0.319
8	Transparency	231	1	5	-0.54	0.16	-0.336	0.319
9	Customer oriented	231	1	5	-0.471	0.16	-0.234	0.319
10	Providing necessary information	231	1	5	-0.425	0.16	-0.551	0.319
11	Service quality	231	1	5	-0.174	0.16	-0.755	0.319
12	Employee' behavior	231	1	5	-0.551	0.16	-0.224	0.319
13	Changeability	231	1	5	-0.479	0.16	0.951	0.319
14	Trust	231	1	5	0.057	0.16	-0.886	0.319
15	Strategy	231	1	5	-0.891	0.16	0.415	0.319
16	Cultural infrastructure	231	1	5	-0.396	0.16	-0.461	0.319
17	Organizational learning	231	1	5	-0.213	0.16	0.193	0.319
18	Product diversity	231	1	5	-0.753	0.16	-0.21	0.319
19	Empowering employees	231	1	5	-0.487	0.16	1.074	0.319
20	Analysis of audiences	231	1	5	0.148	0.16	-1.193	0.319
21	Coordination and continuity	231	1	5	-0.184	0.16	-1.012	0.319
22	Work ethic	231	1	5	-0.595	0.16	0.638	0.319
23	Employee skills	231	1	5	-0.342	0.16	-0.794	0.319
24	Reliability and quality of electronic services	231	1	5	-0.632	0.16	0.299	0.319
25	Ease of use	231	1	5	-0.828	0.16	0.659	0.319
26	Customers' need	231	1	5	-0.73	0.16	0.31	0.319
27	Creativity and innovation	231	1	5	-0.262	0.16	-0.521	0.319
28	Privacy / Security	231	1	5	-0.787	0.16	0.124	0.319
29	Interaction with contacts	231	1	5	-0.711	0.16	0.613	0.319
30	Developing capabilities	231	1	5	-0.704	0.16	1.054	0.319

Since the proposed method of this paper uses principle component analysis and the method is sensitive on Skewness of questions we have decided to remove some items. Table 2 and Fig. 1 show the results of total variance of different components as well as Scree plot, respectively.

Table 2
The summary of total variance

	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.981	17.176	17.176	4.981	17.176	17.176	2.596	8.951	8.951
2	2.244	7.738	24.914	2.244	7.738	24.914	2.33	8.036	16.986
3	1.918	6.615	31.53	1.918	6.615	31.53	2.232	7.698	24.684
4	1.675	5.777	37.306	1.675	5.777	37.306	2.071	7.142	31.826
5	1.508	5.2	42.507	1.508	5.2	42.507	1.704	5.877	37.703
6	1.354	4.669	47.176	1.354	4.669	47.176	1.693	5.838	43.541
7	1.287	4.437	51.613	1.287	4.437	51.613	1.558	5.372	48.913
8	1.164	4.013	55.626	1.164	4.013	55.626	1.504	5.188	54.101
9	1.061	3.659	59.285	1.061	3.659	59.285	1.279	4.41	58.511
10	1.04	3.586	62.871	1.04	3.586	62.871	1.264	4.36	62.871
11	0.936	3.229	66.1						
12	0.917	3.163	69.263						
13	0.808	2.785	72.048						
14	0.766	2.642	74.69						
15	0.706	2.434	77.124						
16	0.68	2.345	79.469						
17	0.609	2.099	81.568						
18	0.602	2.077	83.645						
19	0.593	2.045	85.69						
20	0.545	1.88	87.57						
21	0.528	1.819	89.39						
22	0.483	1.665	91.055						
23	0.46	1.587	92.642						
24	0.437	1.506	94.148						
25	0.428	1.476	95.623						
26	0.381	1.313	96.936						
27	0.329	1.135	98.071						
28	0.291	1.004	99.076						
29	0.268	0.924	100						

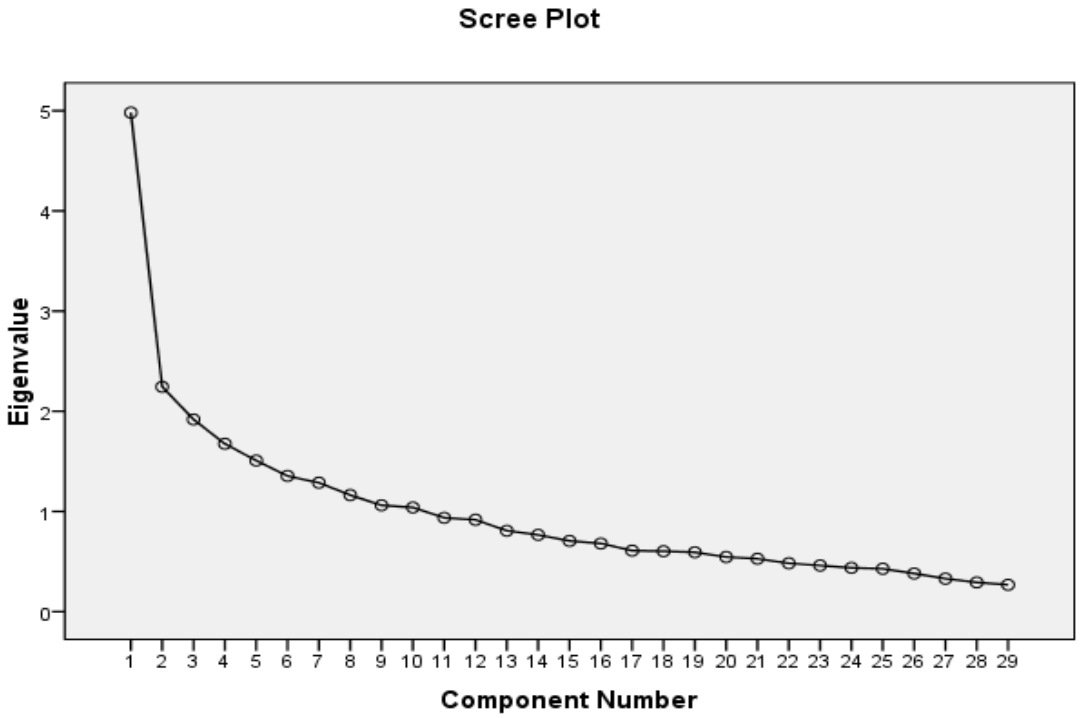

Fig. 1. The summary of Scree plot

As we can observe from the results of Table 2 and Fig. 1, there are six components, which are important for contributing on organizational performance. Table 3 presents the results of principle component analysis after Varimax rotation is implemented.

Table 3

The summary of principle component analysis after Varimax rotation

	Rotated Component Matrix[a]									
	1	2	3	4	5	6	7	8	9	10
q16	0.821									
q2	0.817									
q3	0.731									
q26		0.729								
q9		0.7								
q10		0.651								
q29		0.643								
q23			0.742							
q12			0.677							
q1			0.634							
q22			0.583							
q17				0.717						
q30				0.71						
q19				0.681						
q13				0.652						
q24					0.736					
q6		0.345			0.546					
q18					0.457	0.39				
q27						0.806				
q15						0.657				
q5							0.756			
q7							0.702			
q28								0.724		
q25						0.337		0.557		
q8	0.502							0.538		
q4									0.728	
q21					0.332				0.57	
q11										0.808
q14					0.392					0.572

4. Results and discussion

According to the results of principle component analysis using Varimax rotation, there are six factors including culture, communication, customer, employee engagement, learning organization, service management, and usefulness of application, which influence the most on organizational performance. The first factor, culture, includes cultural infrastructures, customers' perceptions and Ecological. The second factor, employee engagement, includes four sub-components including customers' needs, customer orientation, information and good interaction with contacts. Employee commitment is the third factor, which includes four sub-components including employees' knowledge and their behavior, physical appearance of the service departments and work ethics.

The fourth factor includes organizational learner, which includes organizational learning, development of capabilities, empowering employees and changeability. The fifth factor, management of services, includes reliability and quality of electronic services, service time and diversity in services. Finally, the six factor, usefulness of application, includes three factors including security and confidentiality, ease of use and transparency in operations. The results of this study are consistent with other findings (Beerli et al., 2004; San Martín & Herrero, 2012; Šebjan et al., 2014).

Azad, et al. (2014), for instance, performed an empirical investigation to find important factors influencing data security in Municipality of city of Tehran, Iran and determined that process approach and the acceptance were influencing the most on the performance of organizations. Zhu et al. (2002) reported that IT-based services had direct impact on the SERVQUAL dimensions (Parasuraman et al., 1988) and an indirect impact on customer perceived service quality and customer satisfaction. The analyses also explained that customers' evaluations of IT-based services were influenced by their preference towards traditional services, experiences in implementing IT-based services, and perceived IT policies. Jamal and Naser (2002) reported that core and relational dimensions of service quality were associated with customer satisfaction and expertise was negatively associated with customer satisfaction. We hope the proposed study of this paper could help other interested researchers to do similar studies on factors influencing the organizational performance.

Acknowledgement

The authors would like to thank the anonymous referees for constructive comments on earlier version of this paper.

References

Azad, N., Abbasi, N., & Zarifi, S. (2014). A study to determine influential factors on data security. *Decision Science Letters*, *3*(1), 57-64.

Beerli, A., Martin, J. D., & Quintana, A. (2004). A model of customer loyalty in the retail banking market. *European Journal of Marketing*, *38*(1/2), 253-275.

Bigdeli, A. Z., Kamal, M. M., & de Cesare, S. (2013). Electronic information sharing in local government authorities: Factors influencing the decision-making process. *International Journal of Information Management*, *33*(5), 816-830.

Elnihewi, I., Fadzil, F. H., & Mohamed, R. (2014). The effect of institutional factors on the organizational performance through performance measures of commercial banks in Libya. *Procedia-Social and Behavioral Sciences*, *164*, 635-640.

Hernandez-Ortega, B., Serrano-Cinca, C., & Gomez-Meneses, F. (2014). The firm's continuance intentions to use inter-organizational ICTs: The influence of contingency factors and perceptions. *Information & Management*, *51*(6), 747-761.

Homburg, C., Kuester, S., & Krohmer, H. (2013). *Marketing management: A contemporary perspective*. McGraw-Hill Higher Education.

Jamal, A., & Naser, K. (2002). Customer satisfaction and retail banking: an assessment of some of the key antecedents of customer satisfaction in retail banking. *International Journal of Bank Marketing*, *20*(4), 146-160.

Kotler, P., Saliba, S., & Wrenn, B. (1991). *Marketing Management: Analysis, Planning, and Control: Instructor's Manual*. Prentice-Hall.

Naumann, E., Jackson, D. W., & Rosenbaum, M. S. (2001). How to implement a customer satisfaction program. *Business Horizons*, *44*(1), 37-46.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual. *Journal of retailing*, *64*(1), 12-40.

Ramayah, T., Ling, N. S., Taghizadeh, S. K., & Rahman, S. A. (2016). Factors influencing SMEs website continuance intention in Malaysia. *Telematics and Informatics*, *33*(1), 150-164.

San Martín, H., & Herrero, Á. (2012). Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tourism Management*, *33*(2), 341-350.

Šebjan, U., Bobek, S., & Tominc, P. (2014). Organizational factors influencing effective use of CRM solutions. *Procedia Technology*, *16*, 459-470.

Tsiknakis, M., & Kouroubali, A. (2009). Organizational factors affecting successful adoption of innovative eHealth services: A case study employing the FITT framework. *International Journal of Medical Informatics*, *78*(1), 39-52.

Yassin, F., Salim, J., & Sahari, N. (2013). The influence of organizational factors on knowledge sharing using ICT among teachers. *Procedia Technology*, *11*, 272-280.

Zhao, L., Lu, Y., Zhang, L., & Chau, P. Y. (2012). Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision Support Systems*, *52*(3), 645-656.

Zhu, F. X., Wymer, W., & Chen, I. (2002). IT-based services and service quality in consumer banking. *International Journal of Service Industry Management*, *13*(1), 69-90.