

Technology readiness aspect of E-government in Developing country: A case study of Jordan municipalities

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Abstract: The aim of this study is to identify the technological related factors impacting the readiness of the people in the Jordan to adopt E-government at the municipality level. To this end, through using extended form of technology acceptance model (TAM) a research framework was conceptualized that resulted in the identification of eight factors influencing E-Readiness of people in the Jordan. Those eight factors included perceived ease of usefulness (PEOU), perceived usefulness (PU), compatibility, trust, social influence, cultural influence, voluntarism and facilitating conditions. 200 responses were collected from the people in the Jordan through using online survey. Findings of the survey were further subjected to simple regression analysis in which all the factors were found to be positively associated with the intendent factors such as adoption of e-Government. In the light of these findings it has been suggested to the Jordanian government to increase public awareness about the benefits of using e-Government through using social and cultural means.

Keywords— E-government; E-Readiness; Municipalities; Jordan

I. INTRODUCTION

Technological developments of the past three decades have resulted in making e-Government principle focus of governments across the globe (Kassen, 2014). Defined as the way of delivering public services to citizens, clients, partners and employees of the state in a cost effective manner through improved transparency y and cross the board accountability (Leach, 2014). There lies material benefits for adopting e-Government such as adoption of mobile tax payment system by the government of Tanzania in 2013 resulted in 56.66% increase in the tax collection to 4.7bn Tanzanian Shillings as compare to 3bn Tanzanian shilling in the previous year (The World Bank, 2017). Similarly, thanks to the US aid Philipian government launched similar type of tax collection system in 2014 to assist businesses taxes in their own convenience through using portable communication devices (Leach, 2014). Apart from merely increasing government revenue, e-Government initiative has also been identified for providing wider benefits such as improving quality of services deliveries, initiating decentralization (Prybutok et al., 2008) promoting accountability (Elbahnasawy, 2014) and increases effectiveness of the government programs (Nica and Potcovaru, 2015). It is these advantages of adopting e-Government that various plethora of researches have been focused on evaluating readiness of both government and general public in both emerging and developed nations and at individual industry and organizational level (Samara and Raven, 2014; Choi et al., 2016; Hung et al., 2014; Alghamdi et al., 2014; Kiberu et al., 2017; Multhu et al., 2016; Srivastava and Panigrahi, 2016; Waheduzzaman and Miah, 2015). In

all these studies research on the implication of technological factors for the e-Readiness of general public, clients, government officials and partners have been given significance among all other factors. For instance, Waheduzzaman and Miah (2015) while investing the e-Government readiness from the perspective of developing country although emphasise on assessing the readiness of all stakeholders but asserted that factor such as technological acceptance plays significant role in it. Similarly, while attempting to predict the e-Readiness of 308 manufacturing firms in the Cairo, Egypt Aboelmaged (2014) used technological, organizational and environmental (TOE) model however technological determinants such as availability of infrastructure, competence of general public and public officials, perceived expected benefits of using the technology are the key challenges that overshadows environmental and organizational challenges. Basically, in the eyes of Aboelmaged (2014) once a firm overcomes technological barriers other barriers would automatically follow the suit. Thus, present research through involving both general public and municipality officials in the Jordan in the research will attempt to identify the e-Readiness of Jordanian municipalities from the perspective of technological factor.

Rest of this paper is organized as follows: next section will provide detailed background to the topic such as definition of e-Readiness and significance of assessing technological factor of the e-Readiness and set the research framework and set the research hypothesis. Subsequent section will provide methodology used for this study that includes the case study context of the present research and identification of the method that will be used to test the set research hypothesis. Afterwards, collected data will be presented followed by statistical analysis and overall discussion of the research. Finally, conclusion will summarize the key contribution and further scope of this research.

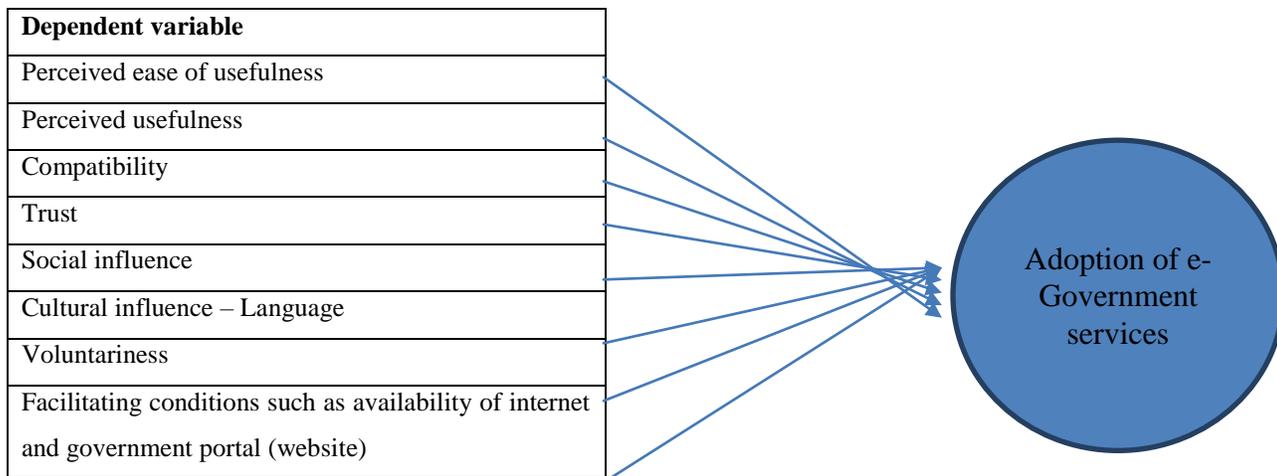
Literature review

The term e-Readiness is defined as the ability of people to use technology to go around their daily life (Ilgaz and Gulbahar, 2015). There are various advantages of offering technological solution to the problems of general public that includes 24/7 availability of services, quick procedure, stopping corruption, giving control back to the people, avoidance of time and bureaucratic hurdles and better overall transparency (Zawaideh, 2017). In the recognition of these advantages, Jordanian government started e-Government program in the country during 2000 with the consent of His Majesty King Abdullah II (Zawaideh, 2017). The aim of the e-Government initiative in the Jordan is not only to improve efficiency and accuracy of the delivery of services but also to decrease the amount of time and cost for completing the transaction. To this end, government portal has been established under the supervision of the Ministry of Information and Communication Technology (MOICT) that provides 49 different services to the general public including tax filling, issuing of different licences such as driving licence and etc., and other services. However, until now e-Government initiative has only been introduced in municipality of the capital city “Amman” and rest of the municipalities are still waiting for their turn hence makes the case for assessing the e-Readiness of the Jordanian municipalities.

Despite of the high level interest taken by the government, adoption of e-Government, its adoption among general public is low. For instance, in their study on the adoption of e-Government in the Jordan from the social perspective Alomari et al (2009) concluded that factors such as trust in relation to the security and privacy of the information, lack of education, lack of accessibility and overall negative attitude towards using technology are the key reasons of the lack of adoption of e-Government by the general public in the country. Similarly, in their pursuit of studying the e-Government strategy and plans of the Jordanian government, Majdalawi et al (2015) while acknowledged that Jordan is the regional leader in whole of the Arab world when it comes to implementing e-Government however future of this initiatives lies in preparing e-Readiness of general public such as encouraging people to use technological means of using public services even if that means cultural change.

Theoretical foundation for the assessment of factors influencing adoption of e-Government in Jordan has been set on the basis of the proposition of the technology acceptance model (TAM) proposed by Davis et al (1989). The key proposition of the TAM model is that it recognizes user’s attitude towards technology plays significant role in their acceptance of it for use, thus the more positive attitude people have towards technology the more willing they will be to adopt it. To this end, TAM propose two factors such as perceived ease of use (PEOU) and perceived usefulness (PU) of the technology among the minds of people directly impacts the attitude of people’s adoption of technology. While PU refers to the belief of individuals that use of certain technology will increase their performance. On the other hand, PEOU states the extent to which people belief that certain technology is going to be easy to use. Several authors (Rauniar et al., 2014; Marangunić and Granić, 2015) have acknowledged the significance of TAM for assessing the adoption of technology and it has also been used to identify issues concerning the acceptance of e-Government in past studies (Mahadeo, 2009; Zawaideh, 2017). However, TAM has been criticized for ignoring other factors such as availability of information, awareness level, cultural influence and etc (Tarhini et al., 2015). It is due to this criticism of the TAM model that various authors (Pikkarainen et al., 2004; Mahadeo, 2009; Zawaideh, 2017) used extended form of TAM model in their studies to identify user’s acceptance of technology. Similarly, research framework in this study has been drawn on the basis of the factors identified Mahadeo (2009) and Zawaideh (2017) for influencing adoption of e-Government by the people in Jordan and in general as shown in the figure 1 below.

Figure 1: Research Framework



Hypothesis

Perceived usefulness

In the context of Jordanian municipalities it is assumed that technology will establish ease for the common people to access the public services hence it is concerned as the key determinant of the technology acceptance (Davis et al., 1989). Thu, based on the proposition of the reviewed literature above first hypothesis of this research is as follows:

Hypothesis₁: Positive perception of people about the perceived usefulness (PU) of the e-Government leads to positive attitude towards adoption of technology

Perceived ease of use (PEOU)

This factor will aim to identify the extent to which people in the Jordan think about the extent of the efforts that they will have to put towards establishing understanding of the use of e-Government portal. In other words, this factor will identify the ease with which people in Jordan believe that e-Government is easier to use. Thus, second hypothesis of this study is as follows:

Hypothesis₂: Positive attitude towards ease of usefulness (EOU) of the e-Government services leads to positive attitude towards adoption of technology

Compatibility

Mahadeo (2009) defined compatibility as the extent to which technological innovation such as e-Government is perceived by the Jordanian people to be consistent with their existing values, experiences and needs. To this end, it has been argued by Agarwal and Prasad (1998) that the adoption of technology by people is influenced by the extent to which individuals are accustomed to work, therefore third hypothesis of this study is as follows:

Hypothesis₃: Perception of the compatibility of the E-Government will have positive impact on the EOU

Trust

Trust in the context of this study means the perceived confidence of the people in the reliability and validity of the using e-Government services. Among all other factors influencing the adoption of e-Government most of them found trust to be the most significant factor that is prohibiting adoption of e-Government by people (Carter et al., 2016; Al-Hujran et al., 2015; Alomari, 2014). Thus fourth hypothesis if this research is as follows:

Hypothesis₄: The higher the trust of people on E-Government services the higher the adoption of technology

Social influence

This factor directly impacts the agreeableness traits of the people for instance determinant of the social influence on the people tends to be the degree to which people attempts to be flexible to meet the others expectations (Melone, 1990). To this end, in their study Moon (2002) on the evolution of e-Government in municipalities also found that social influence plays an integral role in encouraging people towards adopting technology or e-Government in the case of the current study. Furthermore, social influence has also been recognized for impacting personal attitude of the people towards e-Government and is usually considered to be based upon the extent of personal innovativeness of the people. However, it is important to mention here that innovation tends to create uncertainty and people living in the Arab world such as Jordan tends to avoid uncertainty (Hofstede, 1997). Thus, social influence through impacting people's attitude determine their readiness towards adopting technology henceforth fifth hypothesis of this research is as follows:

Hypothesis₅: Positive social influence increases adoption of E-Government services

Cultural influence

Hofstede (1997) presented his cultural dimension theory on the basis of the postulation that culture shapes the individual behaviour that varies country to country. Hofstede (1991) through using the factors of his cultural dimension theory identified that people in the Arab world such as Jordan tends to be highly influenced by the uncertainty avoidance that prohibits their inclination towards using technology or innovation. Furthermore, countries in the Middle East are also highly influenced by the high power distance and collectivism characteristics that means that seniors in the society or organizations tends to highly influence the behaviour of the subordinates, therefore usage of e-Government by the common people in the Jordan would highly rely on the perception and attitude of the senior citizens, celeb or hierarchy in the household (Rees and Athakhri, 2008). Furthermore, cultural factors that impacts e-

Government adoption can be categorized at both national and organizational level however since this study is focused at the municipalities in the Jordan at the national level thus national level factors such as language will be used to determine the readiness of the Jordanian people towards adopting e-Government. Therefore, sixth hypothesis of this study is as follows:

Hypothesis₆: Cultural factors such as language has a direct positive impact on the adoption of E-Government services

Voluntarism

This factor is defined as the extent to which adoption of technology is perceived as voluntary by the people (Brown et al., 2002). Furthermore, voluntarism has also been found to influence PEOU of people since it reflects the conscious public perception towards acceptance of e-Government in instead of a decision made at an unconscious level. On the other hand, since voluntarism require intended behaviour it has been found that failure of public adoption of e-Government depends upon their commitment (Zawaideh, 2017). Since, e-Government at the Jordanian municipalities will be implemented on a compulsory basis hence justifies the investigation of user's perception of the voluntarism on the e-Government services hence following hypothesis will be tested:

Hypothesis₇: Voluntary adoption of E-Government services leads to positive behaviour towards technology

Infrastructure

Availability of infrastructure for the implementation e-Government lies under the umbrella of overall facilitating factors such as availability of facilities at both organizational and technical level to support the running of the overall system (Mahadeo, 2009). Past researchers such as Alghamdi et al (2014) and Kiberu et al (2017) and others have identified infrastructural availability such as internet connection and government website portal as an imminent determinants of the adoption of the e-Government, this following hypothesis has been set:

Hypothesis₈: Availability of infrastructure such as Internet connection and government website increases chances of adoption of E-Government services

Methodology

Aim of this study is to identify the e-Readiness of Jordanian municipalities from the perspective of technological factor. To this end, through using an extended form of TAM a research framework has been produced (see figure 1 above) that identifies eight dependent variables upon which adoption of e-Government (Independent variables) relies.

An online survey was conducted through using likert-style questionnaire based on five factors such as strongly agree, agree, neither agree or disagree, disagree and strongly disagree were used. Participants of the survey came from all walks of life. In total participants were presented with 19 statements. In total 215 responses were collected of which 200 were usable hence 93% response rate was recorded.

Data analysis

Simple regression analysis will be used to test the variables of the identified in the research framework. The independent variables includes PEOU, PU, compatibility, trust, social influence, cultural influence, voluntarism and facilitating conditions. On the other hand, independent variable is set as the intention of the people to adopt e-Government.

Results

Table 1 below represents the results of the demographics of the research participants. Specifically, it shows that participants were consisted of mostly young people since 84% of the participants were in the age group of 18 to 35 years of age. Furthermore, it also shows almost evenly distributed population gender and income wise. Most significant aspect of the demographic factor is that 76% of the population of the research have been found to daily users of the internet however use of the same for government services spears to be small. Finally, evenly distributed population in rural and urban areas were found.

Table (1) frequency and percent for demographic variable

Variable	Classification	Frequency	Percent %
Age	18 – 25 year	32	16
	25 – 30 year	72	36
	30 – 35 year	64	32
	35 – 40 year	16	8
	45 year or above	16	8
Gender	Male	88	44
	Female	112	56
Income	Less than 500 JD	56	28
	500 – 1000 JD	64	32
	1000 – 1500 JD	64	32
	More than 1500 JD	16	8
Experience	Daily user	152	76
	Weekly user	48	24
Usage of E-government	Never used	88	44
	Used occasionally	112	56
Location	Rural	104	52
	Urban	96	48

Mean and standard deviation for each factor and each item

Factor one: Perceived ease of use

Table (2): means and standard deviations for each item by Perceived ease of use level

No.	Statement	Mean	SD	Order
1	I have access to personal computer	3.13	1.49	Moderate
2	I am comfortable at using computer and internet technology	3.87	1.46	High
3	I find it difficult to find information on government website	3.22	1.04	Moderate
Total		3.41	1.19	Moderate

Results in the table (2) means and standard deviations of the all domain, where the means ranged between (3.13 – 3.87) compared with the total instrument mean for the domain (3.41). The item (2) "I am comfortable at using computer and internet technology." ranked first with a mean and standard deviation (M=3.87, SD= 1.46) compared with the total instrument mean and the standard deviation. The item (1) " I have access to personal computer" ranked On the third and last reached a mean (3.13) and the standard deviation was (1.49) compared with the mean and standard deviation of the total instrument.

Factor two: Perceived usefulness

Table (3): means and standard deviations for each item by Perceived usefulness level

No.	Statement	Mean	SD	Order
1	E-Government would make it easier to access to public services	3.04	.82	Moderate
2	I will comply with my legal obligation more easily if they are available on internet	2.70	.97	Moderate
Total		2.87	.69	Moderate

Table (3) above shows means and standard deviations of the all domain, where the means ranged between (2.70 – 3.04) compared with the total instrument mean for the domain (2.87). the item (3.04) " E-Government would make it easier to access to public services. " ranked first with a mean and standard deviation (M=3.04, SD= 0.82) compared with the total instrument mean and the standard deviation. The item (2) " I will comply with my legal obligation more easily if they are available on internet " ranked On the second and last reached a mean (2.70) and the standard deviation was (0.97) compared with the mean and standard deviation of the total instrument.

Factor Three: Facilitating factors

Table (4): means and standard deviations for each item by Facilitating factors level

No.	Statement	Mean	SD	Order
1	Internet is easily accessible in my locality	3.61	1.08	Moderate
2	I would use e-government if internet connection is available in my locality	3.12	1.45	Moderate
3	Government portals are not easily accessible or lack information	3.82	1.47	High

Total	2.91	1.42	Moderate
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Table (4) means and standard deviationsof the all domain, where the means ranged between (3.12 – 3.82) compared with the total instrument mean for the domain (2.91). the item (3) " Government portals are not easily accessible or lack information. " ranked first with a mean and standard deviation (M=3.82, SD= 1.47) compared with the total instrument mean and the standard deviation. The item (2) " I would use e-government if internet connection is available in my locality " ranked On the third and last reached a mean (3.12) and the standard deviation was (1.45) compared with the mean and standard deviation of the total instrument.

Factor Four: Trust

Table (5): means and standard deviations for each item by Trust level

No.	Statement	Mean	SD	Order
1	I feel secure while using internet for transaction purpose	3.29	.99	Moderate
2	I feel confident that use of government website will not result in infringing my privacy	2.94	.75	Moderate
3	I am aware of the benefits of using E-Government	2.88	.99	Moderate
Total		3.04	.63	Moderate

Table (5) means and standard deviationsof the all domain, where the means ranged between (2.88 – 3.29) compared with the total instrument mean for the domain (3.04). The item (1) "I feel secure while using internet for transaction purpose." ranked first with a mean and standard deviation (M=3.29, SD= 0.99) compared with the total instrument mean and the standard deviation. The item (3) " I am aware of the benefits of using E-Government " ranked On the third and last reached a mean (2.88) and the standard deviation was (0.99) compared with the mean and standard deviation of the total instrument.

Factor Five: Social influence

Table (6): means and standard deviations for each item by Social influence level

No.	Statement	Mean	SD	Order
1	People in my society considers e-Government an innovative factor	3.76	.90	High
2	There is a rising trend in the society to use internet for conducting daily routine business	3.12	1.45	Moderate
Total		3.44	.83	Moderate

Table (6) means and standard deviationsof the all domain, where the means ranged between (3.12 – 3.76) compared with the total instrument mean for the domain (3.44). the item (3.76) " People in my society considers e-Government an innovative factor." ranked first with a mean and standard deviation (M=3.76, SD= 0.90) compared with the total instrument mean and the standard deviation. The item (2) "There is a rising trend in the society to use internet for conducting daily routine business" ranked on the second and last reached a mean (3.12) and the standard deviation was (3.12) compared with the mean and standard deviation of the total instrument.

Factor six: Voluntariness

Table (7): means and standard deviations for each item by Voluntariness level

No.	Statement	Mean	SD	Order
1	I feel using e-Government services should be considered optional	3.82	1.47	High
2	Use of e-Government voluntary would enhance intention to use the services	3.29	.99	Moderate
Total		3.56	1.13	Moderate

Table (7) means and standard deviations of the all domain, where the means ranged between (3.29 – 3.82) compared with the total instrument mean for the domain (3.56). the item (1) " I feel using e-Government services should be considered optional. " ranked first with a mean and standard deviation (M=3.82, SD= 1.47) compared with the total instrument mean and the standard deviation. The item (2) " Use of e-Government voluntary would enhance intention to use the services " ranked On the second and last reached a mean (3.29) and the standard deviation was (0.99) compared with the mean and standard deviation of the total instrument.

Factor seven: Compatibility

Table (8): means and standard deviations for each item by Compatibility level

No.	Statement	Mean	SD	Order
1	Use of e-Government is compatible with the way I would like to do things	2.94	.75	Moderate
2	Use of e-Government services fits into the style of my work	2.88	.99	Moderate
Total		2.91	.71	Moderate

Table (8) means and standard deviations of the all domain, where the means ranged between (2.88 – 2.94) compared with the total instrument mean for the domain (2.91). the item (1) " Use of e-Government is compatible with the way I would like to do things. " ranked first with a mean and standard deviation (M=2.94, SD= 0.75) compared with the total instrument mean and the standard deviation. The item (2) "Use of e-Government services fits into the style of my work "ranked on the second and last reached a mean (2.88) and the standard deviation was (0.99) compared with the mean and standard deviation of the total instrument.

Factor Eight: Cultural influence – Language

Table (9): means and standard deviations for each item by Cultural influence - Language level

No.	Statement	Mean	SD	Order
1	I would use e-Government services if it is made available in Arabic language	3.76	.90	High
2	I find it difficult to use e-Government as government website is not available in Arabic	3.82	1.47	High
Total		3.79	.92	High

Table (9) means and standard deviations of the all domain, where the means ranged between (3.76 – 3.82) compared with the total instrument mean for the domain (3.79). the item (2) " I find it difficult to use e-Government as government website is not available in Arabic. " ranked first with a mean and standard deviation (M=3.82, SD= 1.47) compared with the total instrument mean and the standard deviation. The item (1) " I would use e-Government services if it is made available in Arabic language " ranked On the

second and last reached a mean (3.76) and the standard deviation was (0.90) compared with the mean and standard deviation of the total instrument.

Testing hypothesis:

Hypothesis₁: Positive attitude towards ease of usefulness (EOU) of the E-Government services leads to positive attitude towards adoption of technology

To test hypothesis, simple linear regression analysis has been used, table (10) show that.

Table (10) simple linear regression analysis to examine the impact of ease of usefulness on e-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
Ease of usefulness	.487	.237	6.518	.019	.973	.513	2.553	.019

Table (10) shows the impact of ease of usefulness on e-Government services leads to positive attitude towards adoption of technology. Then the results of the statistical analysis showed the presence of statistically significant impact of ease of usefulness on e-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.487) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.237%), which means that the value of 23.7% of changes in the e-Government services leads to positive attitude towards adoption of technology. From changes in the ease of usefulness, and confirms this conclusion F value calculated, which amounted to (6.518), which function at the level of significance ($\alpha \leq 0.05$). This confirms that the regression statistically significant, and a statistically significant impact of ease of usefulness on e-Government services leads to positive attitude towards adoption of technology (0.513), which means that changes in e-Government services leads to positive attitude towards adoption of technology resulting from changes in the ease of usefulness value (0.513).

Hypothesis₂: Positive perception of people about the perceived usefulness (PU) of the e-Government leads to positive attitude towards adoption of technology

To test hypothesis, we can use simple linear regression analysis, table (11) show that.

Table (11) simple linear regression analysis to examine the impact of perceived usefulness on e-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
perceived usefulness	.448	.201	5.281	.032	.399	.809	2.298	.032

Table (11) shows the impact of Perceived usefulness on e-Government services leads to positive attitude towards adoption of technology. then the results of the statistical analysis showed the presence of statistically significant impact of perceived usefulness on e-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.448) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.201%), which means that the value of 20.1% of changes in the e-Government services leads to positive attitude towards adoption of technology. from changes in the perceived usefulness, and confirms this conclusion F value calculated, which amounted to (5.281), which function at the level of significance ($\alpha \leq 0.05$). This

confirms that the regression statistically significant, and a statistically significant impact of perceived usefulness on e-Government services leads to positive attitude towards adoption of technology (0.809), which means that changes e-Government services leads to positive attitude towards adoption of technology resulting from changes in the perceived usefulness value (0.809).

Hypothesis₃: Perception of the compatibility of the E-Government will have positive impact on the EOU.

To test hypothesis, we can use simple linear regression analysis, table (12) show that.

Table (12) simple linear regression analysis to examine the impact of compatibility on E-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
Compatibility	.981	.962	529.626	.000	.203	.864	23.014	.000

Table (12) shows the impact of compatibility on e-Government services leads to positive attitude towards adoption of technology. Then the results of the statistical analysis showed the presence of statistically significant impact of compatibility on e-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.981) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.962%), which means that the value of 96.2% of changes in the E-Government services leads to positive attitude towards adoption of technology. from changes in the compatibility, and confirms this conclusion F value calculated, which amounted to (529.626), which function at the level of significance ($\alpha \leq 0.05$). This confirms that the regression statistically significant, and a statistically significant impact of compatibility on e-Government services leads to positive attitude towards adoption of technology (0.864), which means that changes E-Government services leads to positive attitude towards adoption of technology resulting from changes in the compatibility value (0.864).

Hypothesis₄: The higher the trust of people on E-Government services the higher the adoption of technology

To test hypothesis, we can use simple linear regression analysis, table (13) show that.

Table (13) simple linear regression analysis to examine the impact of trust on E-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
Trust	.883	.779	52.870	.000	.021	1.089	7.271	.000

Table (13) shows the impact of trust on E-Government services leads to positive attitude towards adoption of technology. then the results of the statistical analysis showed the presence of statistically significant impact of trust on e-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.883) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.779%), which means that the value of 77.9% of changes in the E-Government services leads to positive attitude towards adoption of technology. from changes in the trust, and confirms this conclusion F value calculated, which amounted to (52.870), which function at the level of significance ($\alpha \leq 0.05$). This confirms that the regression statistically significant, and a statistically significant impact of trust on E-Government services leads to positive attitude towards adoption of

technology (1.089), which means that changes e-Government services leads to positive attitude towards adoption of technology resulting from changes in the trust value (1.089).

Hypothesis₅: Positive social influence increases adoption of E-Government services

To test hypothesis, we can use simple linear regression analysis, table (14) show that.

Table (14) simple linear regression analysis to examine the impact of social influence on E-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
social influence	.859	.738	42.298	.000	.537	.812	6.504	.000

Table (14) shows the impact of social influence on E-Government services leads to positive attitude towards adoption of technology. Then the results of the statistical analysis showed the presence of statistically significant impact of social influence on E-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.859) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.738%), which means that the value of 73.8% of changes in the E-Government services leads to positive attitude towards adoption of technology. from changes in the social influence, and confirms this conclusion F value calculated, which amounted to (42.298), which function at the level of significance ($\alpha \leq 0.05$). This confirms that the regression statistically significant, and a statistically significant impact of social influence on e-Government services leads to positive attitude towards adoption of technology (0.812), which means that changes E-Government services leads to positive attitude towards adoption of technology resulting from changes in the social influence value (0.812).

Hypothesis₆: Cultural factors such as language has a direct positive impact on the adoption of E-Government services

To test hypothesis, we can use simple linear regression analysis, table (15) show that.

Table (15) simple linear regression analysis to examine the impact of Cultural factors such as language on E-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
Cultural factors such as language	.928	.861	93.125	.000	1.048	.642	9.650	.000

Table (15) shows the impact of Cultural factors such as language on E-Government services leads to positive attitude towards adoption of technology. then the results of the statistical analysis showed the presence of statistically significant impact of Cultural factors such as language on e-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.928) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.861%), which means that the value of 86.1% of changes in the E-Government services leads to positive attitude towards adoption of technology. from changes in the Cultural factors such as language, and confirms this conclusion F value calculated, which amounted to (93.125), which function at the level of significance ($\alpha \leq 0.05$). This confirms that the regression statistically significant, and a statistically significant impact of Cultural factors such as language on E-Government services leads to positive attitude towards adoption of technology

(0.642), which means that changes E-Government services leads to positive attitude towards adoption of technology resulting from changes in the Cultural factors such as language value (0.642).

Hypothesis₇: Voluntary adoption of E-Government services leads to positive behaviour towards technology

To test hypothesis, we can use simple linear regression analysis, table (16) show that.

Table (16) simple linear regression analysis to examine the impact of Voluntary such as language on e-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
Voluntary	.679	.461	12.848	.003	1.161	.745	3.584	.003

Table (16) shows the impact of Voluntary on E-Government services leads to positive attitude towards adoption of technology. then the results of the statistical analysis showed the presence of statistically significant impact of Voluntary on E-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.679) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.461%), which means that the value of 46.1% of changes in the E-Government services leads to positive attitude towards adoption of technology. from changes in the Voluntary, and confirms this conclusion F value calculated, which amounted to (12.848), which function at the level of significance ($\alpha \leq 0.05$). This confirms that the regression statistically significant, and a statistically significant impact of Voluntary on e-Government services leads to positive attitude towards adoption of technology (0.745), which means that changes e-Government services leads to positive attitude towards adoption of technology resulting from changes in the Voluntary value (0.745).

Hypothesis₈: Availability of infrastructure such as internet connection and government website increases chances of adoption of E-Government services

To test hypothesis, we can use simple linear regression analysis, table (17) show that.

Table (17) simple linear regression analysis to examine the impact of Availability of infrastructure such as language on e-Government services leads to positive attitude towards adoption of technology.

Variable	R	R ²	F	Sig.F	β ₀	β _i	T	Sig.T
Availability of infrastructure	.874	.765	48.729	.000	.512	.743	6.981	.000

Table (17) shows the impact of Availability of infrastructure on e-Government services leads to positive attitude towards adoption of technology. Then the results of the statistical analysis showed the presence of statistically significant impact of availability of infrastructure on E-Government services leads to positive attitude towards adoption of technology, with a correlation coefficient R (0.874) at the level of significance ($\alpha \leq 0.05$). The coefficient of determination R² has reached (0.765%), which means that the value of 76.5% of changes in the e-Government services leads to positive attitude towards adoption of technology. from changes in the Availability of infrastructure, and confirms this conclusion F value calculated, which amounted to (48.729), which function at the level of significance ($\alpha \leq 0.05$). This confirms that the regression statistically significant, and a statistically significant impact of

Availability of infrastructure on e-Government services leads to positive attitude towards adoption of technology (0.743), which means that changes e-Government services leads to positive attitude towards adoption of technology resulting from changes in the Availability of infrastructure value (0.743).

Discussion

This study investigated the technological readiness of the people in the Jordan to adopt e-Government initiative. To this end, framework was constructed that through extended on the factors identified by the TAM for influencing the consumer's adoption of e-Government. Investigated factors included PEOU, PU, compatibility, trust, social influence, cultural influence, voluntarism and facilitating conditions.

Positive relation between the PEOU, PU, compatibility and voluntarism and adoption of e-Government shows that Jordanians would happily adopt e-Government provided that they are made to believe that it will make them to easily use the public services as compare to the quality of service that they get without e-Government integration. Thus, the key to increase readiness of the people in the Jordan to adopt e-Government is to increase their awareness about the advantages of using the electronic platform as also suggested by Zawaideh (2017). To this end, Zawaideh (2017) suggested usage of social media platform since there is a rising trend among Jordanians towards using Internet as figure rose to 6.3 million by the end of 2016 (Ghazal, 2016). Another key to the successful implementation of the e-Government at the municipality level would be to increase public trust on using technology for the transactional purpose. These findings have also been supported by Jabir et al (2012) who in their study found that although number of people using internet in the Jordan are increasing however thanks to eluded subjective norms such as threat of online fraud and stigma of theft being attached to using technology for transactional purposes means that usage of internet for transactional purpose in the Jordan would remain low unless people are educated on the security issues surrounding the usage of internet for transaction making purpose. To this end, there is a need for using social and cultural factors so that internet could be made less fearful among people. For instance, in this research both cultural and social influences have been found to have direct positive relation with the intention of people to use e-Government thus there is a need to create cultural readiness among Jordanian people to accept e-Government. Finally, availability of infrastructure has also been found to be positively influencing the people's intentions to use e-Government.

Although above findings have added to the current literature through further validating the constructs that could be damaging the readiness of the Jordanian people to adopt e-Government however key limitation of this study lies in the sample size and lack of segmentation. For instance, not only sample size was merely 200 but also segmentation could not be made possible since survey was conducted online hence it is not possible to identify the extent of readiness of people to adopt e-Government at different municipality levels in the Jordan. However, factors brought forward by this study can be used as future lines of research and could provide better comprehension ability for both practitioners and academics.

Conclusion

This study has brought forth the key implications that could impact the e-Government initiative of the Jordanian government. It has identified key to success of the e-Government initiative in the Jordan is to overcome the fear of people about using internet for transactional purpose, to this end it has been proposed to increase people awareness about the benefits of using e-Government through using cultural and social influences.

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