

Factors influencing the electronic government adoption among PSM in Oman: A structural equation modeling approach

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Abstract

The dynamic movement of electronic government (e-government) needs a clear pathway on the adoption level of stakeholders within the public sector organization. This research has identified gaps in the movement of the adoption. The respondents comprised 237 public sector managers at the ministry level who conduct e-government services in the Sultanate of Oman. A questionnaire was designed to tap into the manager's perception of the Internet's Perceived Usefulness, Perceived Credibility of technology, Intention to use the technology, and adoption of the Internet itself. Seven hypothesized relationships were tested in the structural model. An advanced quantitative data analysis using multivariate data analysis was employed. The data were analyzed using structural equation modeling (SEM) to test the causal and mediating effects of latent variables. Based on the research, the hypothesized model fit fails to be supported ($p < .05$). The findings support the TAM theory extremely well, whereby, all the hypothesized paths were asserted. The generated model found three significant direct paths between Perceived Usefulness, Perceived Credibility, and intention as well as between intention and adoption.

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Keywords: Sultanate of Oman, E-government adoption, Perceived credibility, Perceived usefulness, Perceived ease of use, Structural equation modeling

1. Introduction

Public sector organization services have been increasing dynamically and rapidly in Oman. As a result, the struggle to survive is considerably more difficult for businesses and services tied to such businesses. How information technology (IT) has been implemented into the day-to-day operations of service is one of the primary determinants of whether that service will continue to exist in this new millennium [1-3]. Public Service Motivation (PSM), the rational-choice perspective on bureaucratic behavior, which presupposes a rational and self-interested individual that wants personal benefits such as reputation, authority, and financial incentives, was challenged by public administration experts by developing PSM theory [4]. For the government to be effective, it must understand and become proficient in information and communication technology (ICT) [5]. Therefore, managers proficient in information technology are required in the public sector, particularly regarding the Internet's utilization for improving services and businesses [6, 7]. In addition, the current research focuses on the dynamic mobility of e-government and its impact on the organizational structure of the public

sector as well as the adoption level of public sector managers. e-government makes the promise that it will emulate the private sector by providing residents and organizations with an administration that is more efficient, plain, and transparent [5]. Although the benefits of having an electronic government have been well-documented, there has been a lack of adoption of the concept in both developed and developing countries.

2. Background

Since the conception of e-government came into widespread use, various studies have been conducted to study the challenges that arise when an electronic government is put into practice in different national contexts. As a result of the growth of e-government, public administrations worldwide have realized the necessity of making their services more effective and available to a wider range of people [6]. Although locals have become more Internet savvy and access fantastic electronic administrations (e-services) from the private sector, they are starting to expect the same exclusive standards from government offices for their public administrations. This is because government offices are the only ones with Internet access [1]. Over the past several years, there has been a significant rise in the number of people in Oman who utilize the Internet. It has been estimated that almost 9.8 million people were using the Internet in 2019, which is a threefold increase compared to the number of people using it in 2015. On the other hand, there has not been a lot of research done about e-involvement governments in Internet services and other things like that, decided to do this study [8]. This study aims to investigate the empirical correlations between the perception of technology usage and believability concerning Internet credibility with Internet Adoption [2]. In addition, this study also investigates intention's mediating effect on those relationships, as hypothesized [6].

As a result, e-government has recently been prioritized as an investment by most organizations [7]. As a strategic instrument that may be the foundation of an organization's competitive edge, IT's function has evolved from merely a tool for communication processing [2]. The electronic government allows citizens to transact electronically for services and goods without worrying about time or distance restrictions as consumers [5]. This sort of e-government has expanded exponentially over the past several years, and it is anticipated that this growth will continue for the foreseeable future [6]. In addition, over the next few years, there will undoubtedly be a blurring of the lines between electronic and traditional forms of e-government as more companies decide to move at least some of their operations online [3]. The focus of the international business communities has shifted to e-government due to the rapid Internet integration and other telecom-based functions in almost every area of commercial endeavors [2]. Here are a handful of the many definitions and explanations of what electronic government is. E-government is essentially the online exchange of goods and services [7]. It is also known as the buying, selling, and exchanging of products and services via computer networks when the terms of the sale are carried out electronically [1, 2].

This study applies the conceptual theory of the technology acceptance model to explore the empirical antecedents of public sector managers' intention to use and adoption of e-government (TAM). The UTAUT Vekantesh model synchronized the model's development and validation in the empirical context of Oman's implementation of electronic governance. In addition to introducing three new channels, the proposed model generates two substantial direct paths (Perceived Usefulness to intention and intention to adoption) (direct paths from Perceived Usefulness, Perceived Ease of Use, and Perceived Credibility to adoption). The discovery is explored concerning Oman's public sector manager's goal to use e-government and adopt public services. The current study successfully establishes and validates a basic model of public sector managers' adoption of e-government. It is now one of the foundational components of managerial reform worldwide. Governments worldwide, without a doubt, are fully aware of this potential and use ICT to support government functions.

Consequently, e-government, also known as electronic government, has emerged. The most effective and widely used method for delivering e-government is, in fact, the Internet [3]. Citizens can participate in democratic processes more by using e-government websites since they can easily access government information and services whenever and wherever they want [9]. As a result, the time spent waiting and traveling

is cut down. According to the government, operating and administrative costs decrease as more people use e-government [2]. To obtain these benefits, citizens' initial adoption and subsequent continued usage of e-government websites are required [6]. In general, an information system indicates its eventual success depends on its continued use rather than its first-time use [10, 11]. However, unless a sizable number of residents continue to utilize e-government websites after their initial adoption, it may not always result in the desired result [2]. Furthermore, discontinuance may occur after innovation adoption if the system does not meet the user's needs regardless of its initial adoption [11, 12]. As a result, the rollout of retail e-government will continue Oman's stakeholder journey toward technological adoption. Small, medium, and micro-sized businesses, as well as the unofficial sector, make up most of the Omani public and private sectors. These companies are the goal of the expansion of the global economy. E-government has a lot to offer citizens and SMEs, mainly retail enterprises, including possible strategic benefits like the opportunity to generate new industries and content [6]. Based on an analysis of the pertinent literature, these variables include organizational readiness, perceived benefits, external influences, and culture [3]. A thorough analysis of Davis [13] model on technology acceptance will be done about e-government adoption in developing countries, particularly Oman. Since face-to-face transactions are regarded as more reliable than online commerce, conventional business and public service methods are still the standards. This can indeed be a hindrance or a potential issue for the adoption rate of e-government inside the nation [2, 7]. Government-to-Citizens will be one of the actual e-government classes. Most electronic partnerships between a government and its citizens are included in the G2C classification. According to prior empirical research and practices, the use of e-government will grow and thrive if it meets customer needs. In many countries, however, inhabitants have not reacted to e-taxpayer-driven organizations with much enthusiasm. However, no studies have attempted to thoroughly understand the relationship between benefit conveyance and utilization [8]. Regularly the discernment and desires of the client contrast with the administration supplier in connection to critical measurements, for example, productivity, usability, mindfulness, security, put stock in, enactment, accessibility, and openness [1].

The assessment strategies, what's more, benchmarks at present utilized for estimating the administration clients' discernment concerning the above measurements frequently vary from those used to gauge the administration supplier's impression of what constitutes best practice [3]. Given the arguments above, the author suggests that the literature which focuses on e-government implementation and adoption collectively is limited, as most scholars focus on one aspect only [2, 7]. Even though these models have several common factors, as per the author's knowledge, there is no specific model that investigates e-government implementation and adoption [1].

Presence technology is expected to be the answer to equalize the speed of service, not least in gov [3]. The previous study shows many factors influence the implementation of e-government in Oman. Sahar, et al. [14] stated that uncertainty avoidance, trust; perceived public value; Perceived Ease of Use; and attitude contribute significantly to citizen adoption of e-gov services in Oman. Since Oman and other Arab countries are facing the same problem of low-level citizen adoption of e-government services [8]. Alomari et al. [15] said that according to their findings, trust in gov website design, beliefs, Perceived Usefulness, and complexity are significant factors in adopting e-gov by Omani citizens. Hutchens, et al. [16] also said that due to the high cost of the Internet, security fears, and lack of awareness. Issues like privacy and security concerns, affordability, and acceptance, appear to be the significant challenges for adopting e-government services [2, 5].

E-government became great hope for government programs, one of the critical points in it is that e-government is still considered quite far behind compared to other countries [7]. The problem is quite 'classical,' i.e., equalization Internet network in all regions of Oman. The implementation of e-government will be realized if the Internet network is also available in rural areas [6]. Oman's household download speed is 3.09 megabits per second (Mbps), placing the country 159th overall and 147th in the upload sub-index of the Net Index. The international business Ookla, which provides Speedtest.net, a tool for evaluating Internet connection capacity to locations worldwide, has released The Net Index. The study said that Oman's upload speed was 1.44 Mbps and that testing from 307,295 different IP addresses had been conducted in the Sultanate. A total of 2,504,928

tests had been completed, but only 100,016 were used to calculate the index at hand. According to the index, Oman ranks 147th internationally in terms of upload speed [8]. Saudi Arabia came second among Arab countries, with a 10Mbps download speed and a 2.4 Mbps upload, followed by Qatar, Bahrain, Kuwait, Oman, Morocco, Iraq, and Libya, which all had faster download and upload speeds than Oman. According to [8] there are several reasons for not using the Internet, the main reason being the Internet's cost. For example, the numbers of PCs in Oman are 4.5 per 100 users [8]. These figures illustrate that there is only very little e-society in Oman. Moreover, figures for e-government spending between 2004 and 2006 show a significant disparity between the expenditure of tens of millions of dollars allocated to e-services projects and the spending of only tens of thousands of dollars on projects intended to encourage Internet access and computer ownership among citizens [17].

3. Method

Identifying the most accurate methodology to conduct research can be seen as a daunting task, as various ways research can be performed. Moreover, different research topics will require different methods to achieve their desired results. Hence the research has declared an extensive literature review that provides an in-depth understanding of the research topic. Therefore, the research questions and objectives are the main drivers of this research. The present study configured the adoption of e-government among public sector managers in the public sector organization in Oman. A descriptive approach of research nature with a positivism paradigm was employed [18, 19]. This study also establishes a fundamental finding of the e-government adoption model in the public sector organization. Using advanced quantitative methods and SEM, this research came out with a valid model and measurements of e-government adoption among public sector managers. The present study employed a quantitative method using the descriptive approach to observe the adoption level of public sector managers based on Perceived Usefulness and Perceived Ease of Use to the volume of e-government implementation as a construct of public sector organization performance.

3.1. Research framework and hypothesized model

The model has three determining factors of e-government adoption: perceived benefits, organizational readiness, and external influences. In this research, however, based on the unit of analysis and the consideration of the level of technology adoption in developing countries, four factors have been identified to be determining factors of e-government adoption. These include the three factors named above, which have been modified to suit the unit of analysis of this research and add one more variable, Perceived Credibility influences. Perceived credibility influence is believed to have a significant impact on e-government adoption within developing countries and, therefore, very vital to this research. Considering the abovementioned theoretical framework highlights and identifies the four major influencing factors of e-government adoption. As shown above, each of these four factors has been accompanied by supporting variables that further describe the areas in which they may be relevant, thus playing vital roles in the hypothesis formulation of this research.

3.2. Intention to use and adoption

Based on the technology acceptance model TAM [13], a highly recognized theory of technology adoption, intention to use IT in this model TAM has been hypothesized and proven to be a dependent variable where Perceived Usefulness and Perceived Ease of Use are independent variables. In this research, however, intention to use serves as a mediating variable as it has a positive relationship between the independent variables: perceived benefits, organizational readiness, external influences, and culture, with e-government adoption as the dependent variable, is the stage that completes the process. For this study, a literature review has shown that in developing countries such as Oman, the adoption of e-government by public sector managers of any kind after considering all factors is also resonant with the fact that vendors have the innate need or intention to venture into a new platform of doing business. This made it the mediating variable and hypothesized model for this research, as illustrated in Figure 1.

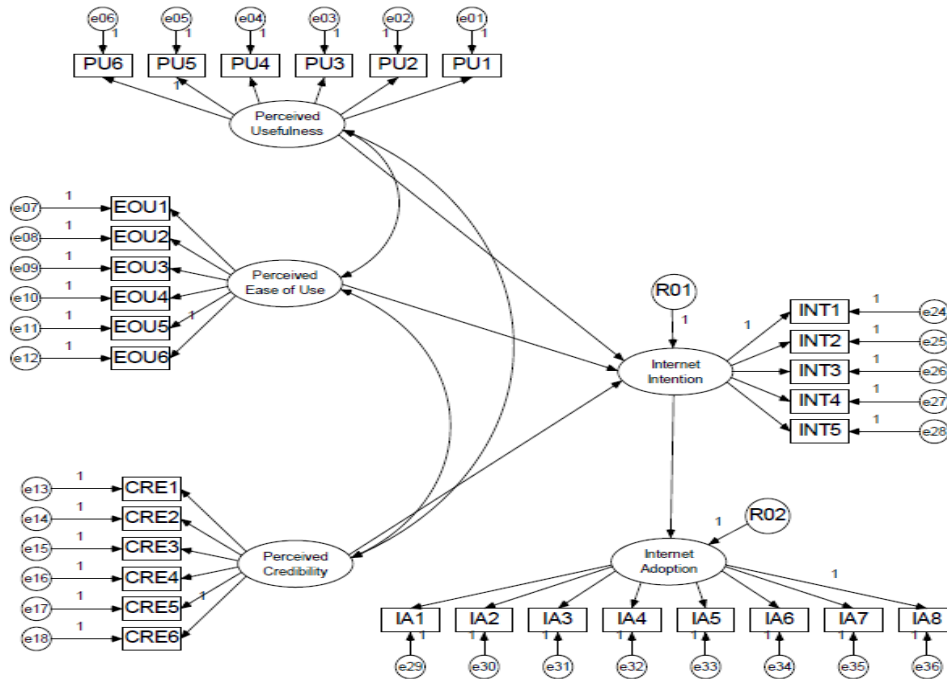


Figure 1. Hypothesized model

4. Sampling mechanism

Based on the quantitative research method adopted for this study, a questionnaire will be formulated, which will be shown later in this paper. Questionnaires have always been identified as the most used method of investigating Internet behaviors and activities in previous research; they usually tend to be more objective and precise and concentrate on the phenomenon. The questionnaire was distributed by face-to-face administration methods. Through this method, the researcher can minimize the failure rate and guide the respondents toward providing genuine and truthful information on the answers that the researcher is looking for. Data sources from various related ministries, such as the Omani Ministry of e-government and Industry and the Omani Bureau of Statistics, will be used to justify the quantitative method of this research. These sources will also provide information to determine the category and number of respondents chosen to administer the questionnaire. This method will therefore serve as phase 1 of the data collection process for this research. The final phase of this survey will be the distribution and collection of the questionnaire from the respondents to start with calculating the results. A proportionate stratified random sampling technique was employed to configure the population and sample of public sector managers in the ministry involved with e-government services and business from 2012 until 2016.

Table 1. Sampling mechanism

Population	Sample
Department 350	$350/1400 * 302 = 75.5$ (75)
Agencies 745	$745/1400 * 302 = 160.7$ (161)
Cities 305	$305/1400 * 302 = 65.7$ (66)
Total: 1400	Total: 302

The primary respondents were PSM managers at the Ministry level who operated their services in the Sultanate of Oman. A total of 302 public sector managers from the ministry involved with e-government services were requested to complete a questionnaire containing measures of the constructs of concern. The questionnaires were distributed to the respondents using a proportionate stratified random sampling method. Out of the desired sample size of 302, 245 were returned. This gives a response rate of 81.12%. As such, the response rate for this study is adequate for structural equation modeling analysis, whereby after outliers' deletion, 237 questionnaires

were subsequently used for analysis (Table 1). A total of 31 observed variables made up the measurement of exogenous independent variables such as Perceived Usefulness (6 items), Perceived Ease of Use (6 items), Perceived Credibility (8 items), Internet intention (5 items), and e-government adoption (8 items) adapted and modified from Wang et al., (2003). The scaling used in this research is the 7-point Likert scale of 1-strongly disagree, 2-disagree, 3-slightly disagree, 4-neutral, 5- slightly agree, 6-agree, and 7-strongly agree. The demographic variables asked are gender, race, age, education, and monthly income of the respondent.

5. Data collection technique

Questionnaires, the principal instruments for data collection in this research, are divided into five sections. Section 1 will collect information related to the retailers, locations, revenue, year of establishment, staff strength, etc. The second section focuses on the awareness level of public sector managers towards e-government, the usage of its applications, and the ability to use the Internet to transact business. The third section explores the perceived benefits of e-government adoption for vendors, showing how the service and business benefit from using e-government as a new business tool. Finally, section 4 showcases the external influences that can hinder or promote the adoption of e-government by the ministry. In contrast, section 5 emphasizes the behavioral or Perceived Credibility influences, i.e., trust and risk, and shows how they can negatively or positively impact e-government adoption. Most items or questions within the questionnaire will be measured using a five-point Likert scale. These range from “strongly disagree” to “strongly agree”, while others have a standard checklist of “yes” or “no” questions.

6. Data analysis procedure

The data gathered in this research from questionnaires from respondents will be studied, and then analyzed using the analysis of movement software (AMOS) version 25.00 techniques. This method has been used as the primary statistical analysis. This software has been chosen because it can provide this research with a detailed, conclusive, and practical result, which has provided the researcher with a clear interpretation of the data collection findings. Data was coded and run using the SPSS version 25.00 for windows and then the AMOS graphics software of version 25.00. Validation of measurements was succeeded using the confirmatory factor analysis (CFA) technique, i.e., confirmatory factor analysis. Even though it is pretty much like the multiple regression techniques, CFA is a much more powerful technique that takes account of the measurement of errors, non-linearity, modeling of interactions, correlated independents, and so much more. This will show the reliability and validity of the data. And in the process, present the researcher with a suitable mode fit that can then be applied. Therefore, with this software technique CFA, the researcher believes that a more accurate finding that can genuinely be applied will be realized. These will all be accomplished using the model specification indicator as seen below:

- Chi-Square χ^2
- Degree of Freedom Df
- Ratio χ^2/df
- The goodness of Fit Index GFI
- Root Mean Square Error of Approximation RMSEA
- P Value P

CFA measurement model of the exogenous and endogenous, generated, and structural model on the hypothesized model through SEM. The goodness of the model fit the direct and indirect effect of variables through path analysis and correlation among variables are also discussed. Finally, the results of hypotheses testing are elaborated. The preliminary results, such as CFA, multivariate outliers' detection, normality test, and reliability test, were analyzed using SPSS 23.00. SEM using the “Analysis of Moment Structures” (AMOS 23.0) was used for CFA and path analysis to verify the validity of the scales and structural relationships among

independent, mediating, and dependent variables. The fundamental electronic government model was then used to test hypotheses and confirm variables' interaction effects.

6.1. Reliability and validity of measurements

All measures obtained from 30 managers for the pre-test and 50 managers for the pilot test were subjected to reliability analysis to assess the dimensionality of the measurement scale. Only items with a high factor loading and no cross-loading greater than 0.70 were retained. Scale reliability was assessed in terms of items-to-total correlation and Cronbach's alpha to determine the internal consistency of the measurement scale. Reliability is also discussed, which is a type of association used to correlate a variable with itself, usually in assessing interrater similarity on a variable. Reliability is the correlation of an item, scale, or instrument with a hypothetical one that genuinely measures what it is supposed to. Cronbach's alpha is a measure of the intercorrelation of things. If alpha is greater than or equal to 0.6, the items are considered unidimensional and may be combined in an index or scale. The researcher uses the more stringent cut-off of 0.70. (Cohen, 1988). Cronbach's alpha is the most common form of internal consistency reliability coefficient.

7. Pre-test of measurements and variables

7.1. Pre-test of perceived credibility

Based on Table 2, the present study confirmed a high level of reliability of Perceive Credibility with several item measurements is 6. This study also configured a detailed reliability test for each item. It's confirmed high reliability for items number 1 until item number 6 (table 3). The consistency of indicators has a significant interaction as reliable measurements of Perceived Credibility. The reliability test is helpful to confirm all variable measurements, and all hands were involved further with a CFA process until hypothesis testing.

Table 2. Reliability statistic of Perceived Credibility

Variable	Cronbach's Alpha	No. of Items	Remark
Perceived Credibility	0.877	6	High Reliability

Table 3. Item-total statistic of Perceived Credibility

Items	Cronbach's Alpha	Corrected Item-Total Correlation	Remark
CRE1	0.904	0.488	High Reliability
CRE2	0.852	0.709	High Reliability
CRE3	0.83	0.845	High Reliability
CRE4	0.889	0.454	High Reliability
CRE5	0.824	0.862	High Reliability
CRE6	0.826	0.856	High Reliability

7.2. Pre-test of perceived ease of use

Based on Table 4, the present study confirmed a high level of reliability of the statistic of ease of use with several item measurements of 6. This study also configured a detailed reliability test for each item. It confirmed high reliability for items number 1 until item number 6 (Table 5). The consistency of indicators has a significant interaction as a reliable measurement of the statistic of ease of use. The reliability test is helpful to confirm all measurements of variables, and all indicators were involved further with a CFA process until hypothesis testing.

Table 4. Reliability statistic of Perceived Ease of Use

Variable	Cronbach's Alpha	No. of Items	Remark
Ease of Use	0.841	6	High Reliability

Table 5. Item-total statistic of Perceived Ease of Use

Items	Cronbach's Alpha	Corrected Item-Total Correlation	Remark
EOU1	0.853	0.444	High Reliability
EOU1	0.812	0.638	High Reliability
EOU1	0.799	0.709	High Reliability
EOU1	0.816	0.619	High Reliability
EOU1	0.794	0.727	High Reliability
EOU1	0.816	0.617	High Reliability

7.3. Pre-test of perceived usefulness

Based on Table 6, the present study confirmed a high level of reliability of Perceived usefulness with several item measurements 6. This study also configured a detailed reliability test for each item. It confirmed high reliability for item number 1 until item 6 (Table 7). The consistency of indicators has a significant interaction as a reliable measurement of Perceived usefulness. The reliability test is helpful to confirm all measures of a variable, and all indicators were involved further with a CFA process until hypothesis testing.

Table 6. Reliability statistic of Perceived Usefulness

Variable	Cronbach's Alpha	No. of Items	Remark
Perceived Usefulness	0.961	6	High Reliability

Table 7. Item-total statistic of Perceived Usefulness

Items	Cronbach's Alpha	Corrected Item-Total Correlation	Remark
PU1	0.968	0.735	High Reliability
PU2	0.945	0.952	High Reliability
PU3	0.962	0.801	High Reliability
PU4	0.944	0.961	High Reliability
PU5	0.955	0.862	High Reliability
PU6	0.945	0.955	High Reliability

7.4. Pre-test of Internet Intention

Based on Table 8, the present study confirmed a high level of reliability of Internet intention with several item measurements is 5. This study also configured a detailed reliability test for each item. It confirmed high reliability for items number 1 until item number 5 (Table 9). The consistency of indicators has a significant interaction as a reliable measurement of Internet intention. The reliability test is helpful to confirm all variable measurements, and all indicators were involved further with a CFA process until hypothesis testing.

Table 8. Reliability statistic of Internet Intention

Variable	Cronbach's Alpha	No. of Items	Remark
Internet Intention	0.945	5	High Reliability

Table 9. Item-total statistic of Internet Intention

Items	Cronbach Alpha	Corrected Item-Total Correlation	Remark
INT1	0.953	0.729	High Reliability
INT2	0.916	0.944	High Reliability
INT3	0.943	0.793	High Reliability
INT4	0.915	0.945	High Reliability
INT5	0.932	0.849	High Reliability

8. Results and discussion

Direct influences of the exogenous to the respective endogenous variables of the two structural models are shown in Table 10 to Table 12. Based on Standardized Beta estimates and critical ratio (CR=t-values) values of >1.96, Hy1, Hy3, and Hy4 are asserted in all generated and re-specified models. Therefore, Hy1: Perceived usefulness is significantly and positively related to intention; Hy3: Perceived credibility is significantly and positively related to intention, and Hy4: Intention is significantly and positively related to Internet Adoption. Only Hy2 is not significantly related, thus, it fails to be asserted i.e., Perceived Ease of Use is insignificantly but positively associated with intention. Also found three new paths in the re-specified model as suggested by modification index results. These three new paths are assigned as Hy1a, Hy2a & Hy3a, respectively, as in Table 10. However, these three paths do not significantly impact Internet Adoption. Thus, Hy1a, Hy2a, and Hy3a are not supported.

Table 10. The direct impact of the generated model (SRW)

Hy	Exogenous & Endogenous			STE	S.E	C.R	P-value
H1	InIn	←	PU _s	0.340	0.103	2.943	0.003
H2	InIn	←	PEU	0.186	0.156	1.050	0.294
H3	and	←	PC	0.425	0.220	2.078	0.038
H4	InIn	←	InIn	0.923	0.191	7.176	0.000

Table 11. The direct impact of the re-specified model (SRW)

Hy	Exogenous & Endogenous			STE	S.E.	C.R.	P-value
H1	InIn	←	PU _s	0.316	0.103	2.943	0.032
H2	InIn	←	PEU	0.137	0.156	1.050	0.553
H3	and	←	PC	0.392	0.220	2.078	0.120
H4	InIn	←	InIn	0.432	0.191	7.176	0.001
H1a (new)	and	←	PU _s	0.178	0.144	1.630	0.103
H2a (new)	and	←	PEU	0.135	0.211	0.840	0.401
H3a (new)	and	←	PC	0.218	0.300	1.170	0.242

Table 12. The direct impact of competing model of tam (SRW)

Exogenous	Endogenous	STE	S.E	C.R.	P	Relationships
		0.418	0.102	3.578	0.000	Significance
PU	InIn	0.495	0.104	4.104	0.000	Significance
		0.947	0.206	7.093	0.000	Significance

There is a growing realization among policymakers and community leaders of information technology's vital role in economic and social development. This is especially true in the case of the Omani. The continuing closure, restrictions over movement, and fragmentation of society require innovative means to communicate and access various information sources and services provided by the government. In addition, the inability of the central government to provide field services might require innovation in the utilization of electronic means to reach local communities. The advent of the personal computer and the Internet has inevitably changed our lives. These technologies and others have altered how people work, communicate, shop, and even learn. Distance education, a form of education traditionally associated with correspondence courses, has significantly benefited from the new technological devices of the 21st century and the digital 4.0 era. This study explores

access issues across the digital divide: What methods are available and may be used to provide web access to people? How might such access be financed? What are privacy issues raised by e-government? How can the government protect citizens from privacy abuses by the government and private businesses that accumulate data on individual purchasing and “surfing” behavior over the World Wide Web? What other issues emerge from the development of e-government in Oman? The present study examines the success factors and validates the adoption model of e-government among public sector managers in Oman. This research successfully investigates the predictors and mediating effects of intention on e-government adoption amongst public sector managers using TAM conceptual underpinning theory. The findings support the TAM theory, where all the hypothesized paths were asserted. The generated model found three significant direct paths between Perceived Usefulness, Perceived Credibility, and intention and between intention and adoption.

9. Conclusions

This paper aims to pursue better measures for predicting and explaining use. The investigation focuses on two theoretical constructs, Perceived Usefulness, and Perceived Ease of Use, facilitating condition, and technical complexity of the Internet, which are theorized to be fundamental determinants of Internet Adoption among public sector managers as primary stakeholders in the bureaucracy in Oman. The quantitative research method succeeds in determining the interaction of variables in the research framework. The relationship and level of variable influence through the survey method on the respondents have been explained. A five-point scale questionnaire was employed to collect the data for the constructs of the research model. Items from previous studies were modified for adaptation to the e-government adoption context. The measure used a five-point Likert scale ranging from “1” (strongly disagree) to “5” (strongly agree). This study attempts to examine the empirical relationships between technology usage perception and credibility with Internet Adoption in the public sector organization in Oman. Additionally, this study investigates the mediating effect of intention on those relationships as hypothesized based on the conceptual underpinning of TAM. This study also found mediating effects of intention on linkages between Perceived Usefulness, Perceived Credibility, and Perceived Ease of Use with Internet Adoption. The additional findings on the new paths in the re-specified model support the presence of mediating effects for these relationships. Our findings found a substantial partial mediating effect.

Abbreviations and acronyms

The following abbreviations are used in this manuscript:

PSM	Public Service Motivation
SEM	Structural equation modeling
STE	Std. Estimate
SRW	Standardized Regression Weight
TAM	Technology acceptance model
IT	Information technology
ICT	Information and communication technology
CEO	Chief Executive Officer
SEM	Structural equation modeling
G2G	Government-to-Citizens
AMOS	Analysis of movement software
PU _s	Perceived Usefulness
PEU	Perceived Ease of Use
PC	Perceived Credibility
InIn	Internet Intention
AND	Internet Adoption
CFA	Confirmatory factor analysis

Declaration of competing interest

The authors declare that they have no known financial or non-financial competing interests in any material discussed in this paper.

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