



## OVERVIEW OF RESEARCHES ON THE INFLUENTIAL FACTORS OF M-GOVERNMENT'S ADOPTION

Fakije Zejnullahu<sup>1i</sup>,

Indrit Baholli<sup>2</sup>

<sup>1</sup>Ministry of Public Administration, Republic of Kosovo

<sup>2</sup>European University of Tirana, Albania

### Abstract:

Willingness of targeted users to adopt government mobile services is a determinant for the success of m-government, and as such, requires the interest of researchers who are focused on m-government research. Understanding the factors influencing the end-users to adopt government mobile services is very important for the government to find ways to encourage the use of these services by targeted users, so that investment in adopting mobile technologies for government services can be profitable and safe. Although, some researches to measure citizens' perceptions of m-government have been conducted recently, the anticipation and explanation of m-government use to provide full understanding of the adoption of m-Government requires further investigation. For all those who would like to study the factors influencing the adoption of m-Government, it is essential to know about the work done so far by researchers and scholars of this field and to learn the theoretical and methodological approaches used in relevant researches. In attempt to provide such an overview, many research studies in the field of User Acceptance and adoption of m-Government services have been analysed in this research. A summary table reflects the studies conducted by 19 different authors in identifying factors that may influence the adoption of m-Government, by summarizing them from a selective list of articles published between the years 2011-2017.

**Keywords:** user acceptance, adoption of m-government, intention to use, TAM, UTAUT, DOI

---

<sup>i</sup> Correspondence: email [fakije\\_z@hotmail.com](mailto:fakije_z@hotmail.com), [indrit.baholli@uet.edu.al](mailto:indrit.baholli@uet.edu.al)

## 1. Introduction

Anticipating the use of a technology became a field of interest for many researchers, decades ago. With the increase of technology demands in the 1970s and the increase of failure of systems adoption in organizations (Chuttur, 2009:1), the efforts of various scholars to predict which factors could impact the targeted users to adopt and use the system have begun.

The path towards improving the use of systems is continuing nowadays, four decades after. Aware that the lack of readiness to use the new Information Systems is one of the most important obstacles for the success of these systems and it is a determining factor for the success or failure of an information system (Davis, 1993: 475), various academics and scholars are trying to find the factors that affect the readiness of individuals to use information technology, in different contexts, in order to improve their use.

In the context of m-government (m-G), despite the opportunities created by m-G in improving access to public information and government services, one should not ignore the fact that these services may not be accepted by targeted users. Such a huge global acceptance of mobile technologies is not a guarantee for governments that these technologies, in addition to daily activities, will be used by citizens to consume public services and that the investment in adopting mobile technologies in government services will be profitable and safe.

Therefore, understanding the determinants for adoption of government mobile systems will help to understand how end-users can be motivated to adopt and use these systems.

For all those who would like to study the factors that influence the m-government adoption, it is essential to have an overview of the studies done so far, in order to understand the current work being done in this area. In attempt to provide such an overview, many research studies in the area of user acceptance and adoption of m-Government services have been analysed to understand the current state in this field and to learn the theoretical and methodological approaches used in these researches.

## 2. Research methods

During a limited time, January - July 2017, several procedures have been used in order to find the literature used in this research. Initially, by using key words, such as: "m-government adoption", "user acceptance", "intention to use," etc., searches have been done in several academic databases, such as: Google Scholar, IEEE Xplore, ACM digital

library, ProQuest, Sciencedirect etc. Then, searches of similar articles have been done in various volumes of the most relevant journals / conference proceedings in information management and finally a search of relevant articles cited in the collected literature. The selected literature resulted in 19 articles addressing the issue of identifying factors that influence the adoption and use of government mobile services, published during 2011-2017.

### 3. Related researches on the Influential Factors of m-Government's Adoption

Table No.1 provides an overview of studies done by different authors in identifying factors that may influence the adoption of government mobile services, published during years 2011-2017.

**Table No 1:** Adoption of m-Government Services

1	Name of research	The Adoption of Mobile Government Services in Developing Countries: The Case of Egypt
	Year of publication	2012
	Author	Hany Abdelghaffar & Yousra Magdy
	Research model	TAM (Perceived usefulness , Perceived Ease of Use)+ Compatibility + Social Influence + Awareness+ Personal connections + Face-to-face interactions + Trust + Internet Experience  TAM-Technology Acceptance Model
	Results	The authors Abdelghaffar & Magdy conducted an empirical study on adoption of government mobile services by young people from four Egyptian universities. Young people aged 16-25 were targeted for participation.  The findings of the research show that important determinants of m-Government adoption are the factors: Social Influence, Face-to-face interactions, Compatibility, Awareness and Perceived usefulness, while Social Influence and Face-to-face interactions are the most influential contributors in explaining the Intention to Use. Whereas, Internet Experience, Perceived Ease of Use, Trust and Personal Connections insignificantly contribute to the prediction of Intention to Use m-Government. (Abdelghaffar & Magdy, 2012:333-341)
2	Name of research	A Model of Intention to Use Mobile Government Services
	Year of publication	2012
	Author	Hamed Ahmed Saud Al-Busaidi
	Research model	TAM (Perceived Ease of Use) +DOI (relative advantage, Perceived Compatibility, Perceived Trialability, & Perceived Observability) + Perceived trustworthiness +

		perceived security + personal innovativeness +perceived enjoyment.  TAM-Technology Acceptance Model DOI-Diffusion of Innovations
	Results	In fulfilling the requirements for PHD studies, Al-Busaidi developed and validated a Model of Intention to Use Mobile Government Services by combining TAM and DOI as well as external variables including Perceived Security, Perceived Trustworthiness, Perceived Enjoyment and Personal Innovativeness.  The author investigated the perception of 246 citizens regarding the use of Mobile Parking Service.  Quantitative and qualitative data are collected from Oman and specifically Muscat, the capital with mixed method technique.  The final findings in this dissertation paper show that only five of the variables incorporated in the model influence the intention to use m-Government, such as: Personal Innovativeness, Perceived Compatibility, Perceived Trustworthiness, Perceived Observability and Perceived Enjoyment. Out of all variables, the Personal Innovativeness is considered to be the most influential variable on the Intention to Use.( Al-Busaidi, 2012:1-213)
3	Name of research	How to make them use it? Citizens acceptance of M-government
	Year of publication	2017
	Author	Ibrahim Almarashdeh & Mutasem K. Alsmadi
	Research model	TAM(Perceived Usefulness, Perceived Ease of Use )+ Social Influence + Perceived Trust in Technology + Cost of Service  TAM-Technology Acceptance Model
	Results	In order to examine users' acceptance of mobile governments, the authors Ibrahim Almarashdeh & Muutasem K. Alsmadi investigated the influence of five factors on Behavioral Intention (Perceived Usefulness, Perceived Ease of Use, Social Influence, Perceived Trust in Technology and Cost of Service).  The data for this study were collected from 468 citizens of the Dammam city of Saudi Arabia, mostly young people (72% of respondents were aged 18-34).  The research result shows that all proposed model factors (Perceived Usefulness, Perceived Ease of Use, Social Influence, Perceived Trust in Technology and Cost of Service) have an important direct effect on the Intention to use m-Government. This study gives priority to "social influence" - as the most influential factor in Intention to Use, followed by "Perceived trust in technology" factor, which also significantly influences the Intention to Use.( Almarashdeh & Alsmadi, 2017: 194-199)
4	Name of research	Major factors influencing the adoption of m-government in Jordan.
	Year of publication	2015

	Author	<a href="#">Emad Abu-Shanab</a> & <a href="#">Shatha Haider</a>
	Research model	TAM (Perceived Usefulness, Perceived Ease of Use) + Social Influence+ Perceived Responsiveness+ Perceived Compatibility + Perceived Cost of Services  TAM-Technology Acceptance Model
	Results	To investigate the factors that influence the Intention to Use m-Government services, the authors explored the perceptions of Jordanian citizens by analysing the data of 458 respondents, collected through a questionnaire. The study was based on TAM and four other factors such as Social Influence, Perceived Responsiveness, Perceived Compatibility and Perceived Cost of Services.  The results show that out of six factors proposed in the study, five of them (Perceived Usefulness, Perceived Ease of Use, Social Influence, Perceived Responsiveness and Perceived Compatibility) are important, while Perceived Cost of Services is not an important factor. ( <a href="#">Abu-Shanab</a> & <a href="#">Haider</a> , 2015: 223-240)
5	Name of research	Developing and Validating an Instrument for Measuring Mobile Government Adoption in Saudi Arabia
	Year of publication	2016
	Author	Sultan Alotaibi, Dmitri Roussinov
	Research model	TAM (Perceived usefulness, Perceived Ease of Use, Attitude towards to use)+ Perceived mobility + Perceived trustworthiness+ Perceived service quality + User's satisfaction.  TAM-Technology Acceptance Model Perceived service quality (Perceived responsiveness, Perceived reliability & Perceived empathy),
	Results	The pilot study, conducted by Alotaibi and Roussinov, on the development and validation of the instrument to measure the perception of users about the acceptance of m-government in Saudi Arabia, shows a strong correlation between all variables in the model developed in this study. The adopted model is an extension of TAM with four constructs: Perceived mobility, perceived service quality (Perceived responsiveness, Perceived reliability & Perceived empathy), User's satisfaction and Perceived trustworthiness  The data for this pilot study were collected through a questionnaire completed by 30 students, academic staff and administrative staff at King Saud University in Riyadh, the capital city of Saudi Arabia.  The results show a significant relationship between actual use of mobile government services and all other constructs. (Alotaibi & Roussinov, 2016: 746- 752)
6	Name of research	A literature survey of m-government services adoption: Lessons for a smart city Success
	Year of publication	2016
	Author	<a href="#">Nasser A Saif Almuraqab</a> & <a href="#">Sajjad M. Jasimuddin</a>

	Research model	TAM(Perceived Usefulness, Perceived Ease of Use) + Social Influenc+ Awareness+ Facilitation Condition+ Perceived Cost+ Perceived Trust in Government + Perceived Trust in Technology + Perceived Risk  TAM-Technology Acceptance Model
	Results	In attempt to find the factors that will improve the acceptance of m-government services by end-users in Dubai, the authors reviewed the literature and analysed many research studies related to "Critical Success Factors of E-Government" and "Adoption factors of m-Government, e-Government and m-services". Based on this research, the authors identified nine key factors for the adoption of m-Government (Perceived Usefulness, Perceived Ease of Use, Social Influenc, Awareness, Facilitation Condition, Perceived Cost, Perceived Trust in Government , Perceived Trust in Technology and Perceived Risk) and integrated them into a framework for the evaluation of Intention to Use m-Government of the citizens of Dubai( <a href="#">Almuraqab</a> & <a href="#">Jasimuddin</a> , 2016:1-12)
7	Name of research	Public Acceptance of M-Government Services in Developing Countries: The Case of Jordan
	Year of publication	2013
	Author	Omar Al-Hujran & Mahmoud Migdadi
	Research model	UTAUT (Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions) + Trust, Information Privacy.  UTAUT -Unified Theory of Acceptance and Use of Technology
	Results	To address the issue of m-government adoption, the authors conducted an empirical study on identifying the predictors of the intention to Use m-Government in Arab countries, specifically in Jordan. In accomplishing this goal, they proposed a framework incorporating two constructs: trust and information privacy in UTAUT by adapting it to an m-Government context. The results of the research show that strong and important determinants of Intention to use m-Government for Jordanians are the factors: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Trust, while the Information Privacy effect is not an important factor in the Intention to Use. The findings show that out of all the above mentioned factors, the Users 'Intention to use m-Government services is mostly influenced by the citizens' trust towards the Service Delivery Channel.(Al-Hujran & Migdadi, 2013: 242-463)
8	Name of research	Factors that Influence End-Users' Adoption of Smart Government Services in the UAE: A Conceptual Framework
	Year of publication	2014
	Author	Nasser A. Saif Almuraqab & and Sajjad M. Jasimuddin
	Research model	TAM(Perceived Usefulness, Perceived Ease of Use)+ Perceived Compatibility + Social Influence + Awareness+ Facilitation Condition+ Perceived Cost+ Perceived Trust in

		Government + Perceived Trust in Technology + Perceived Risk TAM-Technology Acceptance Model
	Results	Following the intention to find the relationship between the adoption of smart government and the intention of the citizens to accept these services, the authors Saif Almuraqab & Sajjad M. Jasimuddin, who a year ago proposed a framework for the Intention to Use m-Government ( <a href="#">Almuraqab &amp; Jasimuddin</a> , 2016:1-12), in this study identified the determinants of smart government adoption in the United Arab Emirates (UAE). The framework developed and proposed in this research integrates into a single model only the two TAM constructs (Perceived Usefulness and Perceived Ease of Use) and eight other constructs (Social Influence, Awareness, Facilitation Condition, Perceived Cost, Perceived Trust in Government, Perceived Trust in Technology, Perceived Risk and Perceived Compatibility) which may influence the acceptance of smart governance by the end users, in the UAE context. (Almuraqab & M. Jasimuddin, 2017:11-23)
9	Name of research	An empirical investigation of mobile government adoption in rural China: A case study in Zhejiang province
	Year of publication	2014
	Author	Yong Liu, Hongxiu Li, Vassilis Kostakos, Jorge Goncalves, Simo Hosioa dhe Feng Huc
	Research model	TAM (Perceived long-term usefulness, Perceived near-term usefulness, Perceived Ease of Use) + TRUST (integrity & benevolence) + Social Influence due Image.  TAM-Technology Acceptance Model
	Results	In this study, conducted in the rural areas of China, the authors conducted an empirical assessment of the adoption of mobile services by the rural population, which study is among the first of its kind in the developing countries. For all the factors included in the model, the findings in this study show that they have a significant influence on the Intention to Use. Especially Perceived Ease of Use, Perceived long-term usefulness and Social Influence which have a direct significant impact on the Intention to Use, while Perceived near-term usefulness, Image, Integrity and Benevolence have indirect influence on the Intention to Use. (Liu, Li, Kostakos, Goncalves, Hosioa & Huc, 2014:432-442)
10	Name of research	Examining Adoption Behavior of Mobile Government
	Year of publication	2015
	Author	<a href="#">Mahmud Akhter Shareef</a> , <a href="#">Norm Archer</a> & <a href="#">Yogesh K. Dwivedi</a>
	Research model	TAM(Perceived Ease of Use) + DOI(Relative Advantage, Compatibility)+ Perceived Security+ Perceived Reliability + Perceived Empathy  TAM-Technology Acceptance Model DOI-Diffusion of Innovations

	Results	<p>By adopting constructs from TAM, DOI models and deriving from literature constructs: Perceived Security, Perceived Reliability and PEM, the authors developed a model to examine the adoption of m-Government. The model was tested by the quantitative data collected in the urban and non-urban areas of India.</p> <p>This study finds that Relative Advantage, Perceived Ease of Use, Perceived Security and Perceived Empathy are important factors in predicting the adoption of government mobile services. The Perceived Reliability factor also influences the adoption, but it is a weak contributor, while Compatibility is an insignificant factor in predicting the adoption of M-Government by the Indian citizens. (<a href="#">Shareef, Archer &amp; K. Dwivedi</a>, 2015:39-49; <a href="#">Almuraqab, Jasimuddin &amp; Mansoor</a>, 2017:15)</p>
11	Name of research	The Acceptance of Using M-Government Services in Jordan
	Year of publication	2014
	Author	Ahmad Althunibat, Thamer A. Alrawashdeh & Mohammad Muhairat
	Research model	TAM(Perceived Usefulness, Perceived Ease of Use)  TAM-Technology Acceptance Model
	Results	<p>This is another research related to the Behaviour Intention of m-Government of Jordanian citizens. The influence of citizens' perception related to the government mobile services has been explored by collecting the data of a survey conducted with 300 citizens.</p> <p>The research findings show that both Perceived Usefulness and Perceived Ease of Use constructs have strong influence on the behaviour intention to use m-government. This means that when m-Government is useful and non-complex, the Jordanians will have more readiness to adopt and use these services. On the other hand, these findings show that the basic elements of TAM fit very well in the Jordanian m-Government context. (<a href="#">Althunibat, A. Alrawashdeh &amp; Muhairat</a>, 2014 :733-740)</p>
12	Name of research	Modelling the factors that influence mobile government service acceptance
	Year of publication	2011
	Author	Ahmad Althunibat, Nor Azan Mat Zain & Noraidah Sahari @Ashaari
	Research model	TAM (Perceived Usefulness,, Perceived Ease of Use, ATU)+ Social Influence + Cost of Service+ Services Quality+ Perceived Compatibility + Perceived Trust in Government + Perceived Trust in Technology + Perceived Risk.  TAM-Technology Acceptance Model ATU-Attitude Toward Use of m-GOV
	Results	An exploratory study was conducted in Malaysia by the authors Althunibat, Zain & Sahari @Ashaari to identify the determinants of User Acceptance of government

		<p>mobile services by Malaysian citizens. The investigation of these determinants was based on a model designed by extending TAM with seven other constructs, such as: Social Influence, Cost of Service, Services Quality, Perceived Compatibility, Perceived Trust in Government, Perceived Trust in Technology and Perceived Risk.</p> <p>The influence of Perceived Usefulness and Perceived Ease of Use in Intention to Use was mediated with the ATU construct. The analysis of data of the sample of 551 potential m-government adapters, besides showing strong support for the proposed model, it also proved that the acceptance of m-government by the Malaysian community is determined by nine factors: Perceived Usefulness, Perceived Ease of Use, Social Influence, Cost of Service, Services Quality, Perceived Compatibility, Perceived Trust in Government, Perceived Trust in Technology and Perceived Risk (Althunibat, Zain &amp; Sahari @Ashaari, 2011:13030-13043)</p>
13	Name of research	Understanding Citizen's Intention to Use Mobile Government Services in Bangladesh: Role of Perceived Good Governance and Less Corruption
	Year of publication	2014
	Author	Mst Rebeka Sultana & Abdul Rahman Ahlan
	Research model	<p>UTAUT(Performance Expectancy + Effort Expectancy + Social Influence)+ "Perceived Good Governance and Less Corruption"</p> <p>UTAUT -Unified Theory of Acceptance and Use of Technology</p>
	Results	<p>UTAUT model, extended with the construct: "perceived good governance and less corruption", was used as the basic model in this study.</p> <p>In order to measure the relationship between variables, quantitative data collected from 524 citizens in Bangladesh (students, teachers, farmers, professionals and household members using the mobile phone) were used.</p> <p>The research results find that "Perceived Good Governance and Less Corruption" and Performance Expectancy have significant and positive influence on the adoption of M-government, while Effort Expectancy and Social Influence do not influence the intention.</p> <p>(Sultana &amp; Ahlan, 2014:1-19)</p>
14	Name of research	Extending the Technology Acceptance Model for Mobile Government Systems
	Year of publication	2013
	Author	Nisreen Beshir Osman
	Research model	<p>TAM (Perceived Usefulness, Perceived Ease of Use, Intention to Use) + Perceived Ease of Adoption + Trust+ Taking into Use.</p> <p>External variables: Age, Gender, Level of Education, Mobile phone usage duration and Mobile Usage profile(familiarity with the mobile phone as well as different levels or no expertise with similar systems)</p>

		TAM-Technology Acceptance Model Taking into Use - E mediating construct between Intention to Use and Actual Use)
	Results	<p>Analysing the voluntary use of a prototype designed for the Mobile-based Civil Registry System, the author investigates the impact of perceptions (Perceived Usefulness, Perceived Ease of Use, Perceived Ease of Adoption and Trust) on Intention to use, the influence of "Intention to Use" on "Taking into Use" (mediating construct) and "Taking into Use" impact on "Actual Use".</p> <p>The analysis of data collected by 103 participants in the study shows that the factors that may influence the user's decision to use the system are: Perceived Usefulness, Perceived Ease of Use, Perceived Ease of Adoption, Trust, Intention to Use and Taking into Use.</p> <p>All proposed model constructs are significantly positively related to predicting a user's acceptance of the mobile system.</p> <p>The results also show that Taking into Use is strongly influenced by Users' Intention to Use the Mobile Systems, and on the other hand Taking into Use affects positively and significantly the Actual Use of the System.</p> <p>In this study, the author examines the influence of individual differences of the participants using the system. The findings show that age and gender do not influence the decision to use the system, while the level of education, mobile phone usage duration and Mobile Usage profile influence the intention to use the system by the participants. (Osman, 2013:1-8)</p>
15	Name of research	Mobile government (mGovernment) Adoption factors in the UAE: A conceptual Framework based on UTAUT
	Year of publication	2017
	Author	Mr. Nasser A. Saif Almuraqab, Pro. Sajjad Jasimuddin & Pro. Wathiq Mansoor.
	Research model	<p>UTAUT(Performance expectancy , Effort expectancy, Social influence, Facilitating conditions) + Awareness, Perceived Trust in Government + Perceived Trust in Technology</p> <p>UTAUT -Unified Theory of Acceptance and Use of Technology</p>
	Results	<p>By studying the literature on the adoption of m-Government, the author concludes the existence of a gap in the theoretical framework of factors that influence the citizens of the United Arab Emirates to accept and use government mobile systems. In attempt to reduce this gap, they propose a Conceptual Framework by arguing the potential factors that may influence the adoption and acceptance of mobile governance in the UAE.</p> <p>The framework proposed in this research is based on UTAUT by extending this model with three additional variables: Perceived Trust in Technology, Perceived Trust in Government and Awareness.</p> <p>The proposed model contains a total of seven variables(Performance expectancy , Effort expectancy, Social influence, Facilitating conditions, Perceived Trust in Technology, Perceived Trust in Government and Awareness), plus three moderators: age, gender and experience. The "voluntariness of use" moderator was removed from</p>

		the proposed model, as the authors estimate that m-government services in the UAE are largely used voluntarily. (Almuraqab, Jasimuddin & Mansoor, 2017:14-19)
16	Name of research	Technology Acceptance Model for the Use of M-Health Services among health related users in UAE
	Year of publication	2015
	Author	Mohamed Alloghani, Abir Hussain, Dhiya Al-Jumeily & Omar Abuelma'atti
	Research model	TAM (Perceived Usefulness, Perceived Ease of Use) + Perceived Security + Perceived Trust.  TAM- Technology Acceptance Model
	Results	To measure the factors that influence the intention to use m-Health services, the authors in this paper propose an extended TAM model with two constructs: Perceived Security and Perceived Trust.  The data were collected by patients, health professionals and publics from different government and non-governmental hospitals and clinics, consisting of a sample of 144 participants.  The findings of this study show that all factors (Perceived Usefulness, Perceived Ease of Use, Perceived Security and Perceived Trust) directly influence the intention to use M-Health services. (Alloghani, Hussain, Al-Jumeily & Abuelma'atti, 2015:1-6).
17	Name of research	<a href="#">Saudi Citizens' Perceptions on Mobile Government (mGov) Adoption Factors</a>
	Year of publication	2015
	Author	Abdullah Babullah, Yogesh Dwivedi, Michael Williams
	Research model	UTAUT(Performance Expectancy, Effort Expectancy, Social Influence, Facilitation Condition)+ Perceived Risk + Innovativeness+ Perceived Value  UTAUT -Unified Theory of Acceptance and Use of Technology
	Results	Similar to many other researchers, the authors Babullah, Dwivedi and Williams based their study on the UTAUT model to explore the factors that could be important in encouraging potential users to adopt m-government in Saudi Arabia. The results obtained through a descriptive analysis of 600 questionnaires demonstrated that all of the aforementioned factors (Performance Expectancy, Effort Expectancy, Social Influence, Facilitation Condition, Perceived Risk, Perceived Value and Innovativeness) influence the adoption of m-Government by Saudi citizens. (Babullah, Dwivedi & Williams, 2015)
18	Name of research	A Comprehensive Adoption Model Of Mgovernment Services Among Citizens In Developing Countries
	Year of publication	2016
	Author	Mst Rebeka Sultana, Abdul Rahman Ahlan &md. Habibullah

	Research model	<p>UTAUT(Performance Expectancy, Effort Expectancy, Facilitating Conditions)+ Perceived Trustworthiness + Perceived Public Value + Culture: Language +“Perceived Good Governance and Less Corruption”.</p> <p>UTAUT -Unified Theory of Acceptance and Use of Technology</p>
	Results	<p>In this study, the authors formulate a model for m-Government adoption by using UTAUT. The proposed model, in addition to constructs adopted by using UTAUT(Performance Expectancy, Effort Expectancy, Facilitating Conditions), integrates four other constructs, such as: Perceived Trustworthiness, Perceived Public Value, “Perceived Good Governance and Less Corruption” and Culture: Language into a single model.</p> <p>The authors estimate that this model is appropriate for developing countries to investigate the factors that influence the adoption of government mobile services. (Sultana, Ahlan &amp; Md. Habibullah, 2016: 49-60)</p>
19	Name of research	User acceptance of mobile e-government services: An empirical study
	Year of publication	2013
	Author	<a href="#">Shin-Yuan Hung</a> , <a href="#">Chia-Ming Chang</a> , <a href="#">Shao-Rong Kuo</a>
	Research model	<p>TAM(Perceived Usefulness, Perceived Ease of Use)+Perceived Trust+ Interactivity + External Influence + Interpersonal Influence + Self Efficacy + Facilitating Conditions+ Compatibility</p> <p>TAM-Technology Acceptance Model</p>
	Results	<p>A study was conducted in Taiwan for the identification of critical factors in improving the user acceptance of m-government services. Hung, Chang and Kuo developed an acceptance model and empirically validated it among 331 users of m-Government services. Research findings show that critical factors that influence the User Acceptance are: Perceived Usefulness, Perceived Ease of Use, Trust, Interactivity, External Influence, Interpersonal Influence, Self-Efficacy and Facilitating Conditions, while Compatibility is not significant in this study. (Sultana, Ahlan &amp; Md. Habibullah, 2016: 53) (Hung, Chang &amp;. Kuo, 2013: 33–44)</p>

Table 2: Influential factors of m-Government adoption derived from above studies

	Number of research:	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No.1 0	No.1 1	No.1 2	No.1 3	No.1 4	No.1 5	No.1 6	No.1 7	No.1 8	No.1 9
1	Perceived usefulness	Yes	-	Yes	Yes	Yes	Yes	-	Yes	-	-	Yes	Yes	-	Yes	-	Yes	-	-	Yes
2	Perceived long-term usefulness	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-
3	Perceived near-term usefulness	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-
4	Perceived Ease of Use	No	No	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	-	Yes	-	-	Yes
5	Relative advantage	-	No	-	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-
6	Performance Expectancy	-	-	-	-	-	-	Yes	-	-	-	-	-	Yes	-	Yes	-	Yes	Yes	-
7	Effort Expectancy	-	-	-	-	-	-	Yes	-	-	-	-	-	No	-	Yes	-	Yes	Yes	-
8	Compatibility	Yes	Yes	-	Yes	-	-	-	Yes	-	No	-	Yes	-	-	-	-	-	-	No
9	Social Influence	Yes	-	Yes	Yes	-	Yes	Yes	Yes	Yes	-	-	Yes	No	-	Yes	-	Yes	-	-
10	Perceived Trust	No	Yes	-	-	Yes	-	Yes	-	Yes	-	-	-	-	Yes	-	Yes	-	Yes	Yes
11	Perceived Trust in Technology	-	-	Yes	-	-	Yes	-	Yes	-	-	-	Yes	-	-	Yes	-	-	-	-
12	Perceived Trust in Government	-	-	-	-	-	Yes	-	Yes	-	-	-	Yes	-	-	Yes	-	-	-	-
13	Awareness	Yes	-	-	-	-	Yes	-	Yes	-	-	-	-	-	-	Yes	-	-	-	-
14	Facilitation Condition	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-	Yes	-	Yes	Yes	Yes
15	Perceived Trialability	-	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Perceived Observability	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Cost of Service	-	-	Yes	No	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-	-
18	Perceived	-	-	-	-	-	Yes	-	Yes	-	-	-	-	-	-	-	-	-	-	-

OVERVIEW OF RESEARCHES ON THE INFLUENTIAL FACTORS OF M-GOVERNMENT'S ADOPTION

8	Cost																		
1	Perceived security	-	No	-	-	-	-	-	-	Yes	-	-	-	-	-	-	Yes	-	-
2	Personal connections	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Face-to-face interactions	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Internet Experience	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	personal innovativeness	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-
2	Perceived enjoyment.	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Perceived Responsiveness	-	-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Perceived reliability	-	-	-	-	Yes	-	-	-	Yes	-	-	-	-	-	-	-	-	-
2	Perceived empathy	-	-	-	-	Yes	-	-	-	Yes	-	-	-	-	-	-	-	-	-
2	Services Quality	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-	-
2	User's satisfaction;	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Perceived mobility;	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Perceived Risk	-	-	-	-	-	Yes	-	-	-	-	Yes	-	-	-	-	Yes	-	-
3	Information Privacy	-	-	-	-	-	-	No	-	-	-	-	-	-	-	-	-	-	-
3	Image	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-
3	Perceived Good Gov. and Less Corruption	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	Yes	-
3	Perceived Ease of Adoption	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-
3	Taking into Use	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-
3	perceived value,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-

38	Perceived Public Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-
39	Culture: Language	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-
40	Interactivity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
41	External Influence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
42	Interpersonal Influence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes
43	Self-Efficacy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes

**4. Conclusion**

Studying the work done so far in the field of User Acceptance and adoption of m-Government points out that despite the fact that the adoption of m-G is a critical issue in the success of these services, it seems that the researchers and scholars have not made enough efforts in addressing this phenomenon. A limited number of studies in the field of m-government adoption can be found in the literature and there is a gap in the investigation of factors that influence the adoption of m-Government services.

Researchers who made attempts to address the User Acceptance of m-G (reflected in this study) in their work have adopted different models and theories well known as: Technology Acceptance Model (TAM), Diffusion of Innovations (DOI) and the Unified Theory of Acceptance and Use of Technology (UTAUT), by extending these theories with additional factors to produce new models for examination of adoption of mobile systems. TAM is one of the most widely used models in most of these studies integrated with other theories and / or extended with additional variables.

The recommendation of many researchers is to integrate the TAM model with other theories that can withstand rapid changes in IS/IT. The researches consider that TAM extension is necessary to be adapted to the special nature of mobile government systems and to improve the specifics and explanatory strength of the model. The review of the 19 above mentioned articles shows that the above studies find and prove some beliefs that may influence the individuals to use or reject a mobile service, as: Perceived Usefulness, Perceived Ease of Use, Performance Expectancy, Effort Expectancy Compatibility, Social Influence, Perceived Trust, Facilitation Condition etc. (see Table No. 2)

Most of these researchers were focused in adopting voluntary mobile government systems, mainly in the G2C domain. Quite few studies address this issue

from the perspective of government officials and businesses, and those m-government services that are not voluntarily used. Therefore, researches for adoption and use of government mobile services in the domains G2G and G2B are needed.

This Overview of researches proves that enrichment of m-Government literature with studies on the factors that influence the Intention to Use m-Government is an urgent need at this early stage of its development. Scope of researches need to be expanded in all dimensions (G2G, G2B and G2C) to provide a full picture of all categories of users for voluntarily/non-voluntarily use of government mobile systems, in order to address the obstacles that may hinder the adoption of these services in timely manner.

## References

1. Abdelghaffar H. & Magdy Y. (2012), "The Adoption of Mobile Government Services in Developing Countries The Case of Egypt", *International Journal of Information and Communication Technology Research*, Volume 2, No. 4.pp.(333-341)
2. [Abu-Shanab](#) E. & [Haider](#) S. H. (2015), "Major factors influencing the adoption of m-government in Jordan", [Electronic Government, an International Journal, Volume 11, Issue 4, pp.\(223-240\)](#)
3. Al-Busaidi H. A. S. (2012), "A Model of Intention to Use Mobile Government Services",pp.(1-213)  
[https://books.google.com/books/about/A\\_Model\\_of\\_Intention\\_to\\_Use\\_Mobile\\_Gover.html?id=fIGIAQAACAAJ](https://books.google.com/books/about/A_Model_of_Intention_to_Use_Mobile_Gover.html?id=fIGIAQAACAAJ)
4. Al-Hujran O. & Migdadi M., (2013),"Public Acceptance of M-Government Services in Developing Countries: The Case of Jordan", [E-Government Implementation and Practice in Developing Countries](#) , Copyright © 2013, IGI Global, pp.(242-463)
5. Almarashdeh I. & Alsmadi M. K. (2017)," How to make them use it? Citizens acceptance of M-government", [Applied Computing and Informatics, Volume 13, Issue 2](#), July 2017, pp.(194-199)
6. Almuraqab N. S. & Jasimuddin S. & Mansoor W. ( 2017), "Mobile government (mGovernment) Adoption factors in the UAE: A conceptual Framework based on UTAUT", *International Journal of Engineering Technology, Management and App.ied Sciences*, Volume 5 Issue 3, pp.(14-19)

7. [Almuraqab](#) N. S. & [Jasimuddin](#) S. M. (2016), "A literature survey of m-government services adoption: Lessons for a smart city Success", GCC Smart government & Smart cities conference, At Dubai, UAE, Volume: 22, pp.(1-12)
8. Alotaibi S., & Roussinov D. (2016) "Developing and Validating an Instrument for Measuring Mobile Government Adoption in Saudi Arabia", International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering Vol:10 No: 3, pp.(746-752)
9. Althunibat A. & Alrawashdeh T. H. A. & Muhairat M., (2014) "The Acceptance of Using M-Government Services in Jordan" Journal of Theoretical and Applied Information Technology. Vol.63, No.3, pp(733-740)
10. Althunibat A. & Zain N. A. M. & Sahari N. Ashaari (2011), "Modelling the factors that influence mobile government service acceptance" African Journal of Business Management Vol. 5(34), pp.(13030-13043)
11. Alloghani M. & Hussain A. & Al-Jumeily D. & Abuelma'atti O. (2015)," Technology Acceptance Model for the Use of M-Health Services among health related users in UAE", International Conference on Developments of E-Systems Engineering (DeSE)/58, pp.(1-6)
12. [Babullah](#) A. & Dwivedi Y. & Williams M. (2015), "[Saudi Citizens' Perceptions on Mobile Government \(mGov\) Adoption Factors](#)", UK Academy for Information Systems Conference Proceedings 2015. 8. <http://aisel.aisnet.org/ukais2015/8>
13. Chuttur M. (2009). "Overview of the Technology Acceptance Model: Origins, Developments and Future Directions", Indiana University, USA . Sprouts: Working Papers on Information Systems, pp.(9-37).
14. Davis F. D. (1993) User acceptance of Information Technology: system characteristics, user perceptions and behavioral impact, [International Journal of Man-Machine Studies](#), Volume 38, Issue 3, pp.(475-487)
15. [Hung](#) SH. Y. & [Chang](#) C.H.M. & [Kuo](#) SH. R. (2013)," User acceptance of mobile e-government services: an empirical study". Government Information Quarterly, 30(1), pp.(33-44).
16. Liu. Y & Li. H & Kostakos. V. & Goncalves. J. & Hosioa S. & Huc. F., (2014)" An empirical investigation of mobile government adoption in rural China: A case study in Zhejiang province", Government Information Quarterly, pp.(432-442)
17. Osman N. B. (2013), "Extending the Technology Acceptance Model for Mobile Government Systems", The International Arab Conference on Information Technology (ACIT'2013), <http://acit2k.org/ACIT/2013Proceedings/191.pdf>
18. Sultana R. & Ahlan A. R. & Md. Habibullah (2016), "A Comprehensive Adoption Model Of Mgovernment Services Among Citizens In Developing Countries,

- Journal of Theoretical and Applied Information Rechnology, 15th, Vol.90,No.1, pp.(49-60)
19. Sultana R. & Ahlan A. R. (2014), "Understanding Citizen's Intention to Use Mobile Government Services in Bangladesh: Role of Perceived Good Governance and Less Corruption", Conference paper: International Conference on Governance and Innovation (GAIN2014), pp.(1-19)
  20. [Shareef](#) M. A. & [Archer](#) N. & [Dwivedi](#) Y. K. (2015), "Examining Adoption Behavior of Mobile Government", [Journal of Computer Information Systems](#), Volume 53, [Issue 2](#), pp.(39-49)

Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Management and Marketing Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).