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Modelling of User Perspective of M-Government Adoption Preferences Constructs

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Abstract: Mobile government system has got a worldwide attention including the United Arab Emirates (UAE) government. The government is promoting the adoption of M-government services resulted from several hinderence such as trust on e-services and culture. People can be motivated to adopt this current trend through understanding the preferences. Hence, this paper presents the development of six constructs models having 30 preferences of adopting M-government services from the perception of the UAE people. The constructs are Social Influence (SI), Perceived Compatibility (PC), Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Trust in Technology (TT) and Perceived Risk (PR). These constructs were modelled using AMOS software with 263 samples collected data from people of the UAE. It was found that all the constructs achieved the fitness values which indicates there is strong relationship amongst the measuring preferences for adopting the M-government services for the people of UAE. These findings of the study will help devise strategies to promote M-government services in the UAE.

Keywords: M-government, AMOS, SEM, United Arab Emirates

1. Introduction

UAE is an Arabian Gulf country that consists of seven small emirates. The UAE has a rich culture that reflects traditional Arab and Islamic values. The culture of the UAE is a perfect blend of Persian, Islamic, and Arabic culture with influences from the cultures of East Africa and the Indian subcontinent. This diversity is reflected in many aspects of life in the UAE, including art, traditions, lifestyle, cuisine, architecture, etc. The religion of Islam plays a significant role in forming people's culture as a majority of the population (approximately 76%) are Muslim. Hinduism, Christianity, Buddhism, Sikhism, and Judaism are the other minority religions practiced.

United Arab Emirates (UAE) is regarded as one of the Middle East's most rapidly developing economies (Alhammadi and Memon, 2020). In the last two decades, several developments have been taken place in the UAE. The UAE has become a global business center, leading to an increase in immigration to the UAE. Furthermore, the UAE's development in various fields, trade, industry, education, technology, etc., has enabled the UAE government to take tangible steps towards implementing e-government. As a result, the UAE is considered one of the leading countries in the Arab countries to provide mobile government services. However, people in the UAE with a highly uncertain avoidance culture may have reservations about using mobile government services (Zhao and Khan, 2013). In addition, Arab countries lack a culture of information and knowledge sharing, which may be a direct challenge for most Arab countries to adopt e-government systems (Al Athmay, 2013). Therefore, this aspect should be investigated to determine its impact on the intention of the people of the UAE to use mobile government services and then strengthened. Hence, this study has focused on investigating the behaviour of the UAE people towards the adoption of the M-government

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services. This involved the assessment of various parameters which can encourage or cause people to be reluctant to adopt the services of M-government.

2. Literature Review

2.1 Mobile Government and People

M-government is an extension of e-government (Al-Busaidi, 2012) where it enabling e-government to provide services via mobile phones (Kushchu, 2007). M-government is an e-government add-on product that is limited to the use of mobile technologies (such as mobile phones, PDAs, Wi-Fi-activated computers, and cellular networks) in service delivery. M-government is a strategy and its implementation involving the use of various wireless and mobile technologies, services, applications, and equipment to improve the interests of e-government stakeholders, including people, enterprises, and all government departments (Kushchu 2007). This is an evolving trend in delivering public services and is part of a broader growth phenomenon based on mobile technology. It uses mobile technology in government administrations to provide public services to residents and businesses. However, there are several challenges such as the complexity of various mobile technologies, the provision of strategically effective mobile services, the development of stable networks to provide reliable services, and the identification of types of services that can be quickly delivered on mobile devices (Burksiene, Dvorak, and Duda, 2019; Kim, Yoon, Park, and Han, 2004; Mengistu, Zo, and Rho, 2009; Zheng and Heeks, 2008). In fact, without m-government, governments cannot efficiently operate to ensure the socio-economic development of countries (Almuraqab, 2017).

M-government uses creative information and communication technology to provide people with better facilities, accurate information, and more outstanding expertise to promote access to governing processes for people and enable deeper citizen engagement. The World Bank emphasizes that the government facilitates public participation by encouraging people to consult with government officials about services. In addition, it offers growth in opportunities for rural areas and communities at lower rates through m-government services (Bertot et al., 2016; Reddick, 2005).

To increase the citizen's engagement in m-government programs, several issues such as socio-technical aspects of the plan and restructuring the governance and management systems should be considered. For example, M-government offers greater flexibility for people to process transactions at their convenience rather than during working hours alone (Damodaran, Nicholls, Henney, and Land, 2005). In addition, the usability and low cost of m-government are key factors standing behind the adoption of this system by many governments in the world to offer better service to their people (Abu Tair and Abu-Shanab, 2014). Likewise, Elmouzan and Alhammad (2020) found that Social Influence (SI), performance expectancy, and effort expectancy are significant factors that impact people' adoption of m-government services. In contrast, the results of Abu-Shanab and Haider (2015) indicated that the influence of Perceived Compatibility (PC), Perceived Ease of Use (PEOU), and Social Influence (SI) perceived responsiveness are significant factors that can influence the people' adoption of m-government services

3. Identification of Construct Items

This study aimed to assess the strength of preferences with the people's behavior to adopt m-government services. The assessment of preferences involved six constructs which include Social Influence (SI), Perceived Compatibility (PC), Perceived Ease Of Use (PEOU), Perceived Usefulness (PU), Trust in Technology/e-services (TT), and Perceived Risk (PR). These constructs and their parameters are presented in Table 1.

Table 1 - Description of constructs and their parameters

Construct	Descriptions	Attributes
Social Influence (SI)	It is critical to recognize the importance of Social Influence, such as influencing friends, family, and key stakeholders in deciding to use technology. It is among the significant predictors of intention to use m-government services (Ajzen and Fishbein, 1980; Al-Thunibat et al., 2011; Heijden, 2003; Al-Hujran et al., 2011).	Influence, convince, benefit, comfort, and social respect
Perceived Compatibility (PC)	The term "perceived relevancy" refers to how a citizen perceives the service's compatibility with existing public service channels and popular communication media. This factor considers perceived information relevance, quality, and dependability, as well as perceived mobile network and system performance dependability (Ajzen and Fishbein, 1980; Heijden, 2003; Al-Hujran et al., 2011; Susanto and Goodwin, 2008).	Comfortable, engagement, adaptability, fit to lifestyle, compatible, function and task, and friendly to user
Perceived Ease Of Use (PEOU)	This incorporates parameters demonstrating the ease of use and complexity of m-government services. As a result, the people adopt any technology easily if it is simple, practical, less hassle, easy to reach,	Easy to use, easy to learn, clear and understandable, and easy

	easy to use, and easy to remember (Al-Thunibat et al., 2011). Therefore, PEOU has a strong effect on accepting m-government services (Ajzen and Fishbein, 1980; Heijden, 2003; Al-Hujran et al., 2011; Susanto and Goodwin, 2008).	to get services.
Perceived Usefulness (PU)	Considering the impact of relative advantage and outcome expectations is an essential criterion for adopting any technology. A citizen sees whether using m-government will help them get what they want and make their lives easier. Therefore, technology adoption is an essential indicator in promoting any technology or application (Ajzen and Fishbein, 1980; Heijden, 2003; Al-Hujran et al., 2011; Al-Thunibat et al., 2011).	Help to settle quickly; services make easier, useful services, and for productivity
Trust in Technology/ e-services (TT)	"In the context of mobile government, trust is critical in using the mobile government portal." Therefore, one of the key factors behind the success of m-government services is building people' trust" (Ajzen and Fishbein, 1980; Heijden, 2003; Al Hujran et al., 2011).	reserve personal data, good quality, cost-saving, technology trust, protect data privacy, and worry of security
Perceived Risk (PR)	Using m-government services, people have certain doubts about the product or services, especially if it involves trust and cost. Therefore, the user will weigh the benefits against the costs (Ajzen and Fishbein, 1980; Heijden, 2003; Al-Hujran et al., 2011; Al-Thunibat et al., 2011; Susanto and Goodwin, 2008; Al-Hujran, 2012).	Safeguard information; Not risky to adopt; Consistent credibility; No liability if error; Trustworthy in accessing

Table 1 shows six constructs/groups which formed the preferences with the people's behavior to adopt m-government services. These constructs were used as the main content in the questionnaire designed to gauge the level of agreement on the strength of these construct toward the importance in the adoption of the M-government service.

4. Methodology

Data collection used quantitative method supported with controlled questionnaire form. A questionnaire is a tool for acquiring knowledge and perception from targeted respondents (Almansoori, Rahman, and Memon, 2021). A 5-point Likert scale facilitated recording the response of the personnel participating in the data collection. The Likert scale is very helpful in measuring attitudes and reliability and shows the respondents' feelings (Jupp 2006). Responding to a Likert scale question, respondents can easily express their level of disagreement or agreement for any statement (Kulas and Stachowski, 2013). The respondents were asked about the strength of the parameters influencing in the adoption of the M-government service. The scale adopted to record the level of understanding ranged from very disagree to very agree. This was rated with a scale of 1 to 5 as 1 for very disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for very agree. In this questionnaire survey, a total of 263 completed questionnaire forms were received from various stakeholders. The details of the stakeholders who participated in this survey are in table 2.

Table 2 - Demographic characteristics

Items	Frequency	%
Gender		
Male	169	64%
Female	94	36%
Age		
18-24 years	75	29%
25-34 years	133	51%
35-49 years	55	21%
Educational Level		
High School	41	16%
College Certificate	20	8%
Diploma	116	44%
Degree	86	33%
Total	260	99%
Nationality		
Local	147	56%
African	14	5%
European	19	7%

Asian	68	26%
Americans	15	6%

Table 2 shows no gender discrimination where 64% of the respondents are male, and 36% are female. Among these respondents, slightly more than half are aged between 25 and 34 years, while 29% are aged between 18 and 24 years, and 21% of participants are aged between 35 and 49 years. Among these respondents, the majority with 44%, held a Diploma certificate, 33% had obtained a Degree, 16% indicated that they hold a high school certificate, and 7.6% of the respondents received a college certificate. These respondents are the residents of UAE having the nationality of different countries. The results indicated that the majority of the respondents belong to UAE with 56%. On the other hand, 26% of respondents are from other Asian countries, 7% of respondents mentioned that they belong to Europe, 5% of respondents are African, and 6% are Americans. These characteristics of the respondents reveal that the data collection is suitable to assess the m-government practices. Hence, the data was analyzed, and the results are discussed in the following sub-sections.

Analysis of the data involved advanced multivariate method of covariance-based Structural Equation Modelling (SEM). SEM is a powerful tool for elucidating the pattern of a series of interconnected dependency relationships between a set of latent constructs. One or more observed variables explain each latent construct (Kline, 2015; Hair, Hult, Ringle, and Sarstedt, 2016). Confirmatory Factor Analysis (CFA) with the Analysis of Moment Structures (AMOS) software application was used to validate and confirm all of the constructs developed. CFA is a measurement generated by a correlation between latent variables and a number of indicators (items), also known as a variable and error manifest. SEM measurement assessment confirms the strength of the individual variable used for developing the model. It evaluates the probability of performing a good-fit model. An accepted model in CFA, the model, must follow the model fit requirements. According to Hair et al. (2010), Kline (2015), and Byrne (2010), a model must have at least one index from each of the three index categories: absolute fit, incremental fit, and parsimonious fit indices. Various indices used for validating the structural model are summarized in table 3.

Table 3 - Recommended goodness-of-fit indices

Index Category	Indices Used	Acceptable level	Supporting source
Absolute fit	Chisq.	P < 0.05	Byrne (2010); Kline (2015); Wheaton et. al. (1977)
Absolute fit	RMSEA	Value < 0.08	Byrne (2010); Kline (2015); Browne and Cudeck (1993)
Absolute fit	GFI	Value > 0.90	Joreskog and Sorbom (1984)
Incremental fit	AGFI	Value > 0.90	Tanka and Huba (1985)
Incremental fit	CFI	Value > 0.90	Bentler (1990)
Parsimonious fit	Chisq./df	Value < 5.0	Marsh and Hoeevar (1985)

5. Modelling of Each Construct

The collected data from the questionnaire survey was used to develop model for each construct in assessing the strength of the attributes defining preferences for adopting m-government in the UAE. All the categories of attributes defining the preferences of the people of UAE towards the adoption of the M-government services were considered as the constructs in SEM. All the constructs were evaluated for fitness and acceptability. The construct's assessment involved the parameters of fitness extracted with AMOS software.

5.1 Social Influence (SI) Model

Social Influence (SI) construct has five indiactors/factors and the modelling of the construct is as presented in Figure 1, and the model fit values are shown in table 4.

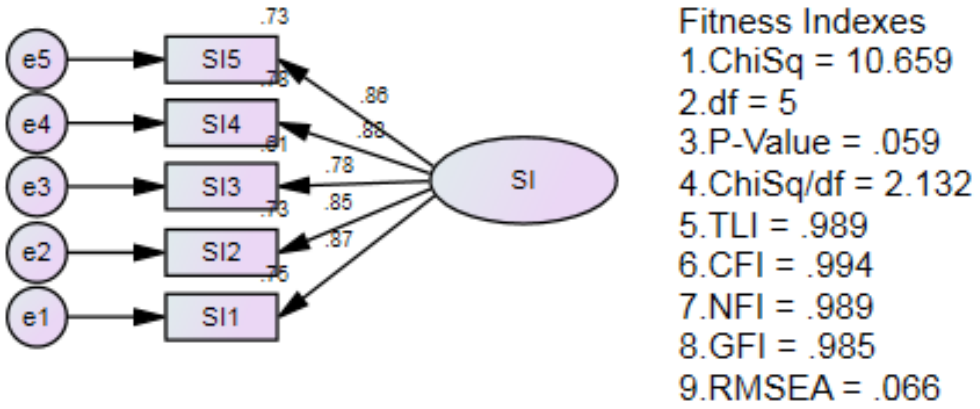

Fig. 1 - SEM construct for SI

Table 4 - Goodness-of-fit for construct SI

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
SI1	←	SI	.868	-	-	***	.754	Achieved
SI2	←	SI	.854	.056	18.268	***	.730	Achieved
SI3	←	SI	.781	.049	15.633	***	.609	Achieved
SI4	←	SI	.882	.050	19.377	***	.779	Achieved
SI5	←	SI	.857	.055	18.372	***	.735	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	5	X^2	=	10.659	CFI	=	.994
Estimated parameter	=	10	X^2/df	=	2.130	RMSEA	=	.066
Degree of freedom	=	5	P-value	=	.059	NFI	=	.989
Decision	**Construct not accepted**							

Figure 1 shows the factor loading of all the variables and corresponding R^2 values. For a construct to be considered valid, factor loadings and R^2 should not be less than 0.50 and 0.30, respectively (Kline, 2015; Byrne, 2010). This construct reached to acceptance level in two iterations. In the first iteration, the model met the required thresholds of .30 of acceptance. Table 4 shows that the p-value is greater than 0.05, and hence the construct was re-specified. This involved co-varying two error terms e2 and e3, to free off one parameter in the model. The re-specification yields the desired outcome where all the requirements for construct me the acceptance criteria. The values of various assessment parameters are RMSEA = 0.079, CFI = 0.993 and Bentler-Bonett Normed Fit Index NFI = 0.989. These values show that the construct is acceptable and is retained.

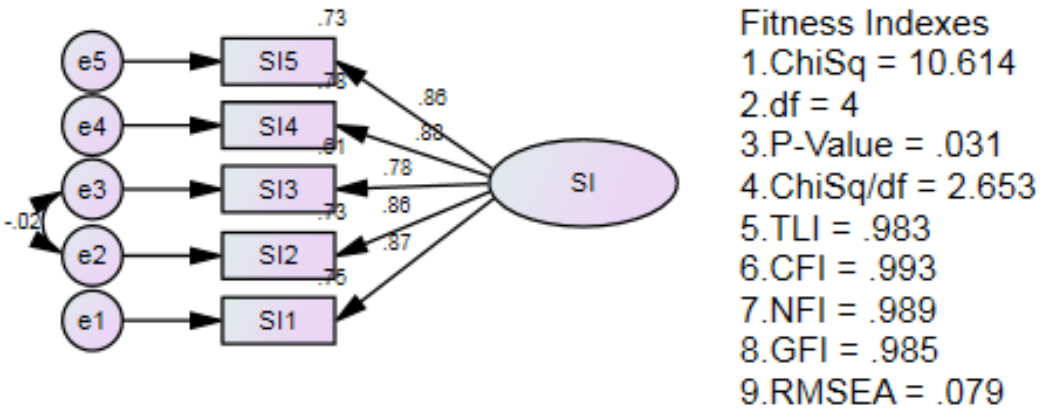

Fig. 2 - Final construct for SI

Table 5 - Final goodness-of-fit for construct SI

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
SI1	←	SI	.868	-	-	***	.754	Achieved
SI2	←	SI	.856	.056	18.143	***	.732	Achieved
SI3	←	SI	.782	.050	15.479	***	.612	Achieved
SI4	←	SI	.882	.050	19.368	***	.778	Achieved
SI5	←	SI	.857	.055	18.362	***	.734	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	5	X^2	=	10.614	CFI	=	.993
Estimated parameter	=	11	X^2/df	=	2.653	RMSEA	=	.079
Degree of freedom	=	4	P-value	=	.031	NFI	=	.989
Decision	**Construct accepted**							

The final construct is shown in figure 2, and the statistics are shown in table 5. From table 5, it can be perceived that S14 has the highest value of loading, which reveals that S14 i.e., "*Gives social comfort to all users*" has the highest strength in the construc social influence.

5.2 Perceived Compatibility (PC) Model

Perceived Compatibility (PC) construct has five indicators/factors and the relationship between its associated indicators is presented in Figure 3, and the model fitness values are presented in table 6.

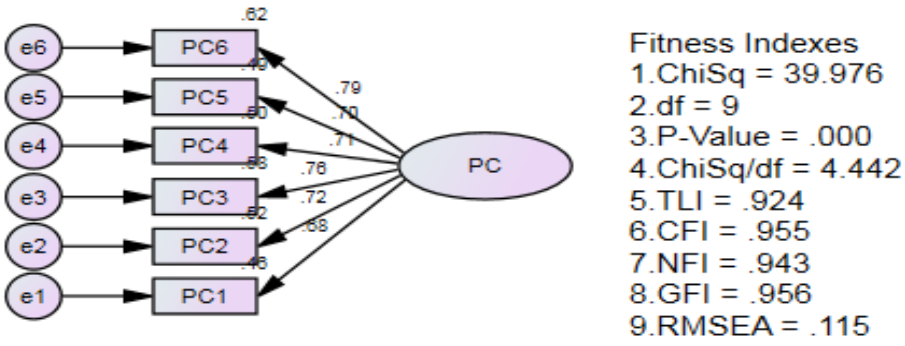

Fig. 3 - SEM construct for PC

Table 6 - Goodness-of-fit for construct PC

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
PC1	←	PC	.680	-	-	***	.463	Achieved
PC2	←	PC	.721	.138	10.237	***	.519	Achieved
PC3	←	PC	.764	.149	10.759	***	.584	Achieved
PC4	←	PC	.709	.102	10.094	***	.503	Achieved
PC5	←	PC	.700	.123	9.981	***	.490	Achieved
PC6	←	PC	.790	.114	11.050	***	.624	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	6	X^2	=	39.976	CFI	=	.955
Estimated parameter	=	12	X^2/df	=	4.442	RMSEA	=	.115
Degree of freedom	=	9	P-value	=	.000	NFI	=	.943
Decision	**Construct not accepted**							

The fitness and the validity of the model were tested by following the prescribed CFA methodology. As seen in figure 3 and table 6, RMSEA is greater than the required limits, and hence the construct was re-specified by co-variate among error terms. For this, the errors e3 with e4, e5 with e6, and e2 with e6 were covariates. With this re-specification of the construct parameters, the factor loadings and the R^2 values fell within accepted thresholds. The RMSEA = 0.079, CFI = 0.986, and Bentler-Bonett normed fit index (NFI) = 0.977 show that the model possess good fit. Graphical presentation of the final model and the statistical values are shown in figure 4 and table 7.

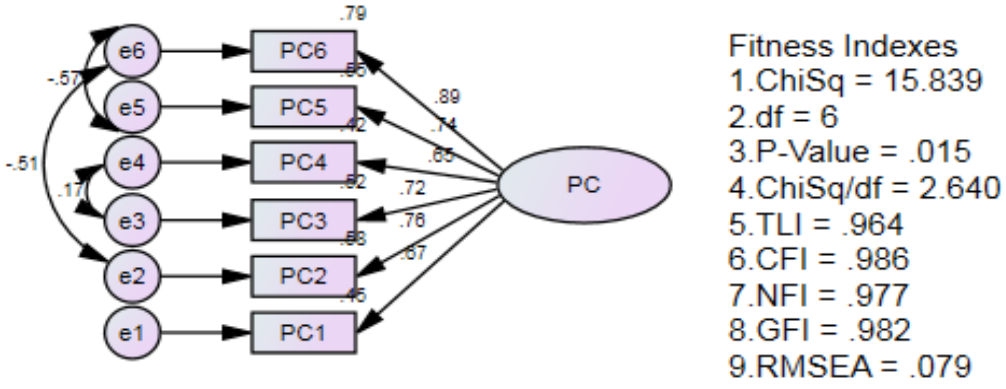

Fig. 4 - Final SEM construct for PC

Table 7 - Final Goodness-of-fit for construct PC

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
PC1	←	PC	.669	-	-	***	.448	Achieved
PC2	←	PC	.759	.148	10.259	***	.576	Achieved
PC3	←	PC	.723	.141	10.860	***	.523	Achieved
PC4	←	PC	.650	.097	9.859	***	.422	Achieved
PC5	←	PC	.744	.131	10.124	***	.554	Achieved
PC6	←	PC	.887	.134	10.798	***	.787	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	6	X^2	=	15.839	CFI	=	.986
Estimated parameter	=	15	X^2/df	=	4.442	RMSEA	=	.079
Degree of freedom	=	6	P-value	=	.015	NFI	=	.982
Decision	**Construct accepted**							

From table 7, it can be seen that the attribute PC6 i.e. "*There is no difficulty in usage*," with a factor loading value of 0.887, contains the highest strength within the construct perceived compatibility.

5.3 Perceived Ease of Use PEOU Model

PEOU construct consists of four indicators. The AMOS graphic was used to assess the measurement model's validity by looking at factors loading, R^2, and the fitness indices. The statistics of the construct are presented in figure 5 and table 8.

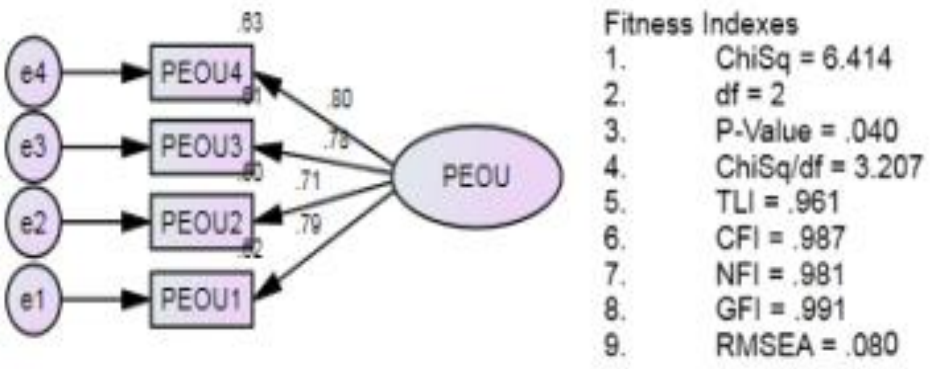

Fig. 5 - SEM construct for PEOU

Table 8 - Goodness-of-fit for construct PEOU

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
PEOU1	←	PEOU	.786	-	-	***	.617	Achieved
PEOU2	←	PEOU	.707	.072	11.150	***	.499	Achieved
PEOU3	←	PEOU	.780	.074	12.319	***	.608	Achieved
PEOU4	←	PEOU	.796	.075	12.536	***	.634	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	4	X^2	=	6.414	CFI	=	.987
Estimated parameter	=	8	X^2/df	=	3.207	RMSEA	=	.080
Degree of freedom	=	2	P-value	=	.040	NFI	=	.981
Decision	**Construct accepted**							

Figure 5 shows that all four indicator's factor loading values are within the recommended thresholds. Furthermore, GFI analysis revealed that the construct meets the acceptance requirement, with RMSEA and Chisq/df values 0.80 and 3.207, respectively. Similarly, CFI, NFI, and GFI all reported values within the recommended value of 0.90; the tested construct is acceptable. The goodness of fit results declare that PEOU4 "*It would be easy for me to get services I need from M-Government services*" carried the highest loading within the construct, showing that the people consider this parameter the most strong in assessing the adaptability of M-government services.

5.4 Perceived Usefulness (PU) Model

Perceived Usefulness (PU) construct contained four indicators as in Figure 6, and the goodness of the construct fit results are in table 9.

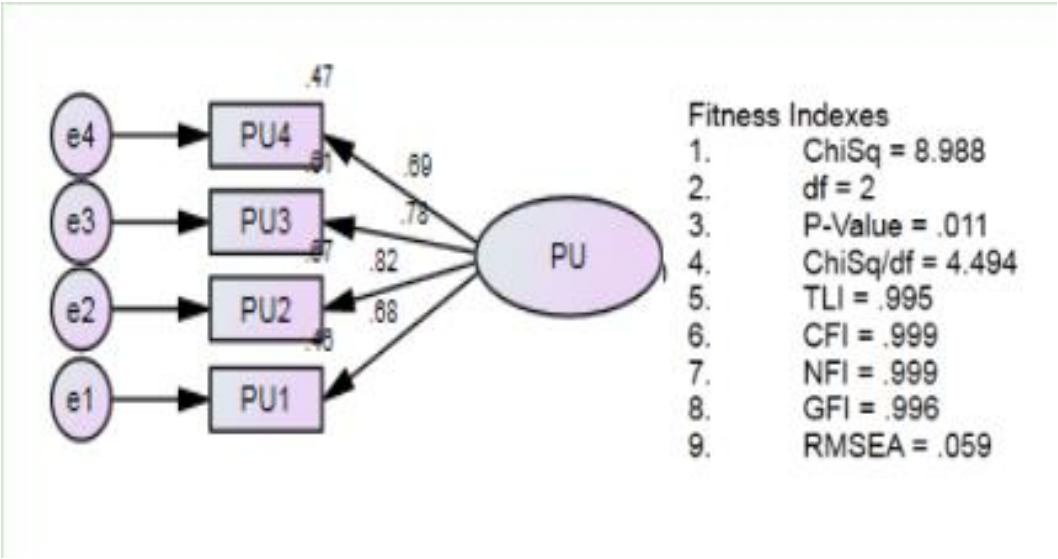

Fig. 6 - Final SEM construct for PU

Table 9 - Goodness-of-fit for construct PU

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
PU1	←	PU	.677	-	-	***	.458	Achieved
PU2	←	PU	.817	.105	10.616	***	.667	Achieved
PU3	←	PU	.782	.098	10.389	***	.612	Achieved
PU4	←	PU	.687	.085	9.436	***	.472	Achieved
Goodness-of-fit measures								
Model identification							Model fit statistics	
Observed variables	=	4	X^2	=	8.988		CFI	= .999
Estimated parameter	=	8	X^2/df	=	4.494		RMSEA	= .059
Degree of freedom	=	2	P-value	=	.011		NFI	= .999
Decision	**Construct accepted**							

From figure 6 and table 9, it can be seen that both the factor loadings and the R^2 for all the four indicators meet the recommended values of 0.50 and 0.30, respectively. The GFI and NFI values are 0.996 and 0.999, respectively. The Chisq/df of the construct is 4.494, which confirms the acceptance level. In the construct, it is also seen that the indicator PU2 i.e. "*Using e-government services makes my life easier*" carried highest loading showing the strongest attribute in this construct.

5.5 Trust in Technology Model

Trust construct (TT) construct has six indicators/factors as in Figure 7. While Table 10 shows the related indicators construct fitness results performance.

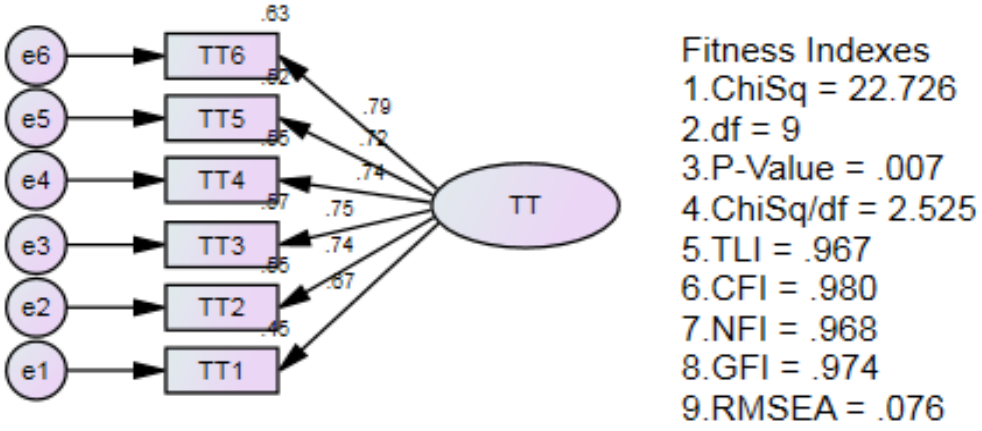

Fig. 7 - SEM construct for TT

Table 10 - Goodness-of-fit for construct TT

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
TT1	←	TT	.672	-	-	***	.452	Achieved
TT2	←	TT	.742	.119	10.429	***	.550	Achieved
TT3	←	TT	.754	.114	10.574	***	.568	Achieved
TT4	←	TT	.743	.120	10.446	***	.552	Achieved
TT5	←	TT	.721	.117	10.184	***	.520	Achieved
TT6	←	TT	.794	.104	11.025	***	.631	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	6	X^2	=	22.726	CFI	=	.919
Estimated parameter	=	12	X^2/df	=	109.091	RMSEA	=	.329
Degree of freedom	=	9	P-value	=	.007	NFI	=	.919
Decision	**Construct accepted**							

The construct's fitness and validity were tested by running the initial CFA without imposing any co-variation on the parameters. Factor loadings, the corresponding R^2 values satisfied the requirement, i.e., above 0.50 and 0.30, respectively. In addition, RMSEA and Chisq/df are within the acceptable ranges of 0.08 and 5, respectively. Similarly, the CFI and the NFI reported values above the recommended 0.90. This means that the model is valid and has a good fit. From table 10, it is perceived that TT6 "*I am not worried about the security of the M-Government service*" has the highest strength with factor loading .794.

5.6 Perceived Risk (PR) Model

Perceived Risk (PR) construct has five indicators/factors as shown in figure 8, while the statistical results obtained from AMOS are presented in table 11.

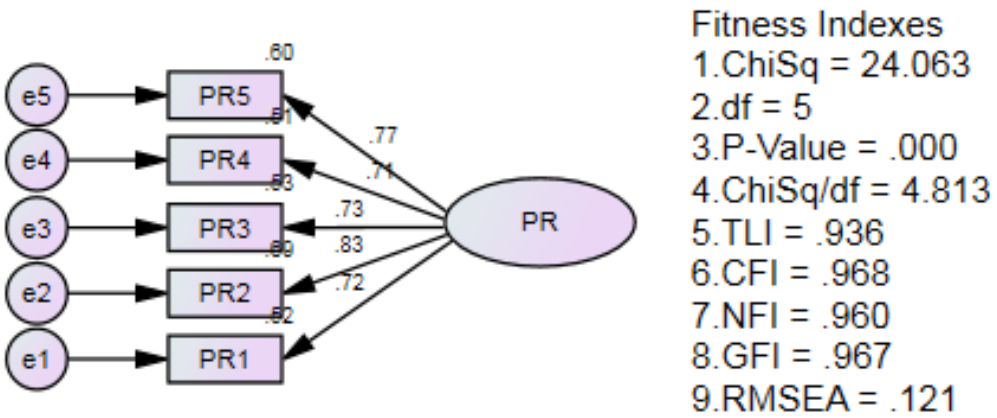

Fig. 8 - SEM construct for PR

Table 11 - Goodness-of-fit for construct RR

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
PR1	←	PR	.719			***	.517	Achieved
PR2	←	PR	.828	.135	12.215	***	.686	Achieved
PR3	←	PR	.731	.118	10.941	***	.535	Achieved
PR4	←	PR	.713	.083	10.688	***	.509	Achieved
PR5	←	PR	.774	.100	11.215	***	.599	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	5	X^2	=	24.063	CFI	=	.968
Estimated parameter	=	10	X^2/df	=	4.813	RMSEA	=	.121
Degree of freedom	=	5	P-value	=	.000	NFI	=	.960
Decision	**Construct not accepted**							

Figure 8 and Table 11 show that the RMSEA of this construct is 0.121, which is above the recommended threshold values. Hence, the construct re-specification was done, and e4 and e5 were covariates. After covariate the errors, the construct showed that all the parameters' values met the required threshold values and retained the construct.

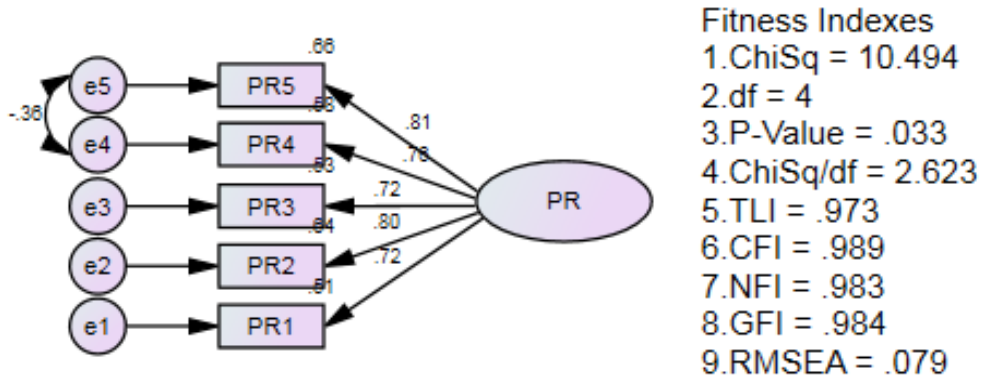

Fig. 9 - Final SEM construct for PR

Table 12 - Final goodness-of-fit for construct PR

Factor Loadings								
Indicators		Construct	Estimate	S.E.	C.R.	P	SMC	Recommended level
PR1	←	PR	.715			***	.512	Achieved
PR2	←	PR	.799	.131	12.206	***	.638	Achieved
PR3	←	PR	.725	.115	11.109	***	.525	Achieved
PR4	←	PR	.760	.087	11.025	***	.578	Achieved
PR5	←	PR	.814	.103	11.810	***	.663	Achieved

Goodness-of-fit measures								
Model identification						Model fit statistics		
Observed variables	=	5	X^2	=	10.494	CFI	=	.989
Estimated parameter	=	11	X^2/df	=	2.623	RMSEA	=	.079
Degree of freedom	=	4	P-value	=	.033	NFI	=	.983
Decision	**Construct accepted**							

Figure 9 and Table 12 show that all the construct parameters are within the ranges, and the construct is accepted statistically. The results highlighted that PR5 "*Mobile government services are credible and trustworthy as far as accessing and availing diverse government services is concerned*" is the most strong parameter in this construct with the highest factor load.

The results from this modelling work are in accordance with the results from Abu-Shanab and Haider (2015) study that indicated the influence of Perceived Compatibility (PC), Perceived Ease of Use (PEOU), and Social Influence (SI) perceived responsiveness are significant factors which able to influence the people' adoption of m-government services

6. Conclusion

This study assessed the strength of the parameters of preferences of adopting the M-government service for the people of the UAE. For this, data was collected from the people of the UAE. The study involved 30 parameters in six constructs as Social Influence (SI), Perceived Compatibility (PC), Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Trust in Technology/e-services (TT), and Perceived Risk (PR). The strength of the parameters was assessed by evaluating the constructs with the AMOS software package. The assessment parameters revealed that all the constructs are satisfied. The study showed that "*Gives social comfort to all users*" is the most strong parameter in the social influence. In the construct perceived compatibility, "there is no difficulty in usage" is the most vital parameter. Finally, "*It would be easy for me to get services I need from M-Government services*" is the most strong parameter in the perceived ease of use construct.

Regarding perceived utility, the people of UAE consider the most vital parameter as "*using e-government services makes my life easier*." Measuring trust in technology/e-services "*I am not worried about the security of the M-Government service" is reported as the most vital parameter in construct*. "Mobile government services are credible and trustworthy as far as accessing and availing diverse government services is concerned" is the most critical parameter of preferences to adopt the M-government services by the people of the UAE. These findings of the study will help devise strategies to promote M-government services in the UAE.

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ANNEXURE-I

Constructs and Relative Attributes of Citizen's Preference Measuring Adoption of M-government Services

Attribute Code	Description
Construct 1: Social Influence (SI)	
SI1	People who can influence my behaviour would think that I should use M-Government services
SI2	People who are important to me would think that I should use M-Government services
SI3	People who are important to me would find using M-services beneficial
SI4	Gives social comfort to all users
SI5	It gives social respect regard to the people
Construct 2: Perceived Compatibility (PC)	
PC1	It is Comfortable at every level of engagement
PC2	Easily adoptable by citizens
PC3	Using e-government systems to interact with government agencies would fit into my lifestyle
PC4	Using e-government systems to interact with government agencies would be compatible with how I like to do things
PC5	Suitable for a wide range of functions and tasks
PC6	There is no difficulty in usage
Construct 3: Perceived Ease Of Use (PEOU)	
PEOU1	I found M-Government services easy to use
PEOU2	Learning to use M-Government services would be easy for me
PEOU3	N-Government services are clear and understandable
PEOU4	It would be easy for me to get services I need from M-Government services
Construct 4: Perceived Usefulness (PU)	
PU1	Using M-Government services help me to accomplish my things more quickly
PU2	Using e-government services makes my life easier
PU3	I find M-Government services useful to my life
PU4	Using M-Government services increase my productivity
Construct 5: Trust in Technology/e-services (TT)	
TT1	I would not have to give away personal information to use the M-Government service
TT2	I would expect that the quality of M-Government service would be good
TT3	I would be able to control the costs of M-Government service
TT4	I trust the technology that the M-Government service are using
TT5	I trust the ability of the M-Government service to protect my privacy
TT6	I am not worried about the security of the M-Government service
Construct 6: Perceived Risk (PR)	
PR1	Mobile government is safe because information exchanged is safeguarded in accessing and availing diverse government services
PR2	Mobile government is not risky to adopt because my personal details are secure while accessing and availing diverse government services
PR3	Mobile government is credible as there is consistency in the information provided via the portal as I access and avail diverse government services
PR4	Mobile government does not entail liability in case of human mistakes/errors while accessing and availing diver
PR5	Mobile government services are credible and trustworthy as far as accessing and availing diverse government services is concerned