

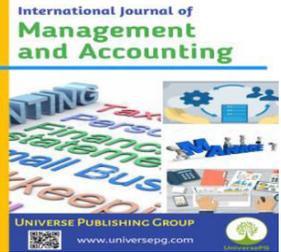


Publisher homepage: www.universepg.com, ISSN: 2707-4641 (Online) & 2707-4633 (Print)

<https://doi.org/10.34104/ijma.024.00106>

International Journal of Management and Accounting

Journal homepage: www.universepg.com/journal/ijma



Factors Identifying Users' Behavioral Intention to Adopt E-government Public Services in Bangladesh

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ABSTRACT

The paper discusses about the behavioral intention of users to adopt e-government public services using the UTAUT model. E-government helps to create efficient delivery of services to mass people. Bangladesh government has a "Vision-2041" to become smart government as a result many e-government services are implemented, and initiated throughout the country. To be successful in this vision, the behavioral intention to adopt e-government services is necessary to identify. In this paper, primary data is collected to conduct the study. Fifteen questionnaires are formed to find the behavioral intention where the sample size is the portion of the population who uses e-government public services at least once in their life. SPSS software is used to analyze and validate hypotheses. The research finds that the factors of the UTAUT model that are adopted for conducting this research such as perceived performance expectancy, perceived effort expectancy, and perceived social influence have a positive relation toward the behavioral intention to adopt e-government services in Bangladesh.

Keywords: E-government, User adoption, Vision 2041, Public services, UTAUT model, and Bangladesh.

INTRODUCTION:

The e-government concept is becoming a buzzing word in many countries, especially in the developed countries. However, some of the developing countries are also embracing e-government because it benefits the government, businesses, and citizens (Jaeger & Thompson, 2003). E-government is becoming an interesting area for research by many academicians because of its broad area of application and impact (Saengchai *et al.*, 2020; Li & Shang, 2020; Bougherra *et al.*, 2023). The research and current trend of the e-government are raising many questions as to why a country should adopt e-government, what are the benefits that people will get from such adoption, what

are the impacts of it on the economy, what opportunities it can bring for the betterment of the country, what are current issues that restrict a country from implementing it, what are the ways a country can overcome such issues (Hardi & Gohwong, 2020; Paul, 2023).

E-government is the use of internet technology for the exchanging information, transacting with citizens and other government arms, and providing utility services which is applied by the administration or judiciary to improve internal efficiency in the delivery of public services (Kamal & Themistocleous, 2009). E-government is the delivery of services through online using

ICT to bring automation in 24/7 hours (West, 2000; Benaïda, 2023; and Upadhyay *et al.*, 2023). Therefore, the use of digital technologies especially information and communication technologies to transform government operations to improve efficiency as well as the effectiveness of the delivering government services (Alhassan, 2023). E-government promotes as well as improves the broad contribution of stakeholders to national development and deepens governance processes (Islam, 2020; Alenezi *et al.*, 2015).

Bangladesh government aims Vision 2041 to become a smart government (Anir, 2023). For this, they are trying to transform digitally. There are 365 services identified as available e-services in the e-government Masterplan for Digital Bangladesh, (2019) such as ‘Admission’, ‘Ask Your Question’, ‘Digital Center’, ‘Forms’, ‘Health Services’, ‘Income Tax’, ‘Online Application’, ‘Online Registration’, ‘Passport’, ‘Recruitment’, ‘Ticket Booking’ and ‘Utility bills’, etc. The main objective of this paper is to find the factors influencing the behavioral intention of users to adopt e-government public services.

METHODOLOGY:

The user’s adoption of e-Government public utility services is influenced by many factors. Therefore, it is crucial to understand the nature and impact of those factors and the responses of users when they confront those influencing factors. There are various models available to study the citizen adoption of e-government services. Some common models such as the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TBP), and the Theory of Reasoned Action (TRA) model (Azjein & Fishbain, 1980; Chau & Hu, 2002; Davis, 1989; Ahmed T., 2023) & Unified Theory of Acceptance and Use of Technology (UT-AUT) model (Venkatesh *et al.*, 2003) that identified many factors creating intention to adopt technology. This study finds the behavioral intention for adopting e-government public services using the UTAUT.

Perceived Performance Expectancy: Performance expectancy refers to the process of the individual belief to gain the benefit from using a service. It is the usefulness that anyone gets from the any technology adoption.

H1: Perceived Performance Expectancy positively relates to the behavioral intention of adopting e-govt. services.

Perceived Effort Expectancy: Effort Expectancy refers to the process of efficiently doing a task thus the task becomes easy to use. This reduces time and enhances the energy to complete any task and fun-ction. Using e-government services makes the task easy and reduces the time to do it.

H2: Perceived Effort Expectancy positively relates to the behavioral intention of adopting e-govt. services.

Perceived Social Influences: Social Influences refers to the process of changing perceptions and behavior from the social environment. The person who uses e-government services spreads about its benefits to others leading to social influences.

H3: Perceived Social Influence positively relates to the behavioral intention of the adopting e-govt. services.

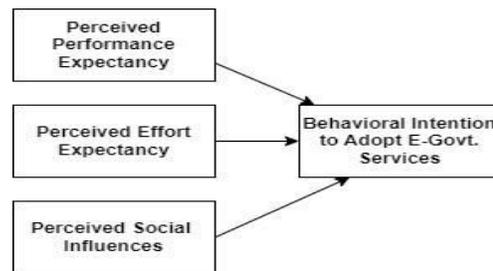


Fig. 1: Conceptual framework to find the behavioral intention for adopting e-government services.

Sampling techniques to collect data

Non-probability purposive sampling techniques were used to the collect data. Primary data were collected through closed-ended questions. The questions were based on the initial hypotheses. The responses were handled on a 5-point Likert scale where 1= Strongly Disagree, 2= Disagree, 3= No-opinion, 4= Agree and 5= Strongly Agree. The questionnaire was based on previous research work which is the secondary data source. The sample size was 250 as the "10-times rules" of sampling size (Kock & Hadaya, 2018). The internal reliability is examined by Cronbach's alpha having a value above 0.7 (Cronbach, 1951). Linear regression modeling along with ANOVA is done to find the correlation between dependent & independent variables and validate the hypotheses.

RESULTS AND DISCUSSION:**Background Information****Table 1:** Background Information and Demographic Profile.

Variables		Frequency	Percentile
Gender	Male	200	80
	Female	50	20
Age	18-30	39	15.6
	31-40	101	40.4
	41-50	96	38.4
	51-60	13	5.2
	61-above	1	.4
Occupation	Student	11	4.4
	Housewife	9	3.6
	Teacher	20	8.0
	Banker	33	13.2
	Doctor	11	4.4
	Business	72	28.8
	Engineer	13	5.2
	Public Job	23	9.2
	Private Job	58	23.2
Education	HSC	16	6.4
	Graduate	130	52.0
	Postgraduate	104	41.6
Service Operator	Computer	69	27.6
	Grameenphone	80	32.0
	Teletalk	45	18.0
	Banglalink	20	8.0
	Robi	36	14.4

Age group 31-40, business persons, graduates, and Grameenphone users mostly use e-government public utility services.

Sample Adequacy Test**Table 2:** KMO Test to Find Sample Adequacy.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.861
Bartlett's Test of Sphericity	Approx. Chi-Square	1232.941
	Df	105
	Sig.	.000

The KMO for the adoption level two model is .861 (KMO range 0.80 to 0.89 refers to the meritorious (Kaiser, 1974). So, the sample size is adequate to analyze the model (**Table 2**).

All the values of Cronbach's Alpha are above 0.70 (Cronbach, 1951). So, it provides good reliabilities among constructs (**Table 3**).

Reliability Test**Table 3:** Reliability Test.

Construct	Cronbach's Alpha
Performance Expectancy	0.770
Effort Expectancy	0.761
Social Influence	0.726
Behavioral Intention to Adopt E-government Services	0.728

Test of Hypotheses

Table 4: Regression Model Summary.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.679 ^a	.461	.454	.59824

The R square value .461 indicates moderate correlation among constructs (Pattabhiraman, 2020).

Table 5: ANOVA Test.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.197	3	25.066	70.036	.000 ^b
	Residual	88.042	246	.358		
	Total	163.239	249			

The value of f 70.036 > 2.5 along with p-value < 0.5 implies that the independent variables have a significant impact on the dependent variable (Behavioral

intention to adopt e-government public utility services).

Table 6: Coefficients.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.401	.231			
	Performance Expectancy	.171	.046	.193	3.737	.000
	Effort Expectancy	.311	.052	.315	5.966	.000
	Social Influence	.382	.050	.387	7.617	.000

The t values of each construct are 3.737, 5.966, and 7.617. As all the t-values are greater than 2 along with a p-value less than 5, it is clear that hypotheses H1, H2, and H3 are accepted. From the result, it is found that:

H1: Perceived Performance Expectancy positively relates to the behavioral intention of adopting e-govt. services.

H2: Perceived Effort Expectancy positively relates to the behavioral intention of adopting e-govt. services.

H3: Perceived Social Influence positively relates to the behavioral intention of adopting e-govt. services.

CONCLUSION:

The use of information and communication technology to initiate government operations and services refers to e-government. E-government public services are used widely throughout the world. In Bangladesh, it is also implemented and used for making the country digital. As the Bangladesh government has a Vision 2041 plan to become a “Smart Government”, it

is necessary to find the behavioral intention to adopt e-government public services. In this paper, three factors are initiated to find the behavioral intention to adopt e-government public services such as performance expectancy, effort expectancy, and social influences. All three factors have a positive relation toward the behavioral intention to adopt e-government services.

Government and stakeholders can take necessary steps after knowing the behavioral intention to the successfully implement e-government services. The paper didn’t consider the facilitation conditions of the UTAUT model to adopt e-government public services along with different adoption levels. This can be the future research area of e-government public services.

ACKNOWLEDGEMENT:

I like to thank almighty Allah for giving me the ability to do research work.

CONFLICTS OF INTEREST:

There is no conflict of interest.

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Citation: Shithii IJ. (2024). Factors identifying users' behavioral intention to adopt e-government public services in Bangladesh, *Int. J. Manag. Account.* **6**(1), 1-6. <https://doi.org/10.34104/ijma.024.00106> 