

-RESEARCH ARTICLE-

## REVIEWING UTAUT DIMENSION'S EFFECTS ON INTENTION TO USE ELECTRONIC GOVERNMENT SERVICES: INSPECTING IRAQI CITIZENS' PERSPECTIVES

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### —Abstract—

This study examines the influence of the Unified Theory of Acceptance and Use of Technology (UTAUT) components on Iraqi citizens' intentions to adopt digital government services. A descriptive research approach was employed, utilising a survey comprising 24 questions. The sample consisted of 350 Iraqi citizens, selected through convenience sampling. The reliability and adequacy of the scale were confirmed

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through Cronbach's alpha and the Kaiser-Meyer-Olkin (KMO) test. A descriptive and explanatory analysis was conducted on the collected data, with the Variance Inflation Factor (VIF) test confirming the absence of multicollinearity among variables. Hypotheses were assessed using multiple linear regression analysis. Statistically, "facilitating conditions" and "performance expectancy" significantly influenced the adoption of online government services, explaining 32.4% of the variance in Iraqi citizens' intentions. Conversely, social influence and effort expectancy exhibited minimal effect on the inclination to utilise digital government platforms. The findings indicate that Iraqis infrequently engage with computerised government services. Consequently, this study extends existing knowledge by developing a theoretical framework that elucidates and predicts user behaviour regarding the adoption of digital government services, particularly within Iraqi public institutions.

**Keywords:** Electronic Government Services, Influencing Factors, Intention to Use, Unified Theory, Iraq.

## INTRODUCTION

Technological advancements and the proliferation of knowledge are accelerating across various sectors, leading to an information and communications revolution. Both private and public institutions have embraced modern technologies to capitalise on these developments (Namahoot & Jantasri, 2023). Technological progress has significantly facilitated the adoption process of electronic government services (Mensah & Luo, 2021). E-government encompasses initiatives aimed at modernising and streamlining governmental operations. A key outcome of integrating contemporary technology into public administration is the digital transformation of governmental services, achieved through the optimal utilisation of digital communication networks and emerging technologies (Kanaan et al., 2023). Consequently, governments have adjusted their policies to align with e-government requirements, enhancing institutional efficiency and service delivery. These digital services have improved the performance of governmental entities, which are often characterised by complex administrative procedures (Malodia et al., 2021).

Talukder et al. (2022) stressed that electronic government applications enhance and streamline government services to better meet citizens' needs and expectations. Lowering the government and individuals' costs of transactions, the applications greatly improve service quality and transparency in public organizations. However, despite many advantages, behavioral aspects such as change resistance and varying acceptance of information technology hinder the efficiency of the services offered through e-government (Rajak & Shaw, 2021). Wong et al. (2019) identified change resistance among the beneficiaries to be a problem in deploying and utilizing digital services. Similarly, Donmez-Turan (2020) also identified skepticism regarding new technologies

despite the promise they have to offer in terms of resource efficiency. Resistance to change arises primarily due to security concerns and mistrust in digital services (Nsouli & Vlachopoulos, 2021).

This study addresses two main questions: How does technological adoption affect Iraqi citizens' e-government service use? Additionally, how do enabling factors, performance expectations, social influence, and effort expectations affect intentions? This study examines how UTAUT components affect e-government service adoption. It examines how enabling conditions, performance expectations, social influence, and effort expectations affect Iraqis' digital government platform engagement. Four sections make up this paper after the introduction. Section 2 develops research hypotheses and conceptual frameworks and critically reviews technology acceptance theories, focussing on UTAUT and its components. Section 3 describes data collecting and analysis. Section 4 covers results and implications. Section 5 concludes and suggests additional research.

## LITERATURE REVIEW

Electronic government services represent a pivotal transformation in public administration, serving as one of the most advanced technological innovations that facilitate the transition from traditional to digital governance. These services enhance governmental efficiency to allow effective, transparent, and efficient delivery of public services (Al-Swidi & Enazi, 2021). E-services are among the most important modern mechanisms adopted by governments to revamp administrative institutions. With digitization of service delivery, governments can enhance service quality and operational efficiency. Consequently, e-services reduce costs to governmental organizations and citizens and improve the speed and accuracy of transactions (Chan et al., 2021). Electronic services integrate information and communications technology (ICT) through the application of digital platforms and tools. Accordingly, e-services are marked with the ability of public organizations to offer unrestricted access to governmental services and information through the application of ICT and provide a distinctive and seamless experience to users (El-Gamal et al., 2022). Gupta et al. (2021) posited that e-services employ modern ICT to offer information and services to citizens and individuals in lieu of traditional mechanisms (Danyiuk et al., 2021). Three fundamental components are needed to facilitate the operation of e-services: communication media such as the internet and mobile networks, the service provider, and the recipient.

E-services facilitate online transactions via external communication networks and electronic systems to guarantee efficient and quick services provision. As a consequence, e-services have transformed government processes from an administrative bureaucracy and complexity-based model to one focused on providing

services smoothly online. The process has dramatically reduced cost and effort on the part of citizens and government organizations (Yadav et al., 2019). Empowered with ICT, administrative processes have been revolutionized through e-services to streamline service delivery in public organizations. E-services provide citizens with significant information regarding government services, regulations, and laws via online platforms (Alzahrani, 2022). Additionally, e-services have enhanced operational efficiency and transparency in public administration. Their implementation represents a shift in paradigm, promoting higher participation by citizens in a tech-based economic system. Further, they facilitate policy-making through effective assessment of public needs (Iong & Phillips, 2023).

The effect of e-services to development in society is considerable. The solutions optimize the use of resources and reduce the effort and time traditionally required to get government services. The solutions have maximized the processing of transactions, reduced service errors and improved service quality (Sihotang et al., 2023). The citizens are hesitant about digital governance in spite of its numerous advantages such as cost-effectiveness and efficiency. Theoretical models describing the determinants of the acceptance of ICT have been derived from research on technological adoption barriers. (Dash et al., 2023) tested three widely used models utilized to comprehend adoption and behavioral intention among users. The first model employed is the UTAUT. The second model employed is the TAM and its extensions and the third model employed is the Task-Technology Fit (TTF) model.

### Technology Acceptance Theories

Khaleel and Hilal (2023) emphasized that UTAUT relies primarily on the TAM. TAM has been found to be the most prominent framework to be employed in scrutinising the employees behaviour in the context of IT adoption and usage intention. Accordingly, Al-Emran (2021) emphasized the role played by the model in the determination of the primary drivers that influence the adoption of IT applications. Almusawi et al. (2024) and Korkmaz et al. (2022) tested the constructs in the UTAUT framework and demonstrated that they have an influence on electronic government service adoption. The findings supported a theoretical model that provides significant insights into acceptance and utilization of digital government services and captures individuals' perceptions and attitudes towards e-services. Furthermore, Ammenwerth (2019) demonstrated that new technology adoption relies on factors elaborated in the UTAUT framework.

The UTAUT model consists of four primary dimensions that assess the extent of technology acceptance. Performance expectancy is identified as a critical variable within this model, incorporating perceived usefulness, a construct originally derived from TAM (Worthington, 2021). Al-Emran (2021) further clarified that the TAM model's ease-of-use component corresponds to the effort expectancy variable in

UTAUT. Consequently, technology adoption is shaped by users' motivations for engagement, alongside the intended purpose of its development. [Mojarro Aliaño et al. \(2019\)](#) discussed the profound societal implications of technology adoption, identifying key factors influencing the utilisation of digital tools ([Chatterjee et al., 2023](#)). [Chatterjee et al. \(2023\)](#) argued that the availability of technological infrastructure—such as computers, networks, mobile devices, and internet access—plays a fundamental function in defining the extent of technology adoption. Additionally, the effects of adoption-related factors vary based on demographic characteristics, including age, experience, gender, and voluntary usage. In the TTF framework, task requirements and technological capabilities serve as the primary antecedents of job-technology alignment. Consequently, when a given task exceeds technological capabilities, or when the available technology lacks sufficient functionality to support task execution, the degree of TTF alignment declines.

### **Performance Expectancy**

Performance expectancy predicts usage intention better than the other three UTAUT criteria. It shows how employees think technology improves their work and performance ([Kim & Hall, 2020](#)). This idea holds that technology improves performance. The simplicity of technology adoption, or effort expectation, encourages people to employ digital systems. Employees' intention to use technology upsurges with their confidence in its use ([Jeon et al., 2020](#)). [Ahadzadeh et al. \(2021\)](#) identified five performance expectancy constructs: perceived utility, work correspondence, relative advantage, intrinsic motivation, and result expectations. The first concerns the functional benefits of digital services, particularly in comparison to traditional service delivery. The second pertains to users' expectations regarding the rewards associated with digital engagement. This dimension assesses the extent to which perceived usefulness influences individuals' likelihood of adopting e-services ([Ahadzadeh et al., 2021](#)). Performance expectancy offers a clear advantage over conventional service methods ([Farzin et al., 2023](#)). Users benefit from rapid and unrestricted access to information, eliminating temporal and spatial constraints. Additionally, online services align with user expectations by delivering perceived benefits. Thus, the first hypothesis investigates the extent to which performance expectancy influences individuals' motivation to adopt electronic government services.

**H1:** *The intention to utilize electronic government services is favorably and strongly influenced by performance expectations.*

### **Effort Expectancy**

According to the TAM, perceived ease of use is enhanced by the anticipated simplicity of effort, reflecting the extent of work individuals invest in daily technology usage ([Miah et al., 2023](#)). The perception of ease and simplicity aligns with anticipated effort

expectations, which influence individuals' intention to adopt technology. Citizens' effort expectancy is highest during the initial adoption and discovery phase of online applications but diminishes over time with regular use. When users perceive that these systems deliver positive outcomes without requiring additional effort, they are more inclined to engage with them (Ramírez-Correa et al., 2023). Russ (2021) defines effort expectancy as "the degree of ease associated with using the system." It is primarily shaped by three constructs: perceived ease of use (TAM), ease of use (TAM2), and the general expectation of minimal effort. This factor holds significance only in the first phases of implementation, becoming less influential as users become familiar with the technology. Notably, the anticipated effort has a greater impact on women than men and is more pronounced among older individuals (Sair & Danish, 2018). Nnaji et al. (2023) established that effort expectancy positively influences usage behaviour, with age and gender moderating this effect. The impact is particularly significant for younger women in their initial experiences with technology adoption.

Wandira and Fauzi (2022) established that effort expectancy is linked to the perceived complexity of a system. If technology is viewed as difficult to use, it negatively affects the intention to adopt it. Chao (2019) validated these findings by applying the UTAUT model, demonstrating that perceived ease of use strongly influences adoption intention. Consequently, previous research (Miah et al., 2023; Sair & Danish, 2018; Wandira & Fauzi, 2022) indicates a strong correlation between effort expectancy and the intention to adopt electronic government services. The greater the accessibility of mobile applications and digital services, the higher the likelihood of user adoption. Based on these insights, the second hypothesis examines the relationship between effort expectancy and the intention to use electronic government services.

**H2:** *The intention to utilize electronic government services is positively and significantly impacted by effort expectation.*

## **Social Influence**

Social influence is "the degree to which friends positively or negatively impact the use of online services." Individuals have higher intentions to adopt technology if its use is encouraged within their social group. This factor comprises two key components: social aspects and subjective norms. It is a critical determinant in the computer usage model, as Sharma et al. (2023) confirmed that social pressure significantly shapes technology adoption. Social influence consists of three elements. Firstly, social factors relate to the societal group to which an individual belongs. Ahadzadeh et al. (2021) and Jeon et al. (2020) highlighted peer influence as a form of social impact, where individuals learn by observing others using e-services. Secondly, subjective norms refer to the social environment, including peers' and friends' opinions, which shape individuals' decisions regarding online service adoption. In this context, the perception that adopting a new technology improves one's status within a group can significantly influence acceptance.

Studies indicate that social networks, including family, friends, and acquaintances, are vital in the initial adoption of online services. Successful e-service adoption often depends on interpersonal interactions within these networks. Several scholars have incorporated social influence into the TAM model. [Li and Zhao \(2021\)](#) emphasised its significance in mobile technology adoption, demonstrating the impact of peers, media, family, and mass communication channels such as television in shaping user behaviour. Given these findings, the third hypothesis explores the relationship between social influence and the adoption of electronic government services.

**H3:** *The intention to utilize electronic government services is favorably and strongly influenced by social influence.*

### **Facilitating Condition**

Facilitating conditions, as labelled by [Chan et al. \(2021\)](#), represent an individual's confidence in the organisational and technological frameworks that support system usage. These conditions provide assistance through structural and technological infrastructures, which in turn support the intention to utilise online services. Facilitating conditions are directly linked to e-services and emerge following the adoption of online services. This factor comprises three constructs: supporting factors, alignment, and perceived behavioural control. The necessity for specific skills, technical infrastructure, and adequate resources makes this variable essential for adopting innovative technology ([Nuseir & Elrefae, 2022](#)). Facilitating conditions encompass users' perceptions of technology and the availability of infrastructure, ensuring ease of access to governmental online platforms. [Abbad \(2021\)](#) demonstrated that social media and various online information sources encourage the adoption of governmental e-services by increasing user awareness. Consequently, insights from [Abbad \(2021\)](#) study were used to formulate the fourth hypothesis, examining the relationship between facilitating conditions and the adoption of electronic government services.

**H4:** *The desire to use electronic government services is positively and significantly impacted by encouraging conditions.*

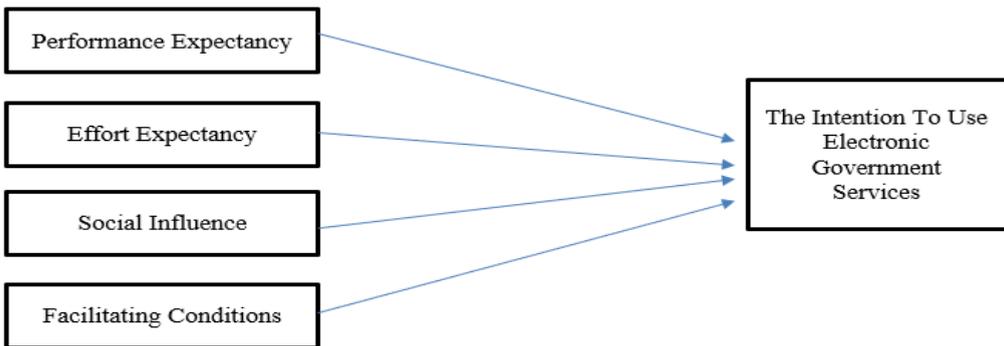
### **The Goal of Using Online Government Services**

Consumer behaviour theories assert that intentions serve as reliable predictors of consumer actions. [Hariguna et al. \(2020\)](#) argue that intentions are the most effective indicators of individual behaviour, as they enable individuals to independently incorporate relevant factors influencing actual actions. The degree of information technology adoption can be assessed through intention, which serves as the dependent variable in the UTAUT model. Intention encompasses a temporal dimension, including the willingness to continue using a system or to re-adopt it. For experienced users, familiarity with the system leads to the transformation of intention into actual usage.

Intention functions as a cognitive intermediary between attitude and behaviour, often reflecting the self-imposed instructions individuals use to guide rational actions. (Almamy, 2022) defines individual intention as the expression of desire, determination, and strong commitment to engage in a particular behaviour. Behavioural expectations are more accurate predictors of actions than intentions, particularly when expectations are high, and prior experience is limited. Alduais and Al-Smadi (2022) and Sharma et al. (2023) highlight the significant influence of behavioural intention on predicted behaviour. Consequently, individuals with strong behavioural expectations are more likely to exhibit corresponding actions.

### Conceptual Framework

Based on the findings discussed by Abbad (2021), Miah et al. (2023), and Sair and Danish (2018), the intention to adopt electronic government services is significantly influenced by social influence (SI), effort expectancy (EE), performance expectancy (PE), and facilitating conditions (FC). Individuals have complex intentions to engage with electronic government services if they perceive these platforms as fulfilling their needs and enhancing their quality of life. Accordingly, formulating hypotheses clarifies the relationships between these variables, with Figure (1) illustrating the conceptual framework inferred from these interactions.



**Figure 1:** Conceptual Structure (Zeebaree et al., 2022)

### RESEARCH METHODOLOGY

This article examines the UTAUT model's impact on the intention to adopt e-government services, assessing the predictive influence of facilitating conditions, performance expectancy, social influence, and effort expectancy among Iraqis. A quantitative methodology, aligned with the positivist paradigm, was employed to gather measurable data, ensuring objective analysis and hypothesis validation. A deductive approach was adopted because this method suited the research objectives, enabling an analysis of behavioural intentions and the implications of e-government adoption in Iraq. Data analysis incorporated both descriptive and explanatory perspectives,

emphasising researcher objectivity and independence in examining the subject matter.

## Study Instrument

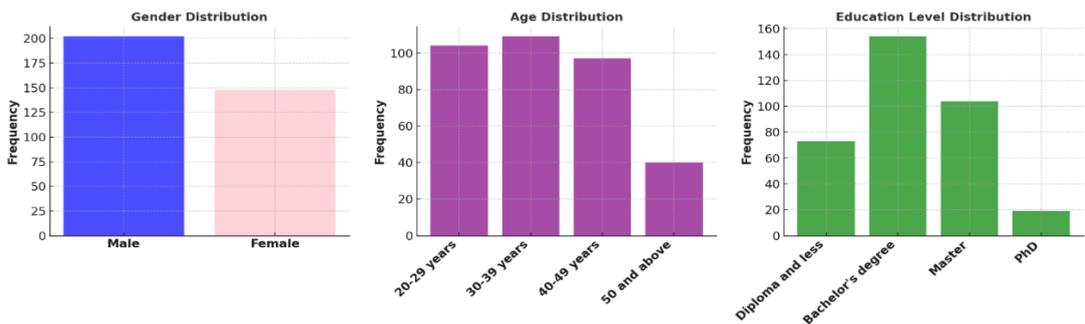
The survey instrument, adapted from prior studies, was pilot-tested for validity with 50 Iraqi residents assessing clarity and comprehension. Originally in Arabic, it was translated into English, and both versions underwent face validation by academics. The questionnaire had three sections: demographics (age, gender, education), UTAUT constructs, and intention to adopt e-services. Items were measured using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). [Table \(1\)](#) provides detailed scale descriptions. This structured approach ensured both linguistic accuracy and content relevance across the studied population.

**Table 1: The Questionnaire Measurement Scale**

Variables	Dimensions	Number of Items		Measurement scale
(UTAUT) Independent Variables	Performance Expectancy (PE)	5	(Farzin et al., 2023; Jeon et al., 2020; Kim & Hall, 2020)	A five-point Likert scale with five options— from strongly disagree to strongly agree— and a relative weight of 1–5 was used to assess the statements.
	Effort Expectancy (EE)	5	(Miah et al., 2023; Sair & Danish, 2018; Wandira & Fauzi, 2022)	
	Social Influence (SE)	5	(Chao, 2019)	
	Facilitating Condition (FC)	4	(Li & Zhao, 2021; Sharma et al., 2023)	
Intention to Use Electronic Services Dependent Variable	Intention to Use Electronic Services	5	(Hariguna et al., 2020)	

## Study Population and Sample

The study used non-probabilistic convenience sampling on Iraqis. Electronic questionnaires were provided to 350 study participants. The survey was performed via Google Forms and shared on social media. There were enough valid responses for statistical analysis. [Figure 2](#) shows the demographic distribution of research participants by age, gender, and education.



**Figure 2: The Sample's Characteristics (Demographic Factors)**

Figure 2 shows these variables' descriptive analysis results. Figure 2 shows that 57.7% of respondents are male and 42.2% female. Participants are mostly under 40, with 61% under 40. Educational background: 20.85% have a diploma or lesser qualification, 44% have a bachelor's degree, 29.71% have a master's, and 5.42% have a PhD.

### Statistical Treatment

The study used SPSS 25 for descriptive and inferential statistical analysis to test hypotheses. Descriptive statistics were utilised to describe the sample, including response percentages and mean and standard deviation. Multiple regression was used to test hypotheses. UTAUT explanatory characteristics (independent variables) were calculated to affect the dependent variable, electronic government service consumption. The R-square coefficient of determination measured how much the independent factors explained fluctuations in the dependent variable.

### FINDINGS AND INTERPRETATIONS

This section presents the study's findings by analysing participants' responses. The results include the calculation of the correlation matrix and the Variance Inflation Factor (VIF) tests to ensure that multicollinearity is not a significant issue among the independent variables. Subsequently, multiple linear regression analysis was implemented to test the study hypotheses and determine the influence of UTAUT dimensions on the intention to use electronic government services.

### Descriptive Analysis

Table (2) presents the descriptive analysis of performance expectancy. The respondents demonstrated moderate agreement with all items (mean = 3.49; standard deviation = 0.404). The highest-ranked item (mean = 3.65, standard deviation = 0.404) indicates that Iraqi citizens acknowledge the usefulness of electronic services in obtaining information anytime and anywhere. Conversely, the lowest-ranked item (mean = 3.40, standard deviation = 0.584) reflects a moderate agreement regarding the role of electronic government services in facilitating access to services.

**Table 2: Performance Expectancy (Descriptive Analysis)**

Rank	No.	Items	Mean	SD	Level
3	1	The availability of electronic services frees from temporal and spatial restrictions.	3.46	.656	Moderate
2	2	Electronic government services have increased my productivity by obtaining products quickly and with less effort.	3.48	.627	Moderate
5	3	Electronic government services help me get the service faster.	3.40	.584	Moderate
4	4	I find that electronic government services are helpful in my daily life.	3.45	.590	Moderate
1	5	Electronic services help obtain information or services at any time and place.	3.65	.664	Moderate
Average Performance Expectancy Score			3.49	.404	Moderate

Table (3) presents the descriptive analysis of effort expectancy items, indicating moderate agreement among respondents (mean = 3.66; standard deviation = 0.367). Iraqi citizens perceive the process of learning electronic services as straightforward. Additionally, they acknowledge an improvement in their skills through engagement with electronic service platforms.

**Table 3: Effort Expectancy (Descriptive Analysis)**

Rank	No.	Items	Mean	SD	Level
1	1	Learning to use electronic services is easy	3.78	.677	High
2	2	I can deal with government websites.	3.67	.656	Moderate
5	3	I have better skills through electronic service sites.	3.60	.619	Moderate
4	4	Conducting electronic services requires less effort to implement what is required.	3.61	.672	Moderate
3	5	Conducting electronic services requires more mental effort than physical effort.	3.65	.653	Moderate
Average Mean Score of Effort Expectancy			3.66	.367	Moderate

Table (4) presents the descriptive analysis of social influence items, indicating a modest level of agreement among respondents (mean = 3.35; standard deviation = 0.430). The results confirm that participants consider the advice of experienced individuals on the Internet when using electronic government services. Additionally, Iraqi citizens take into account others' suggestions and opinions regarding the benefits of adopting electronic services.

**Table 4: Social Influence (Descriptive Analysis)**

Rank	No.	Items	Mean	SD	Level
4	1	I often listen to other people's suggestions and opinions about the benefits of using electronic services.	3.32	.569	Moderate
1	2	I follow the advice of people with experience in the Internet and its services regarding electronic government services.	3.38	.611	Moderate
2	3	My family encourages me to use electronic government services.	3.37	.590	Moderate
3	4	People whose opinions matter to me would prefer that I use electronic services.	3.34	.580	Moderate
2	5	I prefer to use electronic government services if I know that people I know do so.	3.37	.590	Moderate
Average Social Influence Mean Score			3.35	.430	Moderate

Table (5) presents the descriptive analysis of facilitating condition items, showing that respondents agree on the importance of facilitating conditions (mean = 3.35; standard deviation = 0.430). Participants acknowledge the value of using e-services on mobile

phones in their daily lives. However, they moderately agree that the benefits of adopting websites for electronic government services outweigh the associated costs.

**Table 5: Facilitating Condition (Descriptive Analysis)**

Rank	No.	Items	Mean	SD	Level
2	1	I have the necessary knowledge to use electronic service websites.	3.61	.816	Moderate
3	2	I can afford to use online services sites.	3.52	.868	Moderate
4	3	The benefits of using electronic government service websites are commensurate with the cost.	3.44	.926	Moderate
1	4	The use of electronic service sites via mobile phone is of high value.	3.62	.805	Moderate
Average Mean Score of Facilitating Condition			3.54	.544	Moderate

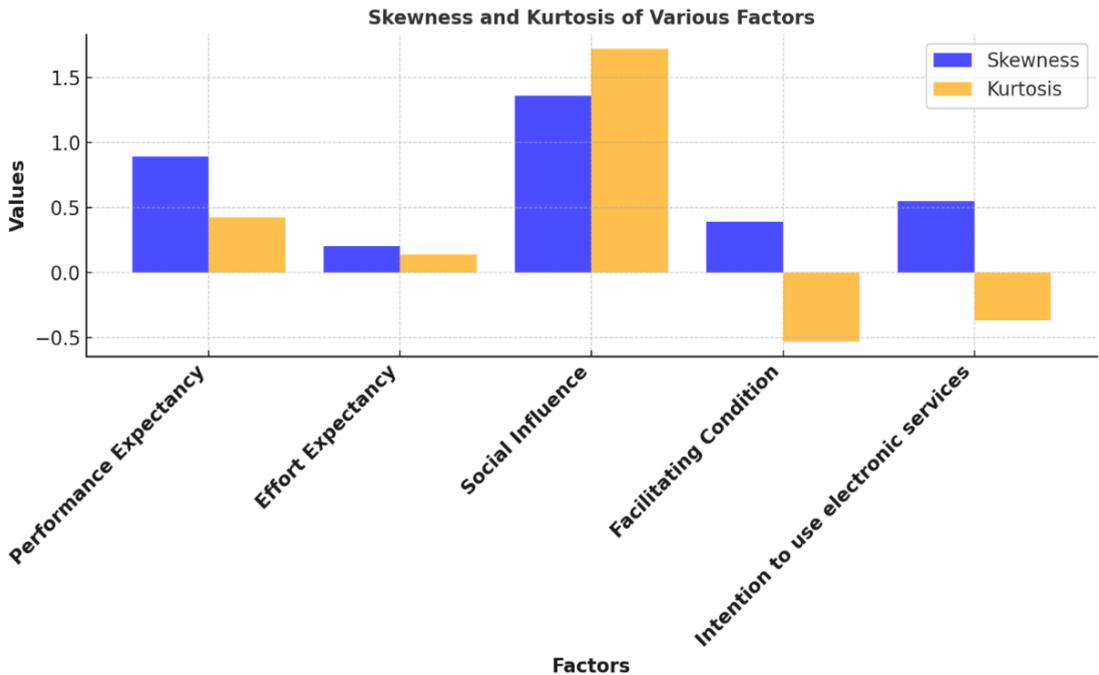
Table (6) presents the descriptive analysis of the intention to utilise electronic services. Respondents exhibited a moderate level of agreement on measures assessing this intention (mean = 3.51; standard deviation = 0.603). The majority expressed optimism about using government e-service websites. However, they only moderately agreed on feeling secure when using or requesting electronic government services.

**Table 6: The Intention to Use Electronic Services (Descriptive Analysis)**

Rank	No.	Items	Mean	SD	Level
3	1	I intend to review new announcements about electronic government services.	3.50	.900	Moderate
2	2	I intend to be a regular user of government e-services websites.	3.54	.847	Moderate
4	3	I feel secure about the security of personal information when using or requesting electronic government services.	3.40	.935	Moderate
2	4	I intend to encourage my family and friends to use electronic government services.	3.54	.847	Moderate
1	5	I feel optimistic about using government e-services websites.	3.59	.814	Moderate
Intention to Use Electronic Services Average Mean Score			3.51	.603	Moderate

### Skewness and Kurtosis

The assessment of skewness and kurtosis coefficients, as shown in Figure 3, confirmed the normality of the data. The results were approximately equal to (1), indicating no issues with data normality.



**Figure 3:** Kurtosis and Skewness

### Reliability and Validity

The Kaiser-Meyer-Olkin (KMO) test showed that the variables measure the intended idea with a threshold greater than 0.5. Cronbach's alpha ( $\alpha$ ) evaluated the measuring scale's reliability. [Alduais and Al-Smadi \(2022\)](#) recommend a value above 0.7, with acceptable values between 0.5 and 0.6. The KMO and  $\alpha$  indices for this measuring scale were statistically significant and within acceptable limits. [Table \(7\)](#) shows validity and reliability coefficients. The study questionnaire's internal consistency was examined using Cronbach's Alpha. In [Table \(7\)](#), the dependent variable's Cronbach's Alpha coefficient was 0.81, whereas the independent variables ranged from 0.80 to 0.82. Study reliability is adequate with these values.

**Table 7: Reliability and Validity**

Variable	Dimensions	( $\alpha$ ) coefficient	(KMO)	Sig.	Items
Independent	(PE) Performance Expectancy	0.82	0.733	000	5
	(EE) Effort Expectancy	0.81	0.539	000	5
	(SE) Social Influence	0.80	0.817	000	5
	(FC) Facilitating Condition	0.82	0.784	000	4
Dependent	(IUEC) Intention to use electronic services	0.81	0.829	000	5

In Table (8), Effort Expectancy correlates 0.154 with Intention to Use Electronic Services, whereas Facilitating Condition (FC) correlates 0.453. At 0.05, correlations are significant. VIF values remain below 10 and tolerance values exceed 0.25, indicating low to acceptable variable correlations. Thus, theories were tested.

**Table 8: Correlation and VIF**

	PE	EE	SE	FC	IUES	Tolerance	VIF
PE Performance Expectancy	1					0.848	1.179
EE Effort Expectancy	0.312**	1				0.874	1.144
SE Social Influence	0.287**	0.208**	1			0.885	1.130
FC Facilitating Condition	0.143**	0.175**	0.185**	1		0.943	1.061
IUES Intention to use electronic services	0.406**	0.154**	0.165**	0.453**	1		

\*\* Correlation is significant at the 0.01 level (2-tailed).

### Multiple Linear Regression (Stepwise)

Multiple linear regression examined the link between UTAUT attributes and the intention to use electronic services. The model's explanatory power, indicated by  $R^2$ , must exceed 0.1 for robustness. Findings show UTAUT dimensions explain variations in adoption.

Table 9 confirms two significant models:

1. Model 1:  $R^2 = 0.206$ , indicating 20% of the variation is explained by facilitating conditions.
2. Model 2:  $R^2 = 0.324$ , showing 32.4% of the variation is accounted for by facilitating conditions and performance expectancy.

**Table 9: Model Summary of UTAUT Dimensions and Intention to Use E-Services**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Predictors: FC Facilitating Condition	0.453 <sup>a</sup>	0.206	0.203	0.36194
Predictors: FC Facilitating Condition, PE Performance Expectancy	0.569 <sup>b</sup>	0.324	0.320	0.33432

Table 10 validates both models, with F values surpassing 1.96:

1. Model 1:  $F = 90.036$  ( $p < 0.05$ ), supporting the hypothesis.
2. Model 2:  $F = 83.206$  ( $p < 0.05$ ), confirming the hypothesis.

**Table 10: The Intention to Use E-Services and UTAUT Dimensions (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
Predictors: FC Facilitating Condition	Regression	11.795	1	11.795	90.036	0.000 <sup>b</sup>
	Residual	45.588	348	.131		
	Total	57.383	349			
Predictors: FC Facilitating Condition, PE Performance Expectancy	Regression	18.600	2	9.300	83.206	0.000 <sup>c</sup>
	Residual	38.783	347	.112		
	Total	57.383	349			

Table 11 confirms significant effects ( $p < 0.001$ ), rejecting the null hypotheses:

1. Facilitating conditions positively influence usage intention ( $\beta = 0.385$ ,  $p < 0.05$ ), supporting H4.
2. Performance expectancy significantly impacts adoption ( $\beta = 0.384$ ,  $p < 0.05$ ), confirming H1.

These findings underline the strong influence of facilitating conditions and performance expectancy on Iraqis' adoption of electronic government services.

**Table 11: Intention to Use E-Services and UTAUT Dimensions (Coefficients)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.977	0.163		12.141	0.000
	FC Facilitating Condition	0.433	0.046	0.453	9.489	0.000
2	(Constant)	0.804	0.213		3.784	0.000
	FC Facilitating Condition	0.385	0.043	0.403	9.047	0.000
	PE Performance Expectancy	0.384	0.049	0.348	7.803	0.000

a. Dependent Variable: IUES Intention to use electronic services

The findings postulate that effort expectancy and social influence were excluded from the model (Table 12) and had no significant impact on Iraqis' adoption of electronic government services.

**Table 12: Excluded Variables**

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	PE Performance Expectancy	.348 <sup>b</sup>	7.803	.000	.386	.979
	EE Effort Expectancy	.078 <sup>b</sup>	1.603	.110	.086	.969
	SE Social Influence	.084 <sup>b</sup>	1.735	.084	.093	.966
2	EE Effort Expectancy	-.028 <sup>c</sup>	-.590	.556	-.032	.886
	SE Social Influence	-.011 <sup>c</sup>	-.227	.821	-.012	.896

Hypothesis H2 was rejected ( $\text{sig} = 0.556 > 0.05$ ,  $t = -0.590 < 1.96$ ,  $\beta = -0.028$ ), confirming that effort expectancy does not influence adoption intention. Similarly, hypothesis H3 was rejected ( $\text{sig} = 0.821 > 0.05$ ,  $t = -0.227 < 1.96$ ,  $\beta = -0.011$ ), indicating that social influence is not a determining factor. Facilitating conditions explained 20% of the variation in usage intention, while the combination of facilitating conditions and performance expectancy accounted for 32.4%. Hypothesis H4 was supported, affirming that facilitating conditions positively impact e-government adoption, aligning with prior research (Farzin et al., 2023; Jeon et al., 2020; Miah et al., 2023; Sair & Danish, 2018; Wandira & Fauzi, 2022). Adoption depends on technical infrastructure, specialised skills, and resource availability, with facilitating conditions shaping perceptions and engagement with e-government platforms. Hypothesis H1 was also validated, confirming that performance expectancy positively influences adoption intention, consistent with previous studies (Ahadzadeh et al., 2021; Farzin et al., 2023; Jeon et al., 2020). E-services offer efficiency advantages, enabling convenient, unrestricted access to information. However, these results contradict research highlighting social influence and effort expectancy as significant predictors (Li & Zhao, 2021). The findings suggest that the aforementioned factors do not have a significant influence on Iraqis' adoption of e-government services and hence negate hypothesis H2 and H3

## CONCLUSION AND RECOMMENDATIONS

This study substantiated that performance expectancy and facilitating conditions positively affect the adoption of e-government services, and effort expectancy and social influence do not affect identifying Iraq's contextual factors. Its originality arises from applying UTAUT to Iraqi government organizations to extend the theory to predicting the adoption of e-government and to identify cultural and institutional forces. Empirically, the study offers practical suggestions to enhance implementation, such as raising social media exposure, detailing content strategy, integrating technology into institutional policy, and utilizing public campaigns with high-profile individuals to promote interest. Limitations do exist in the form of 350 participants in the study to limit generalizability and the use of only a quantitative method to limit depth. Future research should expand sample sizes, incorporate qualitative methods, explore technology adoption across different organisational settings, examine social media's mediating role, and conduct longitudinal studies to trace changes in citizens' behaviour towards digital government services.

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