

E-Governance System Key Successful Implementation Factors

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Abstract— The usage of innovative communication technology and new computer systems increases the value of the E-governance for the provision of services to remote citizens. Such development provides the government and its organization an option to address the challenges connected with conventional delivery approaches. Within this consideration, the approval of the E-governance is deemed crucial in deciding the effectiveness of its application. The primary objectives of this research are therefore to define the reasons that contribute to the recognition of citizens in Syria by the e-governance system in order to suggest a model of technical acceptance of the e-governance system by citizens in Syria. Questionnaires were distributed through a survey to citizens of Syria. As partially of the structural equation model, (AMOS and SPSS) version 21.0 used to examine the collection data. As a consequence, on the basis of these results, a final study framework is suggested to clarify and forecast Syrian citizens' decision to use the E-governance framework.

Keywords— E-governance framework system, Syrian citizens, Structural equation model.

I. INTRODUCTION

Generally, the concept E-governance has indeed been described similarly depending on the scholar's perspective. In instance, the word has been described from the government's [1], service's [2], citizen's [3], and business's [4] viewpoints. Other definitions take computer technology into consideration [5,6]. Furthermore, as a result of the rapid developments and inventions, particularly in the IT and ICT industries, differences have emerged among past and present models and categories in terms of conducting models, kinds, categories, technique, and behaviour, as well as the definition. Several differences exist due to many aspects; examples are different scholars' backgrounds, majors, points of view, rapid technological advancements, as well as the diverse cultures of many areas and nations. There is, therefore, a need to explore further to provide a deep considerate about E-governance just to be able to get a unified perspective on all principles in one system.

Various studies have been done, with a focus on the G2C area, which explicitly addressed citizens' acceptability of E-governance and how to improve this acceptability [7, 8, 9] Other researchers, such as [10, 4, 11], focused at the acceptability of innovation from the perspective of citizens. This demonstrates the significance of citizens' contributions to E-government procedures and initiatives, as well as the increased interest from researchers towards citizens.

E-governance systems have become increasingly important in underdeveloped nations like Syria [12,13]

Concluded that e-governance is recognized and perceived to be an essential policy development tool, and is a leading aspect of many governmental reforms. Moreover, there is a gap in the rate of enhancement, mainly in developing countries [12, 14]. This gap is attributed to a variety of factors, For example, Corruption, bad financial strategy, ineffective administration, a lack of data communication technology access, a lack of creativity, and, more importantly, a lack of trust in the government-citizen relationship (15, 16).

Several factors, particularly in the social and behavioural domains, along with societal conventions, essential belief, and opinions that influence the way people behave, prevent people from adopting the new type of service. Moreover, those research [17, 15, 16, 18, 19] did not include the social behavioural aspects that appear to have the greatest impact on citizen acceptability.

[14] Showed that the majority of individuals and companies in nations that use e-governance always have to interact with a variety of government agencies. As a result, these institutions should cooperate, and operating in isolation isn't any more an option, Governments should also coordinate various central government agencies and departments such that can support and complete each other in a one integrated system [20].

A current study made by [12] identifies another difficulty in Syria's present E-governance situation. Only a few of those surveyed were aware of the government's use of ICT (e-governance) to provide services and benefits, and the findings reveal that a some of those surveyed

were aware of it. This shows that there is a significant disconnect

II. ELECTRONIC GOVERNMENT (E-GOV)

E-governance should be an extraordinarily new concept, which has been gaining big significance over the previous few years [21]. In the current day, it is turn out to be feasible to put into effect good-sized modifications in how governments spherical the world feature with the assist of expertise Technology (IT) [22].

Since e-governance should be a rather new phenomenon, it is no longer but set up universally clear phrases inside the area of science, which would possibly be identified and utilized through pupils inside the identical specific way [22]. However, thanks to its essence and foremost functions, e-governance will be described as a device using the match and implementation of know-how and Communications Technologies (ICT), to furnish authorities facts and offerings on-line to citizens, businesses, and different organizations, for this reason enhancing offerings and growing the effectiveness and effectivity of public institutions [21].

[23] Attribute this problem to the complexity of E-governance in the public department, as well as various interpretations. Therefore, [24] concluded that no definition enjoys broad acceptance. Some researchers such as [1, 2] Others, like [5, 6, 25], may base their concepts of service in the manner of the government IT and communication methodologies. Another researcher could focus on the relationship between authority and society as the definition's key feature

III. INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

(ICT) gives governments a modern path to accountability and anti-corruption protection. Several countries with accountability legislation have explicitly related the application of such legislation to the introduction of ICT-based programs, mostly by e-governance [26, 27].

The effectiveness of ICT-enabled programs, such as the anti-corruption campaign, would rely on issues of governance, culture and education, among others. Progress would also rely on the approval of ICT amongst citizens. While governments have a particular preference for offering resources over the Web as a way of improving cost- efficiency, in many cases, users also have a particular preference for communications with corporate leaders once they have concerns or are requesting support, while higher education individuals are usually more responsive to utilizing electronic facilities with governance [27, 28, 29, 30].

IV. METHODOLOGY

This study approach in this study offers a structured

and planned technique that allows for the investigation of the interaction between the variables, including E-governance, Government Operation Excellence, satisfaction services, and behavioural intention.

In Syria, there are many technological aspects that enable the citizens to accept the e-governance like internet coverage, internet quality.

This study will look at the variables that lead to people trusting and accepting e-governance and allowing technological advancements.

The purpose of this research is to look at the moderating influence of Satisfaction Services Accepting and Behavioural Accepting in the context of E-governance and Government Operation Excellence as a primary motivation.

Questionnaires were distributed through a survey to citizens of Syria. As partially of the structural equation model, (AMOS and SPSS) version 21.0 used to examine the collection data.

V. CONCEPTUAL FRAMEWORK

The assessment of the related IS documentation shows that the adoption of IS, in particular E-governance systems, is impacted through Three parameters, namely: (1) individual factors (Citizens-Centricity). (2) System factors (Performance Expectancy, Effort Expectancy, and System Flexibility). (3) Environmental factors (Facilitating Conditions) [31, 32, 33, 34, 35, 36]. And two factors Behavioural Intention [37, 38, 39, 40] and User satisfaction services [41, 42, 43, 44] use as moderates in this research

In this study, the researcher adopted (UTAUT) as the most important framework to use for examine the main performance factors and the Syrian users' usage and adoption of E-governance technology in support of Government Operation Excellence.

UTAUT was created largely by Venkatesh (2003) and consists of basic components from eight different models of acceptance and use of technology [45] Venkatesh said the model was particularly useful since it could explain up to 70% of situations as long as the goals and usage of IS were influenced. In actuality, the framework's design is based on data gathered from the background of government departments. As a result, the researcher believes that this UTAUT is more suited to big institutions and government department than previous acceptance technology models [45, 31, 46, 47].

A. Behavioural Intention (BI)

Citizens are encouraged using a platform if it has been utilized or advertised by social organizations, friends or

family, or any other factor that affects a people's behaviour or emotions [48]. The construct was modified for this study to show that Syrian residents desire to use the E-governance system.

B. User Satisfaction Factors

User satisfaction has also been highlighted as a key indicator of IS success by a number of researchers. Increased interest rates of participant satisfaction with the use of IS, according to DeLone and McLean (2003), will lead to greater desire of intention to use, that could eventually affect any use of the systems.

DeLone and McLean Model have reported that three influences have mainly led to an effective E-business. And those are the model's quality components, which include information, system, and quality of service, as well as the most essential business sectors which are the customer' and users' satisfaction [50].

C. Performance Expectancy (PE)

PE [Performance Expectancy] is defined by several publications, including [50, 45] as a person's predictions of development while utilizing a certain system that might increase their job performance. Performance expectation is a significant variable in determining users' intention in information and communications technologies domains, according to a slew of studies [51, 52, 53, 45].

When this construct (performance expectancy) is applied to the E-governance system, it shows most Syrian people believe that utilizing the E-governance system would improve their knowledge and, as a result, their productivity.

D. Effort Expectancy (EE)

Effort expectancy, generally defined mostly by [44, 49] is the amount of ease with which people can use information systems. Several studies have shown that effort expectancy has an impact on behavioral intention. That seems to be, the intention is to utilize E-governance innovation later [54, 52, 35]. In this respect, effort expectancy theory suggests that people, or users throughout this situation, will generally accept a system if they believe it is straightforward to use.

E. System of Flexibility (SF)

In the sense of E-governance, system flexibility relates to the degree of independence that E-governance enables users to have, in terms of time and location [55]. The flexibility of E-governance will ensure that Syrian citizens have access to the opportunity to acquire a

service without any limitations on timing. Several researches shown that the flexibility of the (IS) has become one of the crucial factors in deciding the effectiveness as well as the implementation percentage of E-Governance system [55]. Furthermore, [41] looked at the many factors that impacted user satisfaction with the online system. [41] Found that, in the majority of situations, apparent flexibility is critical to user happiness. [42] A research was conducted to assess user satisfaction in the E-governance context, and the findings echoed those of the [55] research.

F. Citizen centrality (CC)

A strategy requires the services availability from the standpoint of the main customer, rather than the attitude of just the government agency [16]. E-governance initiative will include a citizen-centred view. Citizen-centred service distribution though, is additionally an elaborate matter with multiple viewpoints that need attention from the very start of the transformation. Some researchers have highlighted citizen-centric service quality as a huge success element [56]. Citizen-centric provision of E-governance service predictors in developing countries will allow for a deeper perception of the interests, expectations, preferences and significances of citizens which should be accounted by governments to ensure the quality of services [56].

G. Facilitating condition (FC)

Described by Venkatesh (2003), Facilitating conditions are factors that drive users to assume that their country's technological and organizational environment supports the E-governance system. Throughout this regard, facilitating conditions might lead towards the rejecting of information technology as a consequence of a lack of trust in the corresponding organizational structures [45].

This idea is derived from three previously established components, such as (FC) in the PC usage model, consistency throughout the spread of invention concept, with actual behaviour throughout the planned behaviour theory. [57]. The environmental sustainability factor requires the technological and technological facilities (for example, accessibility and ability) and Organizational features [58, 35]. One variable, facilitating conditions, was used to examine the implementing environmental variable in this research.

H. SERVQUAL

[58] Modified existing previous service quality assessment model [59] and developed the SERVQUAL. In particular, the researchers propose that the understanding of actual service efficiency derives from

the gap between user preferences and also the excellence of the operation that is currently providing. Thus, the implementation of new experiments, with new evidence sets and review, was up to decrease their number, lowering the original 10 measurements to 7: (Tangibles, Reliability, Responsiveness, integrity, Courtesy, Consumer understanding, and service). During next phase, the resulted which in further development of the analysis, SERVQUAL was decreased to 5 dimensions (Table 1).

According to [58], in spite of the kind of service, customers are principally utilizing an equivalent criterion for determining efficiency. Service quality could be the overall view of the user on the execution, and is a collection of positive or ineffective encounters. The quality-of-service operations is challenging to live since they require the Characteristic of intangibility. Created in order to address this problem, [55] a technique has been created where there seems to be a contrast between multiple orders of requirements and evaluations of the client's level of service.

TABLE I
SERVQUAL DIMENSIONS

Empathy	The accessible and Uncontested support given to the user is personalized and based on its core concerns [51, 52].
Assurance	The capacity of employees to encourage confidence, protection and professional efficiency in the provision of services [48, 49,]
Responsiveness	The opportunity to support each customer into an unhesitatingly manner and to endorse the business efficiently and strongly [49,50]
Reliability	The willingness to offer a service delivered on a specified date and period, regardless of any issues that might arise. [35, 36,37]
Tangibles	Physical presence of facilities and staff engaged in the delivery of services. [57,58]

VI. RESEARCH HYPOTHESES

This section contains ideas depending on the connections among E-government system components and GOE variables Mediated by Satisfaction Services and behavioural intention to use. During this whole study, we will be looking into the impact of E-government on GOE.

The relationship between multiple motivations to use,

either Satisfaction or behavioural factors, and the connection among E-governance factors and GOE, either as moderators or mediating variables, is a crucial point for the investigation of all this study. As previously stated, the variables applied in this research include (1) E-governance factors (Facilitating Conditions, Effort Expectancy, Citizen-Centricity, and Performance Expectancy); (2) SS Satisfaction Services; (3) BI Behavioural Intention; and (4) SERVQUAL factors. Table 2 contains a list of the hypotheses:

TABLE2
HYPOTHESES STATEMENTS

H1	There is a strong connection between the e-governance system and Government Operation Excellence.
H2	Different E-governance factors and E-governance have insignificant relationship.
H3	Satisfaction Services mediates the relationship between the e-governance system and government operational excellence.
H4	Behavioural Intention to Use mediates the relationship between the e-governance system and government operational excellence.
H5a	aBehavioural intentions will influence positively by (PE) to use E-gov.
H5b	Satisfaction Services will influence positively by (PE) to use E-gov.
H6a	Behavioural intentions will influence positively by (EE) to use E-gov.
H6b	Satisfaction Services will influence positively by (EE) to use E-gov.
H7a	Behavioural intentions will influence positively by (CC) to use E-gov.
H7b	Satisfaction Services will influence positively by (CC) to use E-gov.
H8a	Behavioural intentions will influence positively by (SF) to use E-gov.
H8b	Satisfaction Services will influence positively by (SF) to use E-gov.
H9a	Behavioural intentions will influence positively by (FC) to use E-gov.
H9b	Satisfaction Services will influence positively by (FC) to use E-gov.
H10a	Tangibles will impact positively by Satisfaction Services to use E-gov.
H10b	Tangibles will impact positively by behavioural intentions to use E-gov.
H11a	Reliability will impact positively by Satisfaction Services to use E-gov.
H11b	Reliability will impact positively by behavioural intentions to use E-gov.

H12a	Responsiveness will impact positively by Satisfaction Services to use E-gov.
H12b	Responsiveness will impact positively by behavioural intentions to use E-gov.
H13a	Assurance will impact positively by Satisfaction Services to use E-gov.
H13b	Assurance will impact positively by behavioural intentions to use E-gov.
H14a	Empathy will impact positively by Satisfaction Services to use E-gov.
H14b	Empathy will impact positively by behavioural intentions to use E-gov.
H15	The relation between Satisfaction Services and Behavioural Intentions has a positive impact on E-government usage.

loading factor was over the 0.5 thread. As a consequence, it ranged from 0.506 to 0. 877.

VIII. CONCLUSIONS

This research provides a guideline to the government institutions which are planning to apply E-governance system for their citizens need. This guideline shows how the applying of E-governance system to help in the citizens will improve the service quality, overcome the traditional processing problems, enable the citizens to interact with the system. This study is the first research being conducted in exploring the acceptance of E-governance system among Syrian citizens in Syria.

A total of 600 surveys were sent to Syrian individuals as part of the study. and employees in Governmental organizations, the Governmental organizations in the Damascus the capital city in Syria. After the given time frame, however, from the total, only 385 respondents have correctly returned the valid questionnaires, giving a response rate of 62.83%. So, only these cases instances were used for the interpretation of the research. In attempt to reach the study's objectives, a total of twenty-five hypotheses were evaluated. Satisfaction Services and Behavioural Intention are used to achieve this goal (BI).

The use of the E-governance system among the Syrian organisations, both public and private in and outside of Syria.

The studies conducted on the acceptance of E-governance system among developing countries around the world are limited.

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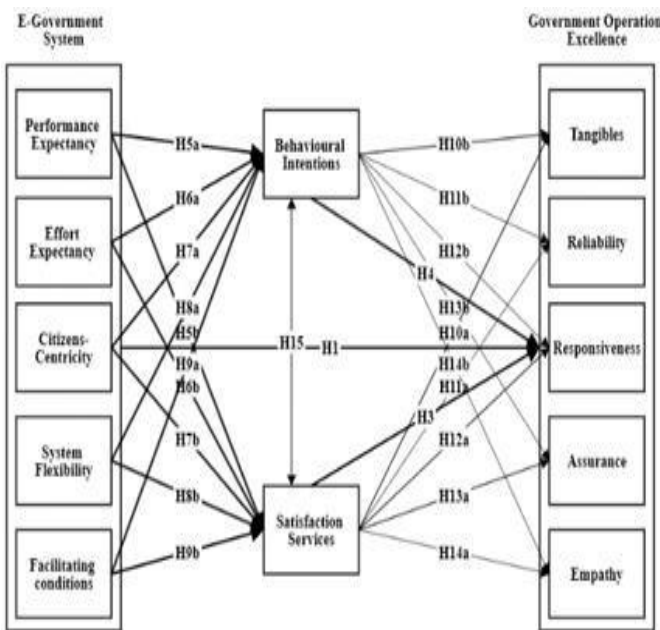


Fig. 1 Research Hypothesis Framework

VII. DATA ANALYSIS AND FINDING

This study's measuring framework consisted of 57 items for the analysis of 12 constructs. namely: Citizens-Centricity (CC), Facilitating Conditions (FC) System Flexibility (SF), Effort Expectancy (EE), and Performance Expectancy (PE). Empathy (EMP), Responsiveness (RES), Reliability (REL), Assurance (ASSU), Tangibles (TAN), Satisfaction Services (SS), and Behavioural Intention (BI).

The represents of the items, likewise loadings factor recalculated for the confirmation items. Shows in Table 3.

The findings of the assessment of the model items standardized loadings revealed which the both items

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