# E- FAWATEERcom Adoption in Jordan : A Proposed Frame Work User Perspective

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**Abstract:**

This paper discusses whether E- FAWATEERcom Adoption in the Jordan. By utilizing the unified theory of acceptance and use of technology (UTAUT), the paper proposes a framework on the antecedents of E-FAWATEERcom. The proposed framework could give significant practical insight and implication to E-government authorities worldwide that implement E- FAWATEERcom, especially the Jordanian authorities.

## 1. Introduction .

The outraging technological advancements have made this world a global village. Most of the nations are interacting across borders for their common set of objectives (Hassan, Abbas, & Zainab, 2018). In this state, the dependence on online sources for faster communication and contact of multiple business features has become crucial and employee engagement based on services environment of an organization (Hassan et al., 2018). Therefore, the financial transactions are being carried out through online sources domestically and worldwide (Hong, Thong, Chasalow, & Dhillon, 2011). governments worldwide have made considerable investments in information technology (IT) to facilitate online public services for citizens (Bhuasiri, Zo, , Lee, & Ciganek,. 2016) .E-government systems effectively deliver public services to citizens as well as improveproductivity and reduce costs for government departments. A pressing issue for manygovernments is how to expand citizen acceptance of e-government systems (Bhuasiri, et al, 2016).

The internet changed the world today. These quick and recurrent changes contributed in making individuals more acceptable and in line with different and various technological applications around us. At the same time, dealers with this technology became unable to accept the idea of living without daily and effective use of available technological means like PCs and telephones. Most of these devices are connected with the internet services that join people with each other despite far away distances. These changes contributed in transforming communicative patterns as they depend greatly on the internet web and social networks that contributed in building social relationships and facilitating communication process. These days, in the existence of society, school, work environment and commercial organizations, we are obliged to use all communicative technological means to get information, products, building relationships and performing life activities. For the aforementioned reasons, the Jordanian government entered internet technology and its applications to Jordan in the middle of 1990s (Ministry of Information and Communication Technology, MOICT, 2015). This environment witnessed many quick developments and changes in response of the government's vision of the importance of this technology. Since that time, many public and private companies exploited this technology to provide the latest services for its customers to keep pace with the tremendous developments the world witnessed lately in profit and non-profit sectors. In 2001, the government entered the DSL service with a small number of about (128 .000) users, to amount 5.700.000 user (Internet world stats, 2015). As a result of these procedures, there are a variety of serious steps taken by the Jordanian government in the information and communications sector to develop it to provide the best services for Jordanian people (Jordan.gov, 2015). The most prominent step was the initiation of electronic government project in response to His Majesty King Abdulla II's vision in 2002 by developing a national strategy that aims at improving the quality of services provided for citizens and business sector, raising the productivity and efficiency of public sector, supporting and facilitating all transactions and public

services to be more efficient and competitive ,at the same time, reducing costs and ease of communication with the governmental organizations, providing required information safely and accurately at the right time. The government put a legal legislative in collaboration with the concerned authorities and ministries like Ministry of Information and Communication, Ministry of Justice, Ministry of Finance, and Central Bank of Jordan In order to develop laws and legislations that control reciprocal process to get different governmental services and trying to restrict any violation or possible problems (Jordan.gov, 2015). The government began applying the E-government in accordance with these inclinations; the Jordanian government encouraged the applications and activities of the E-government by developing legislations and laws and providing all necessary facilitations for the concerned and interested authorities (Shannak & Aldhmour, 2009). The most recent service is E-bills (E-Fawateercom) which was launched as one of the e-commerce applications under the umbrella of the services offered by the e-government of Jordan which were applied through the Central Bank in 2012. The electronic payment services (e-bills, E-Fawateercom) through the electronic payment gate which was established in collaboration with (Your Payments Company) for electronic

payment as the main operator of the gate, "MIGS" for electronic payment as a subsidiary of Master Card and "Emerging Markets Payments Jordan" (EMP) as the host company. A capable electronic system was established to accomplish payment processes by citizens for governmental agencies and joint private sectors by using the internet to facilitate safe electronic payment operations. This system might be used by financial organizations and providers of the offered services. This system works under the umbrella of rules and laws that ensure the secrecy of security and protection of buying procedures and access of services by citizens' subscription in this service. Since the application of this type of services in Jordan, there were few studies that were interested in identifying the factors that affect the attitudes of customers in Jordan by using the electronic payment services in Jordan (CBJ, 2015).

In June 2014, The Central Bank of Jordan (CBJ) officially launched the eFAWATEERcom portal (www.eFAWATEERcom.jo) that enabled customers inquire about, review and settle their bills online via different paying outlets which has led to an expansion in the use of Internet banking services by organizations and individuals as well (The Central Bank of Jordan, 2018). Jordan government is keen on improving e-government services and aiming to automate procedures to reach an e-government by 2020. As of January 1, 2018, a number of ministries and other public institutions began providing 10 e-services to Jordanian citizens and businesses (The Jordanian E-Government, 2018).

In the case of Jordan, like many developing countries, a lack of legal legislation for the protection of any form of electronic payment. At the same time taken in consideration cyber-crime, increase with the information technology revolution and the use of networks for data transmission between individuals and institutions that form a real threat to all users. Therefore a special law has to be issued to protect the privacy of citizens and institutions and protection of their moral and financial.

They presented the barriers from two different perceptions. The first, government agencies(services providers) have explored the following barriers: IT infrastructure; lack of awareness; lack of security and privacy; lack of trust; lack of a comprehensive policy; legal and regulatory framework; insufficient skilled human resources; lack of public-private collaboration/partnerships; lack of training and knowledge transfer; lack of E-Gov transformation and resistance to change; budgets and operating costs and lack of clear strategy. explored the technological challenges specially issuing and adopting standards for system interoperability and data exchange, setting up secured networks based on common standards, developing shared applications (e.g. e-procurement), introducing digital signatures, and authentication. On the other hand, the reasons of non-adoption E-Gov servicers from citizens' perspectives referred to prefer face-to-face services, mistrust in e-services ,lack of financial ability to buy computer and subscribe to internet, useless and for reasons of privacy and security[9]. Also, inadequate the legislation and regulations

governing electronic transactions. Jordanians prefer face-to-face services referred that to cultural factor of favoritism, also known as "wasta". They add more cultural factors such resistance to change and digital divide which means IT infrastructure centric in main cities and neglect the small and rural areas, financial ability. Notably, the overlap between technological ,cultural and organizational factors that affect E-Gov adoption and success.

## 2. Literature Review

### 2.1 E- FAWATEERcom

The e-payment process is defined as "the process of transforming any kind of values from the payer to the payee electronically (Al-Ma'aitah, 2013). But the e-payment system is defined as "the existence of an e-payment gate in an integrated form and supportive banking services to facilitate payment in current transactions through the internet and payment by the cell phones (CBJ, 2015). In response to the tremendous developments that the Jordanian market witnessed in the field of communications an Information technology, the e-payment services were applied in Jordan, the orientations of the Jordanian government toward the necessity for adopting e-services that can facilitate access for services to improve level of economical and social life. This will be reflected on the economical system in general through cash flow processes, promotional campaigns for e-commerce applications ,reducing costs as a result of saving the bills' printed paper (Jordan.gov, 2015). So the government developed an e-payment system called "e-fawateercom" as an electronic website, specialized for inquiries about monetary transactions electronically without need to field visits by the service providers in different ministries that aim at providing time and achieving tasks safely and without any efforts and additional costs .E-fawateercom is the first national and governmental service to be applied by the Central Bank in Jordan in conjunction with public and private providers of services and Jordanian Bank in June, 2014 which enable citizens, users or foreigners who has bank accounts in Jordan from inquiring, reviewing their bills electronically through ATM machines, Internet banks, phones, banking branches or any available payment way. These payments can be directed to pay water electricity bills, communication, education, health, taxes, governmental fines or any service is designed to be able to communicate between several parties like banks owning customers 'accounts and companies providing the service through the internet network, the Central Bank that monitors movements of this service in all direction (CBJ, 2015).

### 2.2 Performance Expectancy

Performance expectancy can be well-defined as a way of using the system to achieve better job performance (Venkatesh, et al., 2003). Performance expectancy can also be defined as a degree at which individuals can improve their job performance through the system (Venkatesh, et al., 2003). The existing literature suggests that technology adoption is an important factor in diffusion and adoption of information technology underperformance expectancy (Venkatesh, et al., 2003). Moreover, a study by AlAwadhi & Morris, (2008). discovered that performance expectancy, peer influence, effort expectancy and facilitating conditions are determinants of service adoption under e-government.

### 2.3 Effort Expectancy

Effort expectancy has been defined as "the degree of ease associated with the use of the system" Venkatesh, et al., 2003. Venkatesh et al (2003) indicated that effort expectancy has a significant influence on the behavioral intention of information technology user. They added that the relationship between behavioral intention and effort expectancy may be moderated by gender, experience and age (Venkatesh, et al., 2003). Other studies also indicated the possible link between effort expectancy and adoption of e-services alongside other variables (Venkatesh, et al., 2003).

**2.4 Social Influence**

Social influence is defined as the point at which the individual recognizes the gains others believe she or he must use the new system (Venkatesh, et al., 2003). Social influence can also be defined as the degree to which an individual perceives other person's belief about the system to determine if he or she should use the new system (Venkatesh, et al., 2003).It denotes that the outcome of people's ideas of the view on individuals' use of technology [26,34]. Social influence is a strong predictor of intention to use an information and communication technology (Venkatesh, et al., 2003).Numerous studies have specified that social impact has a straight effect on behavioral intention to accept IT usage (Venkatesh, et al., 2003).

**2.5 Facilitating Conditions**

Facilitating condition refers to the level to which individuals think that an organizational and technical infrastructure exists to support the use of new information technology (Venkatesh, et al., 2003). Kraemer Gurbaxani & King, (1992). developed a theoretical model to identify the factors that determine public acceptance of e-government services in Taiwan. The results revealed that ease of use; perceived usefulness; perceived risk; compatibility; trust; self-efficacy; external influences; interpersonal influence; and facilitating condition, are important predictors of citizen acceptance of e-government services. The results also show strong evidence of the impact of citizen attitude toward using online tax filing and payment system (i.e. attitude toward behavior) on their usage intention. Based on the results of their study, the authors argued that the descending sequence of significant determinants of e-government services adoption be as follows: self-efficacy; trust; interpersonal influence; perceived usefulness; compatibility; facilitating condition; perceived risk; external influence, and perceived ease of use. They also suggested that government organizations can set their priority based on the relative significance of these factors.

**3. Research Framework and Hypotheses Development**

In this study Unified Theory of Acceptance and Use Technology (UTAUT) (Venkatesh et al., 2003). adapted to theories that underpinned the research framework to E- FAWATEERcom Adoption in Jordan . There could be lots of benefits that can be obtained from UTAUT. Reflecting on the model, the researcher believes that UTAUT is more suitable to large organizations than other models of acceptance technology because the design of this model is based on the data collected from employees' environment (Venkatesh et al., 2003). Additionally, it could successfully predict the adoption of information technology in approximately 70 percent of the cases, compared to 40 percent by other user adoption models (Davis et al., 1989; Venkatesh et al., 2003). Furthermore, the constructs of UTAUT were generated from eight models (Venkatesh et al., 2003). Moreover, the prior scales used to measure the constructs can be combined to come up with new scales that can be applied to the adopt E- FAWATEERcom. Last but not least, this model covers almost the main factors that influence user acceptance of technology such as technology-related and social factors (Venkatesh et al., 2003). The proposed model of this study, therefore, includes influence performance expectancy, effort expectancy, social influence and facilitating condition on E- FAWATEERcom adoption,
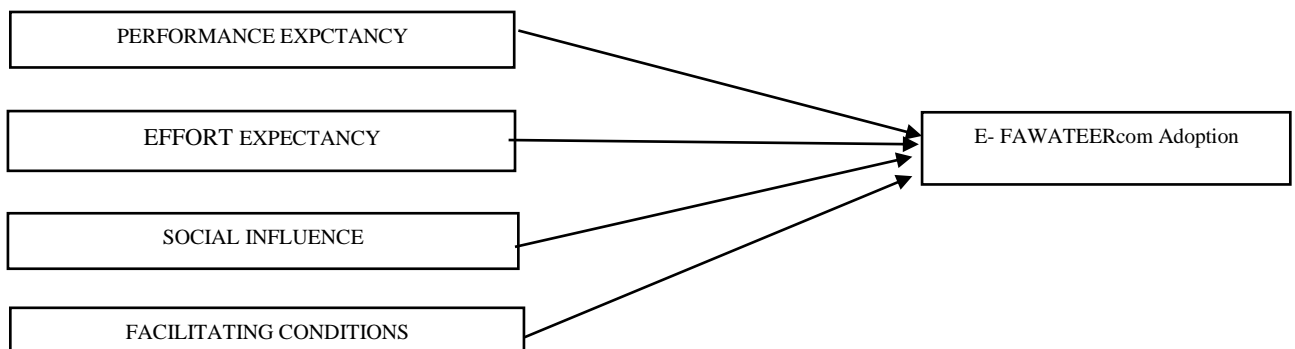


**Figure 1. Proposed framework**

In line with the above framework, literature and supporting theories the following hypotheses were developed. This is in congruent to the earlier studies that display that performance expectancy is one of the main factor in acceptance and use of technology (e.g., Venkatesh et al., 2003; Bandyopadhyay and Fraccastoro, 2007; Al-Gahtani et al., 2007; Wang and Shih, 2009; McLeod et al., 2009). However, Carter et al. (2011)  found that three out of four UTAUT's constructs that encompass facilitating conditions, performance expectancy, and social influence were significant variables that influence the Americans intention to use the e-filing. UTAUT also suggests that performance expectancy is the strongest predictor of an individual's behavioral intention to use an information system/technology and is significant at all points of measurement for mandatory and voluntary settings (Venkatesh et al., 2003). While theory and literature highlight that performance expectancy predicts intention to adopt E- FAWATEERcom, the evidence did not indicate that such relationship has been explored in Jordanian context. Thus, the following hypothesis is formulated.

*H1: There is a positive relationship between performance expectancy and E- FAWATEERcom adoption in Jordan.*

In most studies conducted using UTAUT model, effort expectancy was found to influence positively behavioral intention to use information system platform.  Venkatesh et al. (2003),  indicated that effort expectancy has a significant influence on the user behavioral intention towards the usage of information technology. Despite this theoretical insight, available evidence did not show that the influence of effort expectancy on E- FAWATEERcom adoption in Jordan has been investigated. Hence, the following hypothesis is formulated.

 *H2: There is a positive relationship between effort expectancy and E- FAWATEERcom adoption in Jordan.*

Extant literature revealed that social influence is an important predictor of intention to adopt information technology. A study by Tung and Rieck (2005) found that perceived benefit, external pressure, and social influence to be positively related to firms' decision to adopt e-government services. The study of Tung and Rieck (2005) also found that e-government adoption is positively associated with perceived benefits,   external pressure,   and social influence. In fact, it was stressed that social influence is a   strong predictor of behavioral intention to use an information and communication technology (Dadayan & Ferro, 2005;  Venkatesh et al.,  2003). Additionally, evidence also revealed a significant relationship between the social influence construct and behavioral intention (Venkatesh et al., 2003). However, evidence in Jordanian context on the influence of social influence on E- FAWATEERcom adoption lacks in the extant literature. Consequently, the following hypothesis is formulated.

*H3: There is a positive relationship between social influences and E- FAWATEERcom adoption in Jordan.*

Facilitating condition is an important construct in technology adoption models including UTAUT (Venkatesh et al., 2003). Carter et al. (2011) discovered that three out of four UTAUT's constructs that cover facilitating conditions, performance expectancy and social influence were significant factors that affect the Americans' intention to use the e-filing. Wang and Shih (2008) found a positive relationship between facilitating conditions and actual usage of technology. While available evidence depicts the influence of facilitating condition of IT adopting, the evidence is not readily available on the influence of facilitating condition on E- FAWATEERcom adoption in Jordan. Thus, the following hypothesis is formulated.

*H4: There is a positive relationship between facilitating conditions and E- FAWATEERcom adoption in Jordan.*

## 4. Conclusion

This paper provides a theoretical basis on the determinants of E- FAWATEERcom adoption, through the  UTAUT  theory.  The  major  reason  for  using  UTAUT  as  underpinning  theory  is  that  it  is

comprehensive in nature and recently more acceptable among researchers compared to other technology acceptance models. The UTAUT framework has some key advantages, among them is that the theory is suitable in the prediction acceptability of information system among employees in large organizations. Currently, the authors are conducting a study and the result is expected to provide some evidence in terms of the impact of E- FAWATEERcom adoption , adding to existing literature which concentrated on the impact of E- FAWATEERcom adoption. Additionally, the study offer contribution to the literature for the fact that relatively few studies were conducted in the accounting field using UTAUT variables and also on E- FAWATEERcom adoption in the Middle East region, especially in the context of Jordan. Therefore, this study can be considered the first that proposed the assessment of E- FAWATEERcom adoption

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