

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

At present, governments, worldwide' prefer e-governance instead of traditional governance (Khasawneh & Abu-Shanab, 2013). Additionally, municipal and other services of the government become more accessible to the public as more information is available to the masses and thus e-government makes the government more accountable. Because of e-governance, the public is also able to receive government services irrespective of time and place (Mukherjee & Sahoo, 2010).

In this chapter, the conceptual framework of e-government is discussed in detail using the content method. Simultaneously, the principles of e-government were also examined in-depth with special attention to the e-government activities of the Hashemite-government of Jordan. Furthermore, much of the research is dedicated to developing organizational models of performance, as the performance of employees is a critical factor in assessing the effectiveness of any organization (Carter et al., 1992; Bahn, 2001; Noman, 2003).

A brief portion of the chapter is dedicated to measuring performance on individual levels in the complex public sector (Al-Naimat et al., 2012). Other

challenges of performance management like job nature, working environment, and various other



sectors also addressed. Various performance evaluation procedures in vogue and the uses of performance information are examined. In a nutshell, this chapter examines the conceptual framework of e-government along with employees' motivations and their performance.

2.2 Job Performance

With information communication technology, e-government helps businesses and the citizens to receive governmental services irrespective of time and space (Al-Shboul et al., 2014). The government's consent is required in implementing such innovative policies in addition to willingness of government's employees to transform a traditional governmental institution into an e-government institution (Majdalawi, Almarabeh, Mohammad & Quteshate, 2015). Therefore, performance of the employees regarded as the outcome of e-government rather than driver of e-government (Khasawneh & Abu-Shanab, 2013). Accordingly, factors influencing employees' performance via the use of information systems becomes an essential theme in the context of e-government services (Al-Shboul et al., 2014; Dasgupta & Gupta, 2010).

Overall performance of an organization is the collective results of the organization's work. Its integration includes employees' performance in their organization's units, the organization's units' performance in the general framework of the organization and the organization's performance about the outside environment, economic, social, and cultural, etc. (Majdalawi, Almarabeh, Mohammad & Quteshate, 2015).

Employees' performance can be evaluated by varied indicators. By evaluating employee's performance, it ensured that the work environment, regulations, and implementation in each department are set to achieve effectiveness and efficiency (Zall & Rist, 2004).

Job performance is a subjective matter (Dasgupta & Gupta, 2010) and therefore it has been defined differently by various field experts. All the varied definitions of job performance have some common terms which are 'employee or individual' (Venkatesh, Thong & Xu, 2016), 'assigned task or duty' (Venkatesh, Thong & Xu, 2016), and 'organization' (Abu Aleinein, 2016). A comprehensive definition of job performance is the assessment of quality and quantity of an accomplished task as well as the behavior of the employee at workplace (Abu Aleinein, 2016). In any organizational setup, job performance is a micro or individual-level variable. Nevertheless, this variable alone can determine the fate of the entire organization as success and failure of the organization both are dependent on this variable. Academically job performance is a part of psychology specifically of organizational and industrial psychology and human resource management.

2.2.1 Individual Performance

Individual performance is accomplished task by a worker within the organization to achieve the organizational goals. These tasks are usually assigned to workers by the organizational leader; therefore, the leaders only can evaluate such actions directly, and while evaluating they consider several factors like the cost, quality, and time taken (Sudnickas, 2016).

While evaluating the job performance of an employee, the utility and effectiveness of the task accomplished must also be taken into consideration in addition to the task's quality and quantity (Abu Aleinein, 2016). The utility is the relevance of the employee's task to the organizational core objectives and effectiveness is the role played by the accomplished task in achieving organizational core goals. Various organizations and institutions like a business, governmental, non-profit and the like exist in contemporary human societies. The goals of these different organizations vary and so each organization has peculiar standards of evaluating their employees' performance. Due to the presence of such varied organizations' evaluation standards, job performance is a multidimensional subject. Campbell (1990) has used the term 'behavior' for job performance as he considers job performance more than just task accomplishment or productivity.

Sonnentag, Volmer and Spychala (2008) identified several factors that affect the job performance of an employee, these are:

The first factor is the behaviors that are specific to the task i.e. the core parts of a task that differentiate it from another task. The employee must undertake these behaviors to complete the task (Sonnentag, Volmer & Spychala, 2008).

The second factor is the behaviors that are not specific to the task concerned. The employee may carry out these behaviors additionally, for instance, indulging in training activities apart from completing daily essential duties (Sonnentag, Volmer & Spychala, 2008).

Communication is the third factor that affects job performance. Employees have to carry out oral and written, formal and informal communication at workplaces while discharging their responsibilities (Sonnentag, Volmer & Spychala, 2008).

Dedication of employees towards their job responsibilities is also a crucial factor (Abu Aleinein, 2016). This dedication can be assessed by evaluating the efforts which the employee is making for task achievement. In hard times, employees' dedication can easily be identified.

Organizational discipline is another factor that affects job performance. Good discipline will ensure in time task completion and a smooth working environment at work centers (Sonnentag, Volmer & Spychala, 2008).

Teamwork is another critical factor (Dakhoul, 2018). It is especially required when the group goals require team members' cooperation. Extensive help and advice are required in realizing group goals and teamwork affects outcomes in such cases (Sonnentag, Volmer & Spychala, 2008).

In vertical organizations, leadership style also affects job performance. Especially in governmental organizations, supervising and leading factor predominantly determine outcomes (Abu Aleinein, 2016).

In addition to leadership, the management of any organization also affects that organization's productivity by reducing or enhancing the employee's performance.

In addition to the factors that affect the job performance of an employee, Sonnentag, Volmer and Spychala (2008) also suggested three core determinants of employees' performance at workplaces. These three determinants are subject knowledge, procedural knowledge and skill, and motivation. Subject knowledge refers to the nature of task i.e. the employee must know what to do in the first place.

Procedural knowledge and skills are the familiarities with the set procedures i.e. the employee must be able to comprehend the entire steps involved in task

achievement and the skills refer to skills like communication skills (Sonnentag, Volmer & Spychala, 2008).

Motivation is the third and most important determinant of job performance. A motivated employee will put every possible effort into achieving his and organizational objectives (Sonnentag, Volmer & Spychala, 2008).

Apart from these determinants, employees' emotional intelligence, cognitive development, and the like factors can predict their job performance. Various studies have shown that the prevalence of negative behaviors like 'bullying' impacts badly job performance. Work experience can considerably improve the job performance of the employees, but this improvement is the same for a twenty years experienced worker and five years experienced worker. The experience costs life years so experienced workers are aged workers and age also affects the performance at work centers (Sonnentag, Volmer & Spychala, 2008).

2.2.2 Job Performance in the Governmental Organization

Although other factors are also relevant in job performance, in governmental organizations predominantly revolves around two factors, the first one is legal, and the second one is economic. The legal aspects are inducting and retaining the required workforce, devising their rule of conduct and the like. Economic aspects cover the salary package, promotions i.e. career path and retirement and pensions. Job performance appraisal systems also affect the performance of government employees, as promotions are in most cases dependent on these performance appraisals.

In a research study, 'Career Commitment and Job Performance of Jordanian Nurses', the authors Mrayyan and Al-Faouri (2008) found that all nurses irrespective of their job performance were equally committed to their careers. Jordan is an Islamic country, so Islamic ethics have also a profound impact on the job performance of governmental employees. In another study, 'The role of Islamic work ethics in developing organizational citizenship behavior at the Jordanian Press Foundations', Alhayasat (2010) has concluded that employees of Jordanian Press abide by Islamic ethics which in turn have impacted their job performance positively. So as the case with any governmental organizations, the economic and legal aspects play a significant role in the job performance of the Jordanian government's employees.

2.2.3 Effects of Job Atomization on Job Performance

Job atomization is referred to as the replacement of a full-time career job with the contract based and short-term jobs. The induction of robots in our organizations especially industrial organizations is badly affecting the job performance of human employees. The human workforce is feeling threatened by the robotic employees. The fear of the human workforce has transformed into dismay and therefore they are lacking the motivation to perform the tasks. As these smart machines have no time-constraints and they are also not tiring workers, so these bots perform well on certain repetitive tasks as compared to their human counterparts. Therefore, much workforce is fearful of losing their jobs to these automated machines.

Despite their superiority in certain fields, organizations will still need human employees and opportunities will arise for certain skills in the future. In the future, the

effects of job atomization will be felt more clearly, when humans fully acclimate to working with smart machines side by side. However, at present job atomization, has enhanced organizational performance by incorporating these smart machines yet it also negatively impacted the individual performance by instilling fear in them.

2.2.4 Deficiencies Addressed by Measurement Indicators

Following are the challenges in assessing accurately the government performance measurement indicators: diverse governmental activities, multiple and conflicting goals of government organizations, the difference in the organizational structure, the difficulty in defining unified measurement units for all agencies and the difficulty of establishing performance indicators for some of the tasks. Indicator measurement characteristics are essential in organization performance measurement (Kankari, 2005), while the most important characteristics are: the indicators to examine the methods in which government agencies work, to recommend the best and divide the work into its different elements, and the steps followed in order to shorten and eliminate unnecessary elements (Hodges & Mellett, 2003).

1. Indicators study work conditions and their impact on time and cost and are concerned with the possibility of developing employees' performance rate for each work element.
2. The indicators expose the development of organizational structure in line with programs and performance methods.
3. Performance indicators analyze the government work and lead to determining time, costs and the best way to perform the work and

determine the performance average, then access to performance indicators.

Kankari (2005) identified the areas covered by the measurement indicators, which include a variety of fields; they can be identified in the following activities:

1. Activities that can be measured and others that cannot be measured:

The activities that can be measured are always business unit activities with identical work units, and in all similar organizational units, such as the issuing of passports and personal identification cards (Kankari, 2005). The activities that are difficult to measure are those for which a suitable measuring unit is not available and therefore it must be determined by alternative indicators.

2. Major and supportive activities:

Major activities also known as “specialized” or “technical” activities are the activities that are described by their major functions: for example, the major activities for each ministry are described along with the subsequent administrative units in accordance with the administrative organization structure (Berry, Berry & Foster, 1998). In contrast, assisting the technical departments is the role of supportive activities and such supportive activities is mainly carried out in management and financial affairs (Berry, Berry & Foster, 1998).

2.2.5 Specified and Non-Specified Activities

The specific activities are very specific and clear, so the employee who is assigned the specific activity can be questioned regarding the assigned work, for

example an employee who is tasked with the preparation of the employees' salaries, while the non-specified are broad and non-specific such as the responsibilities of managers or directors. As Martin (1989) notes, these activities cannot be measured quantitatively because of the absence of precise quantity of work that can be measured.

2.2.5.1 Fixed and Dithered Activities

There is no increase or decrease in fixed activities irrespective of time, but for the worker who faces changes in work capacity will lead to change in their workload, such as a worker in the passport issuing department, for him the workload changes according to the season. Therefore, such changes in work types and workload in government departments require a variety of indicators according to the nature of activities (Kankari, 2005).

In literature review, it has been found that there are several human resource management factors that can influence firm performance, including the performance of employees. Among these factors, certain factors like stress, job satisfaction, organizational culture, and training and development have been explored in depth and researchers have related these factors with employees' performance evidentially. Western studies have related employees' performance with the increased competitiveness and economic growth of their countries (Kettani & Moulin, 2014). These studies conclude that a developing country, with rich natural resources and adequate financial support, can achieve economic success and increase its competitiveness by adopting the right tools to increase employees' performance.

Extensive research provides greater understanding behind the significant variation in job performance among employees. Factors such as gender (Stevens et al., 2009), age (Ng & Feldman, 2008), salary (Gerakos et al., 2007), stress (Hourani, Williams & Kress, 2006), motivation and job satisfaction (Wang et al., 2011), training and development (Budds & Sultana, 2013), and organizational culture (Alvesson, 2012) have been studied to determine the relationship between these variables and job performance.

Individual factors such as aptitude, knowledge, skill level, and rewards are also responsible for the good performance of employees. Good and subjective knowledge about the work enhances the capability of employees, and it will ultimately affect productivity and growth positively (Budds & Sultana, 2013).

Efficiency and effectiveness of working is increased through enhancing skills like technical, operational, leadership, and management. On job training, also increases the efficiency of working, which will ultimately result in the growth of the education sector. Employees should be kept abreast of the recent developments especially those related to the economy of the country (Budds & Sultana, 2013).

As Kok (2009) argues, employees' performance and sustainability are very important to maintain and facilitate a value-added education system. Academic institutions and universities should hire well-educated and capable employees who can face challenges of the present time. Value-added education system should not be compromised in any circumstance because the academic qualifications of employees have an impact on their performances (Rani & Khan, 2015). Nowadays, several institutions are compromising on the academic qualifications of their employees while hiring them. Despite qualified staff, certain institutions are hiring employees who are

willing to work for a lower salary, and this behavior in the long run affect negatively their performance (Rani & Khan, 2015).

Job performance is a multi-dimensional subject that needs to be treated as such. Job performance is critical to the success of any organization. In addition to its multi-dimensionality, several factors affect the job performance of employees. Improving job performance of individual employees and instituting accurate performance appraisal mechanisms are the only way for the success of governmental organizations. The e-governance institutions have also come up with innovative appraisal mechanisms in addition to improving the employees' performance on the ground, so they are flourishing. In contrast, traditional organizations are still struggling because of ignoring this critical success factor.

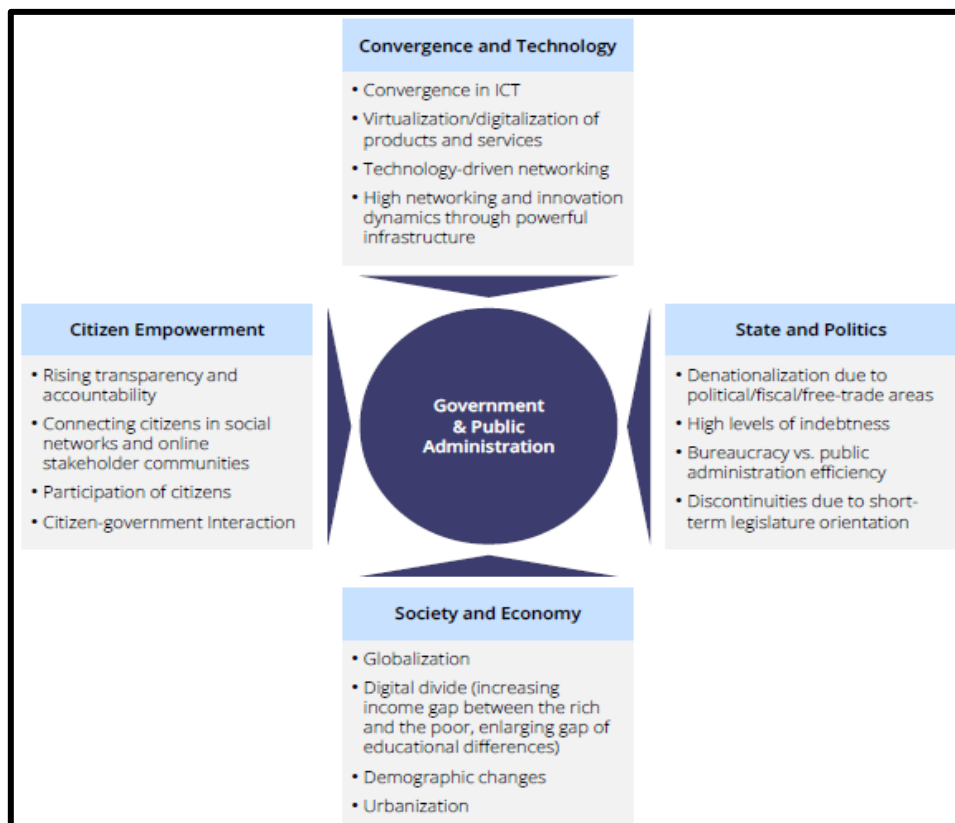
2.3 Usability of E-Government

In the last decade of past century, governments and public authorities started running the first electronic operations in government sectors. These electronic operations made possible due to the enhanced processing power and transmission capacities of computers (Block & Keller, 2015). This enhancement of computers' efficiency led to their networks like local area network (LAN) and wide area network (WAN). With these innovations, the demand of electronic information, services, and transactions grew in masses as well as in businesses alike (Kettani & Moulin, 2014). Subsequently, the government also resorted to electronic operations and thus the concept of e-government was born (Dawes, 2009).

E-government is the technology-enabled part of the governance and it quickly identified as a robust system having several associated benefits (Kettani & Moulin, 2014). Because of e-government, a quick access to information and services is now possible, and this is improving government stakeholder interaction. This novel government model enhances efficiency and effectiveness of public sector organizations, and from technological point of view, it provides a forum for the evolution of e-democracy (Kettani & Moulin, 2014). Moreover, a more robust stakeholder-government interaction develops standard procedures and results in a unification of citizens. Unity among citizens results in increased demands for transparency and accountability (Cozzani, 2015).

E-government has successfully addressed needs and requirements of the citizens and other stakeholders and therefore it has become an inseparable part of governance worldwide (Yanqing, 2010). So now, the e-governance is an essential topic for citizens because of its associated benefits. The e-government is highly crucial for the economy of a country, because at present availability of online public services is an essential factor within global competition (Zhou & Gao, 2007).

Figure 2.1 introduces four driving forces for an e-government model that can be explained behind the situation, requiring change for government and public administration. This model aggregates relevant drivers to four key developments: convergence and technology, state and politics, society and economy, and citizen empowerment.



Source: (Wirtz & Daiser, 2017, 36)

Figure 2.1: The Four Forces Model of E-Government

According to Wirtz and Daiser (2017), the first force of the e-government model is convergence and technology. The authors consider convergence and technology to be the most significant elements covering the fundamental breakthrough of making e-government technologically possible. Here, convergence describes the approximation of underlying technologies, diminishing sector boundaries, networking of different public and non-public areas of value creation, and finally, integration of sectors, business units, organizations, products, and services (Denger & Wirtz, 1995). This underlying technological innovation is the reason of a comprehensive service provision. Depending on the individual level of aggregation, convergence divided into different types (Wirtz, & Ehret, 2013).

2.3.1 Sector level: In any industry, several related organizations joined

1. Organizational level: Institutional boundaries are redefined because organizational level convergence forces organizations to reinvent their value chains and core operations.
2. Organization unit level: Convergence at the unit level of organization mean that units of same or different organizations join.
3. Service and product-level: Convergence at the service and product-level refers to the confluence of services, content; e.g., standardization of formats, distribution channels; e.g., the same distribution channel for formerly different forms, or products; e.g., convergence through the integration of functionalities.
4. Several drivers fuelled this convergence, some of these drivers such as virtualization in addition, digitalization of services and technology-driven networking, which in sum caused an essential strategic and operative change in all forms of electronic business and governance. Still, this change continues. The already developed infrastructure of broadband (which is still continuously developed and maintained) is regularly driving new networking applications and innovations (UNDESA, 2010).

State and politics is the second force. From this point of view, certain technological preconditions are required for international cooperation in political and administrative realms (Crook & Manor, 2018). The respective governments are responsible for the creation of these preconditions that will in consequence accelerate the ongoing decentralization of countries, and the smooth regional merging of markets and nations. E-government is a best-fitted answer for overcoming this challenge

because it is an Internet-based solution and therefore it provides the opportunity to quickly establish an online environment that allows worldwide government-user interaction (Cheema & Rondinelli, 2007).

However, at the first glance, technological solutions seem to contradict the expensive implementation of e-government solutions. However, the expected e-government cost-cutting effects, which are achieved, for example, by automation, standardization, and outsourcing of activities, fit the current need to economize, and the cost-saving character of e-government has positive side effects on managing indebtedness (Wirtz & Daiser, 2017).

This goes along with the desire for an increase in public administration efficiency. In this context, e-government is preferred system because of its automation and standardized administration processes (Singh, Goyal, & Sharma, 2012). Electronic banking is a comparable example of e-government. In traditional banking, clients must visit physically their bank's branch to carry out transactions but now, they can conduct every transaction from home at any time thanks to the electronic banking (Deep & Sahoo, 2011).

This form of automation and outsourcing of activities to the client has led to a significant cost reduction of (70) to (90%) in e-banking service delivery (Wirtz & Daiser, 2017). Considering the prevailing political discontinuities caused by short-term orientation on votes and legislative periods, e-government is, despite being an election campaign-friendly topic, not universally supported by decision-makers in the government and the public sector due to its legislature period and transformation processes (Reddick, 2010). Thus, political discontinuities represent an adverse driver or obstacle.

Society and the economy is the next force. Globalization, demographics, the digital divide, and levels of urbanization are the major drivers of society and the economy. Effects of globalization such as high economic interconnectedness and international assimilation of lifestyles require a stronger public sector, which focuses on superregional and supranational demand aspects, as well as on transnational cooperation of governments and federal authorities (Manoharan, 2011).

As e-government is internet based so it is a global medium, and it is the right system for tackling the situation. In a society, always differences exist when it comes to accessing the internet and use of the information communication technology equipment among different social groups. This difference known as digital divides (Razmerita, Kirchner & Nelson, 2016).

Regarding digital divide, Wirtz and Daiser (2017) formulated two key hypotheses: (1) the use of modern information communication technology is not distributed evenly within society since its access depends on social factors, and (2) this odd situation leads to social disparities of opportunity.

This digital divide is due to two reasons. These two reasons are differences in the income and academic qualifications among population (Ragnedda, 2017). Due to the apparent polarization of income and differences in the educational levels among different social groups, the risk of a digital divide is also suspected to be present online; through e-government opportunities can be created in terms of citizen-government or organization-government interaction by ensuring a uniform access to information and services in the same form and quality to all users (Ragnedda, 2017).

Changes in demographics is another aspect of the societal and economic force which refers to the situation of presence of a high proportion of older people with only

limited Internet skills, this older members of the population have to face digital natives; young generation that grew up with information communication technologies (Pew & Van Hemel, 2004). Digital natives are more demanding when it comes to increase online information and service provision.

Internet usage patterns shown by the majority of the digital native generation so it is safe to infer that this generation prefer to manage their public administration matters online individually; this situation is seen as an opportunity to relieve the public administration workload through automatization and outsourcing massively (Emdon et al., 2014).

Automation in this context refers to running the tasks automatically by electronic means, and independent of staff (Schware, 2005). Outsourcing is the shifting of functions from public administration staff to the user, e.g., data input, filling in online forms. On the other hand, e-government also faces severe strategic and structural challenges because of the presence of this older generation and the population living in remote areas of a country with no or limited access to a reliable internet connection (Schware, 2005).

To overcome these challenges, the countries must come up with innovative solutions because gaining and maintaining the confidence of the major chunks of the population is a prerequisite for comprehensive and nationwide provision of information and service (Shekar, 2019). A report mentioned in Shekar (2019), it stated that there are four critical recommendations to address this situation were presented: first, a digital society; second, digital infrastructure; third, digital co-production; and fourth, a digital location policy.

A digital society refers to an informed and active regional community which becomes habitual of self-e-government services and jointly develops (citizens, public administration, and politics) local solutions. Digital infrastructure refers to the establishment of high-speed Internet and related information communication technology (Asgarkhani, 2005). Digital co-production is active participation of citizens in public administration service provision, e.g., citizens inform citizens about administrative procedures. Finally, public communities actively foster collaboration across administrations. Consequently, decentralization takes place which open innovation networks with society, economy, and science to promote local development (Asgarkhani, 2005).

United Nations Development Program (2016) notes that with extensive urbanization, it is not practically feasible to keep up expensive decentralized public administration and to maintain a high territorial presence from a cost perspective in the long term. Cost constraints ultimately reduce the density of public administration resources and thus local public service provision, requiring more centralized and automated public service provision. In this context, e-government is a flexible and cost-effective platform for meeting these demands efficiently (Asgarkhani, 2005).

Citizen empowerment is the fourth force. This force relates to the citizens. Because of new information and communication technologies, government actions are more accountable to the public now and citizens can unite in social networks and readily exchanging their desires and opinions ("Citizen Participation and Technology", 2013). Therefore, their influence on political and administrative processes has increased and they can influence voting patterns more strongly, so citizens are now more empowered. Furthermore, the empowered citizens participate

more aggressively in public policy formulation and therefore the citizen-government interaction is redefined in this era of e-government (Citizen Participation and Technology, 2013). In this new citizen-government interaction, the governments must integrate citizens into public issues and the governments must develop more transparent governance.

After discussing the above forces of e-government, an integrated management approach seems mandatory to handle the multitude of interrelated impacts and activities. It was found that an acceptable definition of electronic government is needed since these differences in descriptions of the term “e-government” reflect the priorities in government strategies. Therefore, some of these definitions are discussed in the next section.

2.3.2 E-Government Definition

E-government has been defined differently by various experts of the field and now it has become difficult to get a specific, and comprehensive definition, because of the technical, administrative, commercial and social dimensions that affect it (Gokmen, 2010). E-government, also known by different terms such as “electronic government”, “electronic governance”, “digital government”, “online government”, “e-Gov.” etc. E-government is the government’s use of information communication technology and the most innovative Internet application technologies to provide more access that is convenient for citizens and businesses to government information and services, to improve the quality of services and to provide greater opportunities to participate in democratic institutions and processes (Fang, 2002).

Gilder (2000) defined e-government as: “economic activity acting to deliver public services in an integrated way and electronically online to citizens and business organizations to add real value added felt by the beneficiaries, and also to contribute to the formation of interactive relationships with individuals or citizens’ institutions by providing them with services of an atypical nature commensurate with their privacy, needs, desires and aspirations. While the World Bank (2015) defines e-government as e-government” refers to the use by government agencies of information technologies (such as wide area network, the Internet and mobile computing) that have the ability to transform relations with citizens, businesses and other arms of government.

The use of information communication technologies in government affairs serves a variety of different purposes: better service delivery, improved interactions with business and industry, and citizen empowerment through access to information and more efficient government management. As a result, the benefits we get are less corruption, increased transparency, greater convenience, revenue growth and/or cost reductions (Ud Din et al., 2017). Alquist and Chinn (2001) stated that for developing opportunities in administrative and economic domains, and for the provision of services to their citizens and businesses irrespective of their location, e-government invests in advanced information communication technology. Thus, it can help businesses and citizens as clientele to go online to get the services they want, enabling them to achieve higher levels of productivity and support better performance.

Technically speaking, e-government is an integrated tool comprising three enabling sets of new technology: infrastructure, solutions and the exploitation of public portals (Fang, 2002). An e-government infrastructure enables the

implementation of specific applications to address specific problems and issues of government management. In this regard, Hussein (2018) defined e-government as “a sophisticated network of computer systems that enable public access to a large number of government services and automated transactions over the Internet or other electronic means”.

In the above-mentioned definitions, two issues are common which are: (1) information communication technology, and (2) government legislation for using such technologies for electronic government practices. Therefore, e-government may be defined as the use of modern information communication technology equipment, and networks especially the internet and internet, to dispense information and government services to the citizens and private sector in the society.

Accordingly, in this study e-government means a way for governments to use the most innovative information communication technology, using web-based Internet applications, to provide citizens and businesses with more convenient access to government information and services in order to improve the quality of provided services, and to provide greater opportunities to participate in democratic institutions and processes. Based on that, there is a need to understand the principles of electronic government, which may be more suitable to developing countries (Misra, 2007) as explained in the following section.

2.3.3 Principles of E-Government

A South African government green paper on transforming public service delivery lays down seven principles of public service delivery based on consultation, service standards, courtesy, information, openness and transparency, responsiveness and value for money (SAGI, 1996) which should be kept in mind while designing any public service delivery, while for making e-government criteria-based, appropriate standards have to be developed to realize the full potential of e-government.

Principle 1: E-government prefers in-house expertise to out-of-house expertise. Indeed e-governance was pioneered, owned, and successfully operated by governments themselves in the (1960s) and (1970s) (Dunleavy et al., 2006). Private companies started entering governments and discharging their functions in the (1980s), and more particularly since the mid-1990s when the Internet itself, pioneered by government, was made accessible to the public. Aggressive promotion of a public, private partnership (PPP) model in e-governance further weakened the technological capability of governments. As a result, governments stand technologically impaired today, even in terms of overseeing private contracts (Verkuil, 2007).

Principle 2: E-government is wary about introducing private sector practices in governmental affairs as government is not business (Corbett, 2004). The private and public sectors are fundamentally different. The private sector is motivated by profit, while the public sector is driven by service. In addition, the private sector serves its clients in order of their capacity to pay while in the public sector, all citizens are treated as equal. Corbett (2004) notes: “The assumption that business models can and should be used for the development of digital government is misdirecting our attention from those variables and (a) governance-centric e-government (1/10) (b) techno-

centric e-government (9/10) (3) consequences which are not measured by business models yet provide the substantive benefits of government.”

Principle 3: E-government prefers open-source to proprietary software. The war, though uneven in terms of available resources, between open-source and proprietary software continues, with both sides having their own merits and demerits (Cordella & Willcocks, 2010). Because of the lower cost, amenability to change and more reliability than proprietary software, the open-source software is preferred by the government over the proprietary software. While preferring open-source software, the government must remain its doors open to any beneficial software though it is a proprietary one. Deek, Tepper and McHugh (2008) conclude that the future of the software environment will be a syncretistic one.

Principle 4: E-government is a networked government and not an integrated government. Calling for a mixed government (i-government) has become very fashionable in the present. However, it has become a norm, but this mixed government has been proved elusive in larger countries that have a complex system of governance (Sarker, 2006). Integrated government means a “merger” of various agencies to produce a “whole government”. This, however, is not possible as governments all over the world are bureaucratically organized and thus do not permit inter-agency merger.

Principle 5: E-government promotes the Chief Information Officer concept. The concept was originated in (1981) in the private sector and Chief Information Officer was conceived as the prime mover of information and communication technology. Many countries have set up elaborate mechanisms to interact, support and guide them by way of setting up Chief Information Officer councils (Misra, 2007). Japan is

leading in the promotion of the Chief Information Officer concept globally and in South East Asia in particular. Japan has also included a set of Chief Information Officer indicators in its ranking of e-government (Wu, 2007). Both the Chief Information Officer Model (1.0) of the pre-Internet and the Chief Information Officer Model (2.0) of the post-Internet period have failed miserably as both were techno-centric and not governance-centric.

Principle 6: E-government is introduced through an organization-wide e-business plan. One of the common failures in e-government, though still unrecognized, is our faulty approach to e-government planning (Heeks & Bailur, 2007). Governments have adopted a wide variety of ideas in the past to achieve specific goals. E-government should thus be introduced through a new “type of plan”, an “e-business plan”, which (1) is citizen-centric and criteria-based, (2) emphasizes the “e” aspect of the plan (missing in traditional methods), (3) deals with government working in a “businesslike” manner, and (4) is organization-wide, as compared to the present piecemeal project approaches, which are neither here nor there as they only tinker with government processes vis-à-vis the role of citizens in e-governance (Boersma, Meijer & Wagenaar, 2009).

Principle 7: E-government offers a multi-channeled approach for service delivery. Among these multi-channels, the two (1) online and (2) offline channels have come to prominence. The online channels include Web, E-mail, Kiosk, SMS, PDA and VoIP (Galal-Edeen & Abdel-Fattah, 2008). The offline channels include visiting an office (face-to-face or information and facilitation counter), call center, post (letters) and citizen grievance redress forums, Figure 2.2.

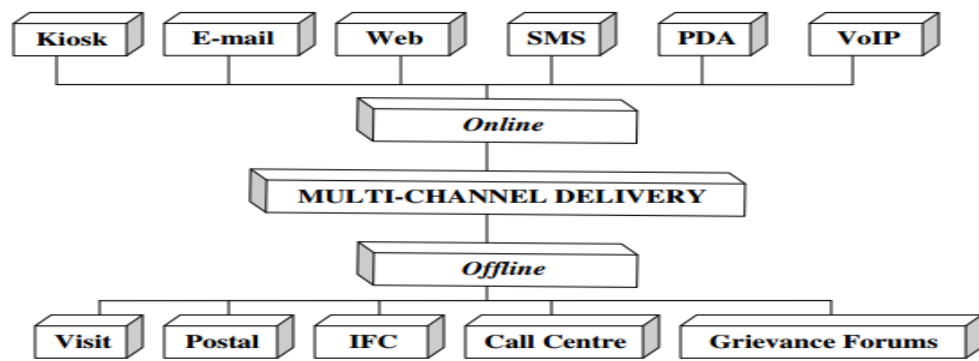


Figure 2.2: Multi-Channel Delivery of Public Services

The term “citizen” is deceptive as it is an umbrella term covering a wide variety of citizens in terms of age, gender, education, income, and familiarity with new technology (Misra, 2007). E-government must strive to meet the needs of these different types of citizens through multiple channels. Two things have to be ensured: first, these different channels do not offer different "levels" of service but are mutually consistent in content – this can be provided by joining these different channels and putting them under one umbrella to ensure uniformity in service; second, various channels have to exist to meet the needs of different types of citizens (Misra, 2007).

2.3.4 E-Government Targets

Because of the information technology, welfare of the citizens is enhanced, and they actively participate in decision-making and governance processes, through provision of services to the citizen instead of making the citizen to physically visit the governmental offices (Moynihan, 2004). Besides, the citizen can also access the transparently, and well-organized published information on government official

websites using information communication technology. The second strategic target is to facilitate the democratic process through publishing the political parties' programs and launching discussion forums to discuss the government's policies in general (Clift, 2004).

Through exploitation of information communication technology equipment and technologies, trend of electronic voting is emerging and it will ultimately expand the people's participation in the democratic processes, and this will increase the popularity of the governing system while showing cooperation, sympathy and understanding of the importance of facilitating services to citizens and fighting corruption and increasing transparency in decision-making (bin Naser, 2003).

Formulation of rules and developing transparency and work clarity is also one of the targets of e-government (Alsilmi, 2002). By updating accurate information and studies for various state departments, the decision-makers in the government will be assisted in long-term planning and development projects. These decision-makers can easily follow up with precise implementation to reduce the complexity of procedures through reorganizing administrative work for managing the social and economic resources of society for development (Alsilmi, 2002).

E-government will also enhance employees' efficiency and productivity by reducing the administrative and financial costs and the efforts. As less number of officers and less time will be required to carry out the daily tasks in addition to work accuracy in accomplishing the different functions so it will ultimately lead to enhancing and elevating the quality services introduced to citizens, and thus local economy will be boosted, through limiting the underemployment (Von Haldenwang, 2004). In addition, it will ease the bureaucratic restrictions, and ease the burden of

communications cost of the citizens. Ultimately, communication costs for citizens will be lowered significantly and thus use and reuse of databases will be increased (OECD, 2003). Costs of the government also reduced because of, development and novel innovation in completing the tasks (Singla, 2002).

Moreover, it will also create enormous administrative possibilities by enhancing governments' capacities for provision of information services to the masses at a reduced cost and through consuming less time in completion of transactions for example, taxes collections, especially for citizens who live in remote places (McGregor, 2001). This helps in creating a robust network structure to facilitate communication and delivering high quality, interactive decentralized and transparent services. This prompt communication and service delivery will increase government's accountability and will improve citizen's access to the desired information. The citizens will also participate and evaluate the performance of the government and thus forcing to change the political practices that have moved into electronic democracy (Wu, 2007).

The introduction of electronic services to citizens via the information communication technology technologies irrespective of time and space with superfast speed and efficiency will definitely gain gaining trust of the citizens (OECD, 2003).

Based on previous works of literature, e-government offers different services through electronic transaction. The differences in services are due to users' needs, and this diversity has given rise to the development of different types of e-government.

2.3.5 E-Government Major Field Activities

E-government functions classify into four main categories. According to Heeks and Bailur (2007), the e-government concept reflects governments' need to enhance and re-invent the actions needed and required from them, where e-government functions can be classified into four main categories (Alshehri & Drew, 2010):

2.3.5.1 Government-to-Citizen Relations (G2C)

The government-to-citizen relations are the first joint/ major category where services provided to citizens and others via comprehensive electronic resources (Kiki & Lawrence, 2006). In this category, the government addresses the individuals' needs through innovative actions. Under this category, government and citizens are continuously communicating when implementing e-government, thereby supporting accountability, democracy and improvements to public services. That is because the primary goal of e-government is to serve the citizen and facilitate citizen interaction with the government by making general information more accessible through the use of websites, as well as reducing the time and cost needed to conduct a transaction (Ndou, 2004).

By applying the idea of G2C, customers have instant and convenient access to government information and services from everywhere anytime- thanks to the use of multiple information communication technology channels (Kiki & Lawrence, 2006). In addition to making certain transactions, such as certifications, paying governmental fees and applying for benefits, the ability of G2C initiatives to overcome possible time and geographic barriers may connect citizens who may not otherwise come into

contact with one another and this, in turn, will facilitate and increase citizen participation in government (Seifert, 2003).

2.3.5.2 Government-to-Government Relations (G2G)

G2G is the online communications between government organizations, departments and agencies based on a government database (Iyer et al., 2006). Moreover, G2G also refers to the relationship between government and its employees as outlined below. The efficiency and efficacy of processes enhanced by the use of online communication and cooperation, which enables the sharing of databases, resources, and the fusion of skills and capabilities as well. By G2G information regarding compensation and benefits policies, training and learning opportunities, and civil rights laws can be accessed readily (Ndou, 2004).

The goal of G2G is to improve intergovernmental organizational processes by streamlining cooperation and coordination (Iyer et al., 2006). In addition, G2G front has also produced numerous instances of time and cost-saving and service enhancement through the use of information communication technology by different institutions of the government to disseminate or centralize information, or to automate and simplify intergovernmental business processes such as regulatory compliance, (Gregory, 2007).

2.3.5.3 Government-to-Business Relations (G2B)

The third e-government category is government to businesses relations. G2B can increase efficiencies of both governments and companies alike. The G2B covers various services exchanged between government and the business sectors, including distribution of policies, memos, rules and regulations. Business services offered include obtaining current business information, new regulations, downloading application forms, lodging taxes, renewing licenses, registering businesses, obtaining permits and many others.

G2B transactions also play a significant role in business development, specifically the development of small and medium enterprises (Pascual, 2003). Fang (2002) argued that G2B applications actively drive e-transaction initiatives such as e-procurement and the development of an electronic marketplace for government purchases and carry out government procurement tenders through electronic means for the exchange of information and goods.

Besides developing businesses, the system is also beneficial for government in the sense that it facilitates the prompt exchange of services, goods, and information between government and businesses. As in the case of G2C system, G2B enhances the efficiency and quality of communication and transactions of government with businesses, and consequently favoring equal and transparent government's contracting (Hong et al., 2003).

2.3.5.4 Government-to-Employee Relations (G2E)

Government to employees' relations is the less discussed sector of e-government in much of the e-government research. Some researchers relegated it as an internal part of the G2G industry, but Riley (2001) identified it as a separate sector of government. G2E refers to the relationship between government and its employees only. The purpose of this relationship is to serve employees and offer some online services such as applying online for annual leave, checking the balance of holiday and reviewing salary payment records, among other things (Seifert, 2003).

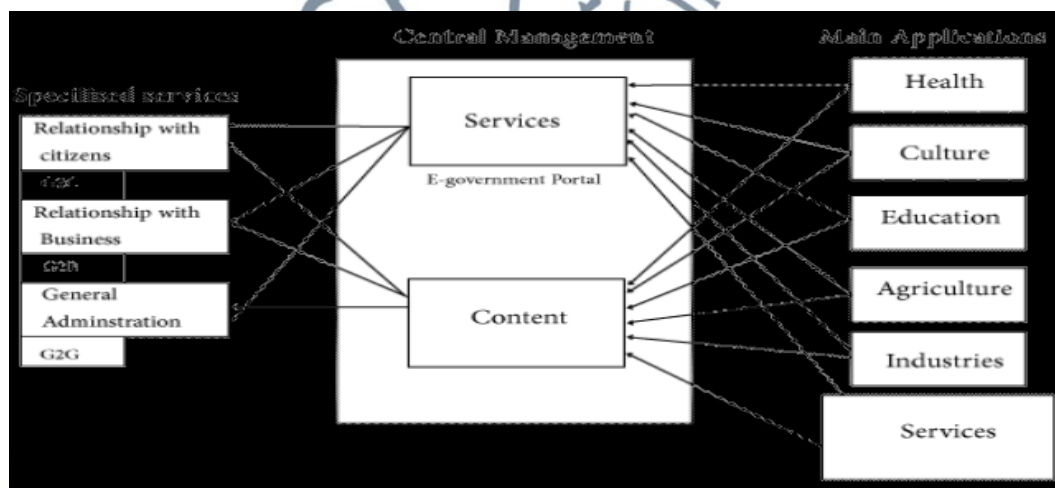
It is a combination of information and services offered by government institutions to their employees to interact with each other and their management. G2E is a successful way to provide e-learning, bringing employees together and encouraging knowledge sharing among them (Baležentis & Paražinskaitė, 2012). Moreover, it gives them the possibility of accessing relevant information regarding compensation and benefits policies, training and learning opportunities, and allowing them access to manage their benefits online with an easy and fast communication model.

Ndou (2004) added that G2E includes strategic and tactical mechanisms for encouraging the implementation of government goals and programs as well as human resource management, budgeting, and dealing with citizens. It concluded from the above discussion that there are two main constituents of e-government:

1. Online Job: which does not limit the worker to time and space to finish the required task, meaning that the mission could be accomplished from any place; the employee's main responsibility is to complete the assignments from any place, even from their house.

2. Online service: the beneficiary could get the needed services regardless of time or location. It is evident that the primary tasks of electronic government are fully integrated within the framework of the services and the functions provided to beneficiaries; such services are offered through the e-government website. The e-government services offer many options that mainly cover service areas needed by recipients, including but not limited to: economic, social and humanitarian needs connected to individuals and society as well as special inquiries when required, Figure 2.3.

In addition, much information could be exchanged and provided to beneficiaries, citizens, government departments and even visitors through the information and content management departments' websites, or unique requested information that could be tailored and prepared from the databases of the e-government website management.



Source: (Schlegel, 2002)

Figure 2.3: Integrated Application of E-Government

It is well noted that as state bodies contact citizens within the frame of their activity, commercial structures and other public authorities, there are four components of the e-government system. Creation and implementation of all four “e-government” components are inseparably linked. Without G2C or G2B, implementation of G2G will give a one-way effect, leading to an inefficient waste of time and money, creating informational chaos and discrediting the idea of “e-government”. That is why the development and consistent realization of development programs of all e-government components are significant (Barsagade, 2020).

2.3.6 E-Government in Jordan

Now, the development of e-government in Jordan will be analyzed with a focus in applying a general framework of e-government through discussing the past, present status and plans for e-government in Jordan. Blakemore and Dutton (2003), in their research “e-government, e-society and Jordan: strategy, theory, practice, and assessment”, analyzed the strategy statements of e-government project implementations in several countries and summarized the expectations of these nations from implementing an e-government project:

1. G2C with citizens being treated as customers not administrative objects:
 - Receiving services that are citizen- not agency-focused.
 - Disintermediation of civil service staff means making services delivered directly to the citizens.
 - Intelligent authentication like smartcards.
 - Providing access to governmental information.

- Being provided with access to the physical ICT infrastructure.
- Being made “more equal” (reductions in digital and other divides).
- Enhancing trust and making it stronger.

All these expectations can be included in Jordan in transport registration, insurance, unemployed compensation, collecting income taxes, leaving work programs (retiring), licensing and welfare benefits.

2. G2G involving good governance and a well-governed society, where this kind of relationship in G2G can be found in the United States, such as state to local government, an integrated justice system or state to the federal government.
 - Reducing the fractured nature of individual departments and agencies and moving towards “joined-up” government, such as by joining all the governmental departments together and facilitating the transfer of related data between them. This will make it less time-consuming and make progress more effective.
 - Making the culture of the civil service change from reactive to proactive.
 - Accountable and open government.
 - Cost-effective procurement.
3. G2B to achieve robust business development.
 - Deregulation and legislative reform.
 - A national economy with flexibility and competitiveness within the global markets.

- Skilled IT literate and flexible citizens for the labor market G2B could be found in Jordan in the clearinghouse for cheques, clearing between central banks on one side and other banks in the economy.
4. An integrated society, where long distances and borders are not a problem anymore; on the contrary, saving time and fast services will be the new trend. Results of achieving the e-government in this way will be noticed as follows:
- Connecting of rural and remote areas with high-speed Internet access, so all people can get the same services provided online.
 - Citizens will be able to make their payments for many governmental charges from home.
 - Overcoming some barriers that used to be a problem in the standard government such as disability and gender barriers, although this depends on the country or culture; for example, disabled people in most developed countries can do their duties by themselves, as everything is ready for them. However, in the developing countries, it is almost impossible for some disabled people to carry out most of their governmental procedures by themselves, as there are no facilities to help them. That means e-services will be useful for disabled people and almost ideal.
 - Increasing the sense of community.

To achieve the previous expectations, e-government in Jordan has offered an e-government portal to deliver informational and directory services related to the government of Jordan in the first stage. In the second stage, the e-government portal

will be fully integrated with the e-government enterprise federated architecture and shared services, finally enabling transactional e-government services (transactional portal) (Blakemore & Dutton, 2003). Ultimately, the portal will be a “one-stop-shop” for user interaction with all Jordanian government entities.

The e-government strategy report for Jordan (MOICT, 2006), which was done by the MOICT, addressed a lot of different useful information about the e-government in Jordan, including the four pillars of e-governance in the country (i.e. the institutional framework, the legal framework, the information communication technology infrastructure and business) and the national e-government vision (“e-government in Jordan is dedicated to delivering services to people across society, irrespective of location, economic status, education or information communication technology ability”).

With its commitment to a customer-centric approach, e-government transformed government and contributed to the Kingdom’s economic and social development. As there are several goals of an e-government so, the order of achieving these varied objectives may vary from country to country. As Blakemore and Dutton (2003) note in the case of Jordan, the most important identified objectives are:

1. Facilitating information exchange within the-government body so that the dependency on the human factor to exchange documents and information between government departments is reduced.
2. Develop and support a strategic e-government program to reach unified applications in different government bodies.
3. Establish technological integration and internal connection between e-government projects, and to encourage the use of applications and its

components in all government sectors, and finally directing all government departments to use technology-based solutions.

4. Transfer training, knowledge and experience to government employees of all levels to develop, enhance and accomplish a higher standard of government e-services.
5. Achieve an upgraded service quality in a way that suits the experiences and qualifications of the services personnel to manage the e-government program and approaches.
6. Support and develop e-government procedures to increase productivity and public sector efficiency.
7. Apply e-government initiatives by increasing information safety, protection and secure e-government.
8. Provide the needed information securely and accurately within a suitable period.
9. Improve the quality of services introduced to citizens, businesses and the government sector.
10. Support and facilitate all government services and work in becoming more efficient and transparent.
11. Reduce the cost of and facilitate communication and interaction with government organizations.
12. Develop and promote the technology and communication sector in Jordan.

In (2014-2016), Jordan unveiled its new strategy of e-government. This new strategy focused on motivating government entities to deliver high quality customer-centric and performance-driven services to e-government beneficiaries while

simultaneously, transforming traditional service delivery into a more effective and efficient service provision to their heirs (citizens, residents, visitors, businesses, government entities and government employees (Sulehat & Taib, 2016).

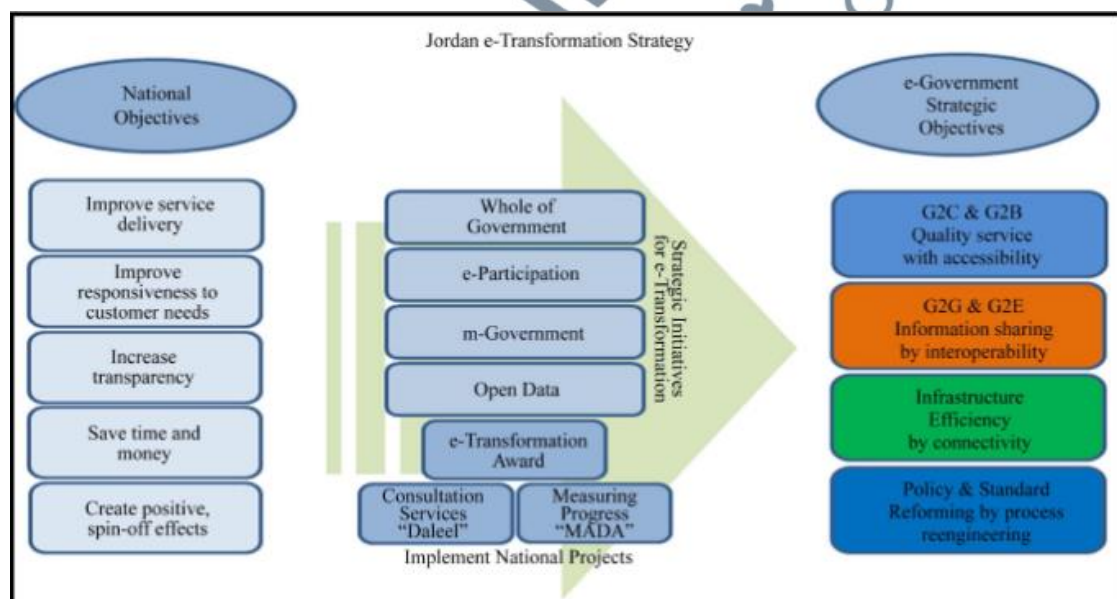
A UN report of (2012) concluded that the participation of all in e-government is imperative to promote economic and social empowerment through information communication technology for all citizens, including vulnerable groups pre-identified by the UN as the poor, illiterate, blind, old, young, immigrants and women. The Jordan's new strategy prioritizes e-government initiatives, tools and projects, Figure 2.3.

In this new strategy, Jordan's e-government launched three main initiatives that aims to incentivize the government entities toward a rapid e-transformation to better serve their beneficiaries and thus to improve the overall progress of Jordan's achievements compared with regional and global countries (Sulehat & Taib, 2016). First of these initiatives is the innovative concept of e-government award. The goal of e-government award is to encourage entities, individuals and organizations to succeed and develop their creativity in the field of e-government by incorporating information and communication technology to promote the e-community (Sulehat & Taib, 2016).

Achieving e-transformation is the second initiative and it is known as "MADA." The goal of this measure is to identify the challenges government entities face in the process of e-transformation. This measure enables governmental authorities and programmers to devise and implement the needed policies that correspond to such difficulties while at the same time motivating government functionaries to transform electronically (Sulehat & Taib, 2016).

Business development is the third initiative, and it is called “DALEEL.” Its objective is the promotion of e-government consultation services toward business development and then employing the accumulative knowledge and experience to enable government entities to achieve e-transformation (Sulehat & Taib, 2016).

The four stages of e-transformation revolve around the maturity of service delivery (emerging, enhanced, transactional, and connected). The government of Jordan is aiming to achieve the transactional stage by the end of this strategy (Sulehat & Taib, 2016). Jordan is currently in the late enhanced stage, given that the government of Jordan offers more sources of information through the National Government Portal, the National Contact Centre (NCC), the National Mobile Portal, and the National SMS Gateway.



Source: (Jordan E-government, 2013)

Figure 2.4: New Strategy Of E-Government in Jordan For the Year 2014-2016

2.3.7 Types of e-Services in Jordan

According to the Official Site of the Jordanian e-Government (2020), the e-government program in Jordan, which includes most government institutions, is divided into the following:

1. Vertical services

Vertical services are services that are limited to a one-government organization that sets its priorities alone; the e-government program helps such organizations by providing technical support, coordination, follow-up, and defining the services to develop them and then introducing these e-services to society. These vertical services are followed through the National Plan for the e-Government Program, through the following procedures:

Planning and following up the implementation of connected vertical services at state institutions at the national level.

Following up and implementing the vertical services for a three- to five-year program, work is now underway, and there is a close follow-up during implementation.

The formation and development of e-government units in various government bodies as part of the institutionalization of e-government.

Periodic reports are introduced to the “Steering Committee for e-government” and prime minister.

2. Integrated service

Integrated services are services introduced by a group of government departments, in which the service receiver presents his application to the one-

government department, and to finalize such a case, the department concerned needs to coordinate and request information from other departments. There are around 3000 such integrated services. For example, visa and residence permits for non-Jordanians is one of these services, along with “Establishment registration” certificates from the Ministry of Trade and Industry, which provide personal registration information, such as birth, death, marriage and divorce certificates, as well as passport issuing and renewal services.

3. Combined services

These combined services are the most common services, provided by more than one-government institution; the e-government program is developing these services to be active under their responsibilities. The following is a list of the most important of these services:

1. Jordan e-Government Gateway: this is a unified, comprehensive communication gateway for citizens, businesses, and the government sector, to obtain information that is needed.
2. Government services: these include more than 1800 government information services listed and provided by government ministries and institutions.
3. Government departments and directorates: these include basic information websites for more than 112 government ministries and departments that provide a list of services for each one.
4. e-services: providing a gateway to more than 35 online services introduced by many government departments, allowing the user to

submit inquiries, such as customs and income taxes, traffic violation tickets, buildings, and floor taxes... etc.

5. "Ask" services: these allow beneficiaries to interact and get answers to their inquiries, complaints, suggestions, or technical problems online from different government ministries and departments.

1. SMS Gateway

This is a different communication channel that includes, but is not limited to, SMS since it is the most widely used service among the Jordanian population: can be found at (www.jordan.gov.jo).

Sending SMS to users: these SMSs are sent directly to beneficiaries without their request, as part of the e-services provided.

Receiving SMSs from users: these SMSs are posted by citizens requesting specific information through the no (94444); when accepted, an answer will be sent to the user via SMS by the department concerned with this issue.

2. E-government Kiosks

The e-government program tends to expand the e-services used. It extends citizens' access to it, regardless of their education, purposes, or technology, and levels of knowledge. This easy and multiple access is made possible through the installation and operation of e-government kiosks in many government departments and establishments. These e-government kiosks are also available in small and large private sector establishments and companies ("The Official Site of the Jordanian e-Government", 2020). Some public institutions are devoted to reduce the technology gap and to expand the culture of different e-government services to reach the vast

majority of the Jordanian society. Thus, the pressures on both beneficiaries and workers in the public sector service departments are reduced significantly (Ministry of Communication and Information Technology, Jordan, 2010).

3. National Communication Centre for Government Services

This National Communication Centre for Government Services responds to all inquiries, claims, feedbacks, and suggestions from all the beneficiaries of the e-government services.

These are some government departments that benefited from the initial stage of the e-project:

Office of Civil Services, the Greater Amman Municipality, the Ministry of Justice, the Ministry of Higher Education, the Amman Chamber of Industry, the customs of Jordan, the Amman Chamber of Commerce, the Ministry of Trade and Industry, the Land and Survey Department, the Ministry of Education, the Public Transport Regulatory Authority, the civil status and passport department, and the Tourism Board ("The Official Site of the Jordanian e-Government", 2020).

4. Secured e-government Networks Project:

Aim of this project is to establish a communication network connecting all government departments with one another and then further connecting these interconnected departments with the e-government central operation center. The e-government central operation center was built according to the highest technical and security standards, and this center will be used as the hosting hub for all the unified services provided, such as e-government gateway and e-payment gateway, etc. This hub could work as the central hub to connect all government departments under a

unified umbrella in a way that will be safe and cost-effective ("The Official Site of the Jordanian e-Government", 2020). There are around (45) government agencies connected through this secure hub, more agencies are gradually connecting, and it is expected the center will host (120) connected agencies in near future. This project aims to:

- Connect the-government departments in Jordan, with a modern, secure, and fast communication network that can provide intranet services between G2G, G2B, and G2C.
- Encourage the-government departments to develop their e-services based on information exchange between departments to provide different types of services.
- Provide the-government departments with needed developed technical equipment to establish the infrastructure for an advanced electronic network to execute combined electronic services.
- Connect the-government departments with the e-government operation center.
- Unify the connection mechanism between government departments to reduce the connection cost.
- Provide a secure connection hub between government institutions.

5. Jordan e-payment Gateway:

The e-payment government gateway is considered one of the main e-government infrastructure components. This gateway is the base on which to build and develop the electronic paper works, to form one of the leading unified shared services that the e-government program is working on developing, operating and

managing ("The Official Site of the Jordanian e-Government", 2020). The aim of this gateway is to provide a digital forum to process e-payment services for beneficiaries, through a trusted, secure, and easy payment method, in which the recipients can pay government fees online. This governmental e-payment gateway is acting as the central hub for banks and financial services to introduce their services through it (Ministry of Telecommunication and Information Technology, 2010).

2.4 The Relation between Age and Job Performance

The workforce all around the globe is getting older (Timar, 2014). Therefore, it is now more important to decipher the relationship between old age and job performance. However, the relationship between age and job performance is not simple rather it is complex and dynamic. Usually, our physical strength and mental faculties diminish with increasing age and therefore one is tempted to correlate lower job performance with old age. Nevertheless, this is not the case as there is no such empirical evidence to support the hypothesis that older age is the cause of low job performance among the employees. Ironically, most of the research studies show that there is no relation between age and job performance (McEvoy & Cascio, 1989). This is surprising as well as interesting and there can be several reasons responsible for this (McEvoy & Cascio, 1989).

The first of these reasons is the job switch of older workers. As employees' performance is critical for an organization's success so the older employees who are not performing well on a task anymore then they may be assigned some age-suitable

responsibilities by their managers. Yet it is also possible that these underperforming older employees quit the organization and join some other suitable institution.

Secondly, almost in every organization older employees are assigned tasks that suit their age. For example, physically demanding tasks are assigned to younger employees while decision-making and managerial tasks are assigned to old employees.

Human biases while evaluating job performance are the third reason. Almost in every organization, supervisors often take a lenient view while assessing the performance of older employees due to their experience and long-term affiliation with the organization. These sorts of biases are very frequent in government organizations. Due to these biases, it is difficult to correlate old age with job performance.

The fourth reason is the multidimensionality of job performance. As job performance, is a multidimensional phenomenon so it is difficult to judge the job performance of older employees accurately. If the older employees are lacking at one aspect of the job, then they may focus on other job aspects so cumulatively no effect of old age on job performance can be measured.

Fifth and the most important reason is the job experience. Greater job experience means enhanced job knowledge. A younger employee may go through the classical trial and error model of learning while performing a task, but an older employee can do the same task perfectly and smoothly because of his accumulated job knowledge. Therefore, an old and experienced employee will perform better than a young and inexperienced employee. This experience of older employees compensates for their physical deterioration and non-familiarity with emerging technologies.

All the above-discussed reasons are responsible for the apparent irrelevance between old age and job performance. The relationship between old age and job performance is not static rather it is dynamic but cumulatively, old age does not affect job performance either positively or negatively.

2.4.1 Effects of E-Government on Job Performance

In traditional governance, extensive branching of governmental agencies, lengthy procedures, and documentation result in time wastage and delayed service delivery. In traditional governmental organizations, job performance is measured mainly by supervisors and managers. While evaluating the performance of their subordinates, the managers also take the lengthy procedures and scarcity of resources as impediments in achieving an optimum task achievement. The age factor also favors the employees as in governmental organizations, older employees are esteemed. So the evaluation of older employees is not the true picture of their performance on the ground. Because of these shortcomings and biases, the practice of evaluating the job performance of governmental organizations is not carried out accurately.

This is the reason why traditional governmental organizations are struggling in achieving their organizational goals. On the other hand, e-governance has fundamentally changed the evaluation procedure of job performance of government employees and therefore these e-government public institutions are flourishing.

The recent growth of information communication technology has paved the way for the incorporation of information communication technology in governmental

organizations. Resultantly, a new form of governance known as e-governance or e-government has taken over the traditional governance. The e-government institutions are lean and effective as they have promoted a paperless environment and most importantly, changed the performance evaluation paradigm.

Al-Jamal and Abu-Shanab (2015) identified the effect of age on the adoption of the use of e-government, where age affects the ability to adapt to using technology and modern developments in the organization, where the objective of technology is to facilitate transactions of individuals to a great extent. The results showed that individuals have a great desire to use e-government services, although age is considered an obstacle. Results showed that the lower the age, the higher the willingness to use technology (Al-Jamal and Abu-Shanab, 2015).

Information Technology like e-government has proved to improved organizational performance by improving performance at the employee level. Job performance is improved in e-governance by disseminating information about the job to concerned employees, enhancing communication and coordination, and instituting a robust system of check and balance (Jeloudarlu & Begzadeh, 2016).

2.5 Previous Studies in E-Government and Job Performance

Navarro, Dewhurst and Peñalver (2007) identified a factor that affects e-government in the telecommunications industry in Spain. The study concluded that e-government is one of the primary factors in the success of the public sectors since it is one of the essential tools for achieving transparency and accountability through a

mutual relation between the citizen and the government. The descriptive-analytical method was used, and (121) questionnaires were distributed to (121) communications firms. The results showed that there is a clear gap in the use of e-government and that the most critical factor that affects the use of e-government is the amount of work. The mentioned study recommended enhancing quality of information technology equipment and its tools to ensure efficiency in the use of e-government. Nevertheless, this study failed to identify that how e-government affects government employees' performance.

Meanwhile, Ramli (2012) examined work process improvement and the job satisfaction of the user associated with e-government projects. The results showed that culture of the government and public sector organizations has positive impact on efficiency dimensions of e-government performance; the dominant bureaucratic culture tend to hinder systemic and enterprise-wide e-government performance.

Kanungo and Jain (2013) also conducted a study in which he proved that government organizations differ significantly from private sector organizations in terms of their working environment, internal processes, and culture. Government organizations are reluctant to accept dramatic changes, usually associated with technology-based interventions.

This study explored the effect of one dominant factor, the organizational culture, on the success of e-government initiatives. To test the research model, survey data were collected from (315) respondents in (13) government organizations in India. The results showed that a well performing government organization on e-government projects exhibits a specific cultural feature and its success is attributed to that specific cultural feature (Kanungo & Jain, 2013). Results further confirmed that the

bureaucratic dimension, which is the dominant cultural feature of government organizations, has both positive and negative impacts on e-government performance dimensions.

Maazuddin (2015) also contributes to the study arguing that the performance of employees is an essential element in the entire process of e-government, which leads to living up to the goals. He further stated that at present, many changes are occurring around the world due to information communication technology enabled governance. These changes are taking place at a fast pace, so in response, organizations are also adopting to these information communication technologies innovations rapidly to remain competitive in the market (Maazuddin, 2015). After a comprehensive survey, the author concluded that creativity, personal efficacy, and effectiveness lead to the efficient delivery of services by employees in a governance scenario.

Awameleh (2014) carried out a related study in the Jordanian context to explore the effect of information technology innovations on government e-services in Jordan and to suggest a model that clarifies the relationship between information technology innovations and the Jordanian governmental e-services. To achieve the objectives of the study mentioned above, the researchers used the descriptive method. The study sample was a stratified sample that was composed of (350) respondents from different governmental departments and ministries. The study recommended that promotion of concept of e-government services is essential and the state media has a critical role in its promotion. The official media can effectively educate the masses on subject and it can also train and prepare employees of the public sector, thus enabling them to develop themselves. The training must involve modifying their thinking processes and working behavior simultaneously in addition to educating them about modern

technological means to obtain effective administrative decisions that are consistent with reality. The study, however, failed to examine the real effectiveness of e-government on employee performance.

In the same context, Alomari, Woods & Sandhu (2012) explored the predictors of e-government adoption in Jordan by deploying an empirical evaluation based on a citizen-centric approach. The goal of the study was to locate the extent of prediction of e-government and its adaption in Jordan by citizens; however, it did not explore how that affects the government's employees' performance. Several factors affecting the intention of citizens to adopt e-government were studied. The most important of these factors were: the extent of the use of e-government, trust in government, designing websites, beliefs, and trends (Alomari, Woods & Sandhu, 2012).

To conduct the study, a survey study was conducted with (400) Jordanian citizens from users of the Internet and e-government websites. The study concluded that there is a need to develop a central governmental website and that the links should be updated, and the sites must be designed attractively and consistently where the website clarifies how to move between pages and gives clear descriptions of transaction steps (Alomari, Woods & Sandhu, 2012).

Moreover, Almarabeh and Abuali (2010) addressed the factors and rules affecting e-government in Jordan. The objective of the study was to identify the factors that affect the efficiency of the application of e-government and its tools and determinants in different areas. Researchers used the descriptive-analytical method. The most important finding of this study was: there is acceptable readiness to apply e-government in ministries. The study recommended that consideration should be given to the tools and means related to e-government, and it highlighted the importance of

training users on websites and other applications in connection with e-government (Almarabeh & Abuali, 2010).

El-Qawasmeh (2011), in his empirical study assessment of the Jordanian e-government, aimed to evaluate e-government and identify the extent of the use of the Internet in delivering e-services, and the quality of the websites of the Jordanian ministries and governmental institutions. The most important finding of this study is that the sites are nothing more than a source of information deliverance to citizens. The study recommended existence of an interaction between the citizens and e-government, even if this requires endeavors on the part of government to improve the website substantially (El-Qawasmeh, 2011).

Similarly, Khasawneh and Abu-shanab (2013) explored the role and the impacts of e-government and social media sites since the Internet has become an indispensable part of people's lives. Besides, the recent developments in social media; such as blogs, websites and other social networking tools like Facebook, Twitter, and Google Plus, have tempted governments around the world to join these sites in an attempt to benefit from these novel means of communication (Khasawneh & Abu-shanab, 2013).

With only an internet access, social media has become a platform that is easily accessible to anyone, which means that governments that have joined these sites can rebuild a relationship with their citizens and increase the level of citizens' engagement and participation. In a research study, Al-Saqqa et al. (2014) tried to identify the factors affecting the use of e-government in developing countries, specifically Jordan, where it dealt with the elements and challenges that affect the application of e-government in Jordan.

To achieve the objectives of the study, he used semi-codified interviews were conducted to collect data from (12) government ministries. These were; the Ministry of Information and Communication Technology, the Ministry of Planning and International Cooperation, the Ministry of the Interior, the Ministry of Industry and Trade, the Ministry of Higher Education and Scientific Research, the Greater Amman Municipality, the Department of the Chief Justice, the Central Traffic Department, the Higher Education Accreditation Committee, the Admissions and Coordination Unit, the Department of Statistics, and the Telecommunications Regulatory Commission (Al-Saqqa et al., 2014). Thirty-six people participated in these interviews, which were conducted within face-to-face meetings or via telephone calls.

The results of the study showed that budget, financial cost, human experiences, technological development, and the resistance to change of citizens, and privacy and security of data are the challenges that affect e-government. The study recommended that the use of e-government must be taken as a reform and restructuring process, not just computerization of electronic processes (Al-Saqqa et al., 2014). Besides this, the government must strive to raise the awareness of employees and clients and that the private sector should be engaged in e-government where it may be a source of cost-sharing and benefit from experiences.

Al-Jamal and Abu-Shanab (2015) identified the effect of age on the adoption of the use of e-government, where age affects the ability to adapt to using technology and modern developments in the organization, where the objective of technology is to facilitate transactions of individuals to a great extent. The results showed that individuals have a great desire to use e-government services, although age is considered an obstacle. Results showed that the lower the age, the higher the

willingness to use technology. The study recommended promoting the level of access to the knowledge and skills necessary for benefiting from e-government through the use of information and communication technology. Findings of the study suggests that government must invest in holding seminars, workshops, and training courses to focus on the benefits of using e-government, especially among aged people, and seriously work on raising their awareness (Al-Jamal & Abu-Shanab, 2015). However, the results failed to relate age and performance of government employees when it comes to adaption of information and communication technology in government applications and services.

Similarly, Shannak (2013) identified the level of application of e-government and the changes in the organizational structure to serve citizens optimally. Data collected through the interviews conducted with the employees in the MOICT, the Ministry of Education, and the Income Tax Department. The study concluded that the e-government application level is traditional, i.e., between the second and third levels. Using electronic signatures and transition to e-documentation in governmental transactions are the recommendations of the study.

Darwazeh, Khrisatand Al Dajah (2016), in their research, successfully identified the effect of the application of e-government with its dimensions; cost reduction, human resources efficiency, transparency and service quality, on the job performance with its dimensions; task completion, job loyalty, and staff compliance, in the Greater Amman Municipality. The study used the descriptive-analytical method; theoretical and field, through (245) questionnaires, which were distributed to administrative staffs in the Greater Amman Municipality. The study showed several results, the most important of which is that there is an evident effect of the application of e-government

on staff performance and the compliance of employees with regulations and instructions and that transactions are characterized by accuracy and quality, unlike the situation in the past (Darwazeh, Khrisat & Al Dajah, 2016). Nevertheless, the results did not show how age affects government employees' performance when adopting e-government applications and services. Moreover, the study did not measure e-government services.

Mashaqbeh (2012), in his study, aimed to identify the effect of the use of e-government on the performance of the Civil Status and Passports Department in Jordan. One hundred forty-five questionnaires distributed to managers and heads of departments. The study recommended that awareness of managers and employees should be raised in order to enhance their performance, the necessity of developing specific grounds to join training courses by all employees working in directorates of the department without exception. The study also recommended that different means for users of the e-government should be provided, like the Internet, to reinforce direction factors and e-booths to obtain the best services, to hold training courses on management information systems since they have a significant effect on development and improvement of performance (Mashaqbeh, 2012). However, the results did not show how age affects government employees' performance when adopting e-government applications and services. Moreover, the study did not measure e-government services usability; the system used in civil status and passport department. Table 2.1 below summarizes the related studies discussed above.

Table 2.1: Below Summarizes Existing Research In E-Government

Author	Services and Purpose	Country	Method	Advantages
Alsalloum, 2011	(e-gov – effect of e-government application on JP	Saudi Arabia	Survey questionnaire	Effect of (e-Gov) application on JP in Ministry of Education.
Kareem and Haseeni, 2015	e-gov and its impact on organizational performance		Survey questionnaire	Strong positive correlation between e-gov and organization performance
Kanungo and Jain, 2013	Organizational culture and e government services	India	Survey questionnaire	exhibits specific cultural traits and bureaucratic dimension is both positively and negatively related to e-gov performance
Khasawneh and Abu-Shanab, 2013	impact of e-gov and social media in building relationship between gov and citizens		Survey questionnaire	rebuild gov relationship with its citizens through social media usage
Awamleh, 2014	The effect of IT outcomes on gov e-services	Jordan	Survey questionnaire	it is necessary to promote the concept of e-gov services and encourage the role of social media in this regard
Almarabeh and Abuali, 2010	factors and rules affecting e-gov	Jordan	Survey questionnaire	There is acceptable readiness to apply e-government in ministries and all main requirements
Qawasmeh, 2011	assessment of the Jordanian e-gov	Jordan	Survey questionnaire	websites are nothing more than information delivered to citizens
Navarro, Dewhurst and Peñalver, 2007	Factors affecting the use of e-government in the telecommunications industry	Spain	Survey questionnaire	There is a clear gap in the use of e-government, and the most important factor that affects the use of e-government is the amount of work
Alomari, Woods & Sandhu, 2012	Predictors of e-gov adoption	Jordan	Survey questionnaire	There is a need to develop a central governmental website and the links should be updated
Shannak, 2013	Impact of e-gov implementation on the organizational structure	Jordan	Survey questionnaire	e-government application level is traditional
Al-Saqqah et al., 2014	Challenges and factors affecting the implementation of e-governance	Jordan	semi-codified interviews	Challenges that affect the e-government are the budget, financial cost, human experiences, technological development and resistance to change by citizens, and privacy and security of data
Al-Jamal and Abu-Shanab, 2015	The influence of age on e-governance adoption in Jordan	Jordan	Survey questionnaire	The lower the age, the greater the desire to use technology

Author	Services and Purpose	Country	Method	Advantages
Darwazeh, Khrisat and Al Dajah, 2016	Effect of application of e-government on staff performance in the Greater Amman Municipality	Jordan	Survey questionnaire	There is an evident effect of application of e-government on staff performance
Mashaqbeh, 2012	The effect of use of e-government on Improvement of Performance of the Civil Status and Passports Department in Jordan	Jordan	Survey questionnaire	There is positive effect of use of e-government on improvement of performance

2.6 Research Hypotheses

There is no specific and defined model relates job performance, e-government services usability, and the moderating variable the employee age. Therefore, an empirical model suggested. The suggested model is an empirical one that assumes there is no association between job performance and age, as well as there is no association between age and e-government services usability, and there is association between job performance and e-government services usability and the moderating variable age of employee.

This study aims to examine the following hypotheses:

H1: The e-government services usability has statistically significant effects on job performance.

Maazuddin (2015) argued that the performance of employees is an essential element in the entire process of e-government services usability, which leads to living up to the goals. In addition, Darwazeh, Khrisat and Al Dajah (2016) argued that there is an evident effect of the application of e-government on job performance and the

compliance of employees with regulations and instructions and that transactions are characterized by accuracy and quality. Based on, the first hypothesis proposed.

H2: The employees' age differences has statistically significant effects on job performance.

Stereotype factors such as gender (Stevens et al., 2009), age (Ng & Feldman, 2008), salary (Gerakos et al., 2007), stress (Hourani, Williams & Kress, 2006), motivation and job satisfaction (Wang et al., 2011), training and development (Budds & Sultana, 2013), and organizational culture (Alvesson, 2012) have been studied to determine the relationship between these variables and job performance. Individual factors such as aptitude, knowledge, skill level, and rewards are also responsible for the good performance of employees (Budds & Sultana, 2013). On the other hand, and in spite of staff candidates, certain institutions are hiring employees who are willing to work for a lower salary, and this behavior in the long term affect negatively their performance (Rani & Khan, 2015). Consequently, the second hypothesis proposed.

H3: The Age differences of the employees moderates the relationship between e-government services usability and job performance.

The above-mentioned hypothesis assumes that: there is no statistically association between the age intervals and job performance, as well as it assumes there is no statistically association between age intervals and e-government services usability. Actually, this assumption is the rational assumption to examine the moderating effect of the moderating variable; age differences on the association between the independent variable; job performance and e-government services usability. However, previously published research on area had showed that this assumption did not completely confirm Darwazah, Khrisat & Al Dajah 2016). Since,

there are many researchers confirmed there is statistically significant association between age intervals' and e-government services usability. Pearson, Bahmanziari, Crosby and Conrad (2003) concluded that age influences employee's response to E-Systems services usability, and different ages have different responses. Al-Jamal and Abu-Shanab (2015) found that employees want to use e-government services, but their age can be a hindrance. However, this finding could attribute to age, since older staff often feels as though and they are not suited to learning new methods, and therefore lack the confidence to make the most of new training (Plett, Lester & Yocum, 1991), and older staff takes longer to pick up new skills, when compared to younger employees (Sterns & Doverspike, 1989). On the contrary, researchers confirmed that; there is no statistically association between age intervals' and job performance (Mashaqbeh, 2012).

2.7 Theoretical Framework

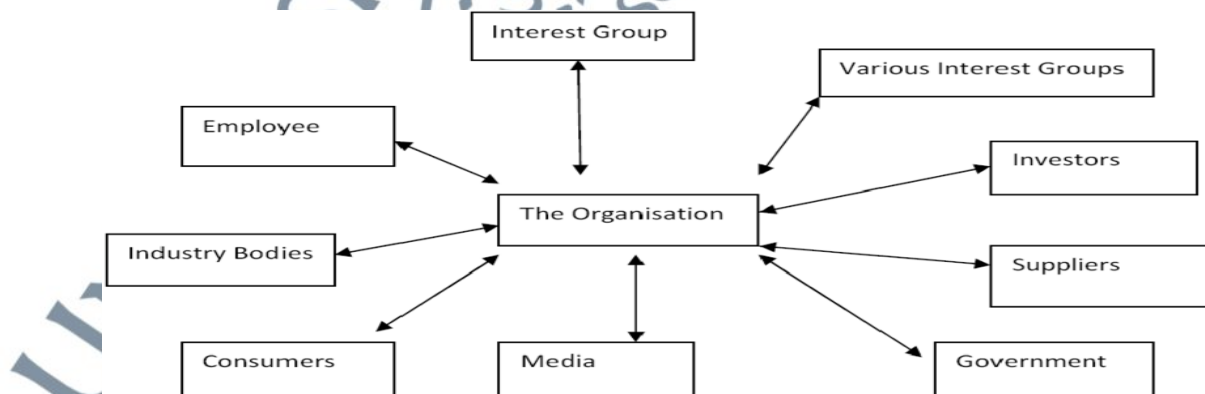
2.7.1 Relevant Theories

Most governments who have resorted to using government have achieved a lot in both private and public sectors. This study will be looking into Theory of Technology Acceptance Model (TAM), Theory of Stakeholders, and Theory of Conservation -of-Resources, Theory of Value, and Trajectory-Turning point how this

theory is related to our topic. The use of Information and Technology, and to be more specific, the internet is e-government. Implementation of e-government has come with many benefits ranging from efficiency, transparency to effectiveness (Riemer & Schrader, 2015). These have enhanced a lot of e-government stakeholder good interaction in governments which have implemented it fully. Despite enhancing good interaction, many countries have failed to realize this benefit.

2.7.1.1 Stakeholder Theory

Stakeholder theory has mostly been used to describe this failure by many researchers. Social matters in Management Division have had much history of management of people in an organization. This is because of the dynamic phenomenon of similar jobs; the increasing complexity of almost similar socioeconomic interactions around the movement may need less useful stakeholders in a particular task.



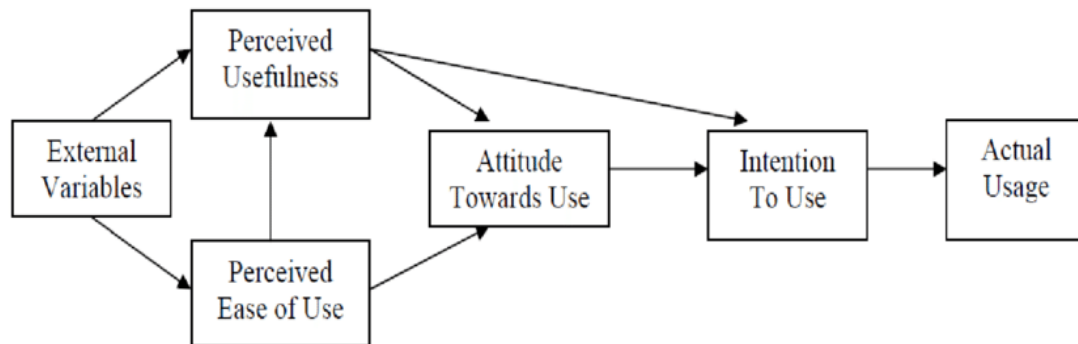
Source: (Lu, Yu, Liu & Yao, 2003, pp. 117)

Figure 2.5: Stakeholder Theory

The involvement of less useful stakeholders on a particular task may lead to a delay in the task due to the complexity caused by many participants (Riemer & Schrader, 2015). Therefore, this theory explains why despite e-government coming with a lot of added advantage to most developed countries, most of them have failed to realize this benefit.

2.7.1.2 Technology Acceptance Model (TAM)

As per the Technology Acceptance Model (TAM), to determine if a person is willing to use a certain technology, we consider his or her attitude on the technologies' usage whereby the usefulness and ease can see us of information system (Lu, Yu, Liu & Yao2003). The theory of reasoned action (Tora or TRA) tries to show how attitudes and behaviors in human actions relate to each other by basically foreseeing how an individual will react based on past experiences or prior actions. To relate this to our topic, it will not be work as when we are introducing e-government systems to a particular setting. The previously using probably a traditional system will expect the e-government system to produce output similar to what they consumed from the traditional systems.



Source: (Lu, Yu, Liu & Yao, 2003, pp. 113)

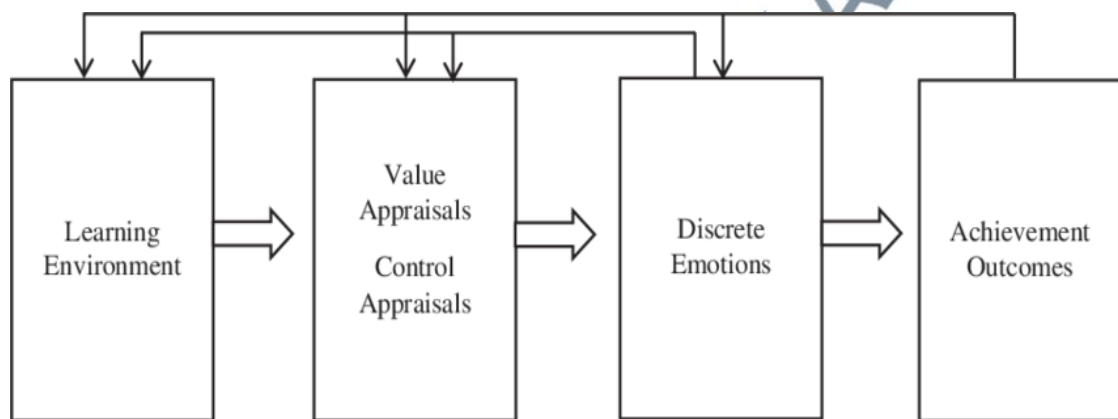
Figure 2.6: Technology Acceptance Model (TAM)

2.7.1.3 Value Theory

The job should be arranged to have the central importance of resources being used in the organization. Considering age, the organization should ensure that people of the same age group are placed as a common e-government system. This enables them to have a central goal or rather a central importance of the resources being used by the system (Smith, 1976). Failure to organize jobs properly may lead to know much success or non-at despite e-government coming with many benefits. The goal of any organization is successful, and thus, proper organization is inevitable.

Value theory is the ways that determine how, why, and to what degree people value things. The Value theory starts with the subject matter. It is difficult to determine sometimes what counts, but it encompasses what we are talking about. When the moderating effect of age in the relationship between e-government services and job performance value theory matters a lot. When designing e-government systems, it is important to consider this theory to ensure that what is produced from the systems is important to the users. When the e-government system produces much

output, which is of no value to the users, it may kill the users' morale, leading to low performance (Martinez-Moyano & Gil-Garcia, 2004). Age factor is also important as some things may be of greater value to the younger generation than the older generations. It is, therefore, advisable to customize these systems to fit the respective user values.



Source: (Williams & Levy 1992, pp. 41)

Figure 2.7: Value Theory

2.7.2 Research Theoretical/Conceptual Framework

This model illustrates the relationship between the study variables; it consists of three variables: e-government services as the dependent variable and job performance as the independent variable in addition to age as a moderating variable as illustrated in the following Figure 2.5 below.

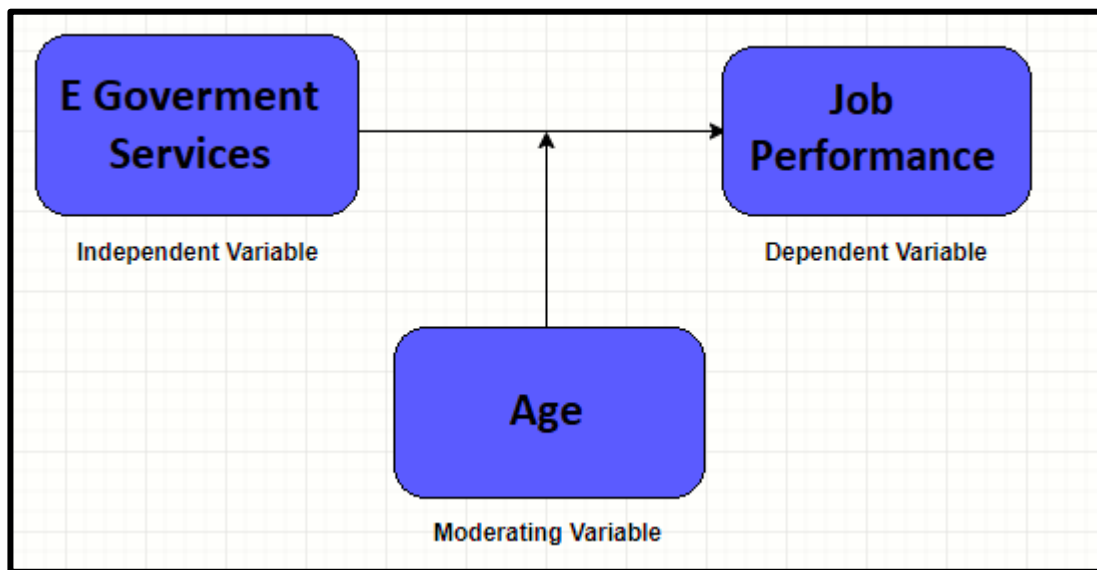


Figure 2.8: Theoretical Framework

2.8 Operational Definitions

2.8.1 Independent Variable

The independent variable is e-government services applications.

E-government services can be defined as a modern system adopted by governments using the World Wide Web (WWW) and the Internet to link their facilities with each other, to connect various services with private and public institutions, and to make information available for individuals to create a transparent relationship characterized by speed and accuracy that aims to improve the quality of performance (www.worldbank.org).

2.8.2 Dependent Variable

The dependent variable is the job performance of the Jordanian civil status and passport department. Job performance is the practical interpretation of work programs and plans that designs to achieve the primary goal of an organization. Job performance relates to the act of doing a job; its performance is a means to reach a goal or set of goals within a job, role, or organization (Campbell, 1990).

