

# Demand for e-Government Adoption in Pakistan

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## Abstract

*Purpose.* The purpose of this paper is to analyze the demands of citizens of Pakistan from its government to adopt and implement e-Government services in developing countries. A truly, e-Government service can empower citizen adoption of e-Government driven organizations, where these offices are at a simple stage in Pakistan. It is an essential topic, as the utilization of e-Government has turned into an integral part of administration.

*Findings and Practical Implications.* E-Government advancement obliges a decent learning of both clients' desires and all the variables that may quality clients' appropriation of the innovation. A few variables could go about as forerunners of the Unified Theory of Acceptance and Use of Technology (UTAUT) model's parts in the connection of obligatory utilization situations. The present examination addresses the legitimacy of such forerunners when one is managing a free utilize environment rather than with a necessary one. This work shows and examines the difficulties forced by the utilization of data and correspondence advancements by the Pakistani state, emphasizing the activities performed by the electronic government. With emphasis to the complementarities, from which positive aspects coming from the adoption of these new technologies are highlighted, such as opening new channels of communication and participation between the citizen and the public manager, as well as the benefits of easy and fast access to public numberless services available via the internet.

*Research Problem.* Citizens of Pakistan demands from its government to adopt e-Government research is based on that how government can adopt e-Government and what factors should be focused to implement the e-Government successfully in Pakistan.

*Research Design and Methodology.* The methodology is based on building up a structural comparison demonstrate by method for the up close and personal meeting and review strategy. Our discoveries demonstrate that the desires about the outcome to be acquired and the exertion desires held by the client influence fundamentally the proposition of utilization of the e-Government stage of Pakistan. Thusly, the plan of utilization and the encouraging conditions have an impact on real utilization of the stage. Besides, we found that accommodation, help, trust and shirking of individual communication assume imperative parts as far as UTAUT model's predecessors..

**Keywords:** Demand, e-Government adoption, UTAUT model, factors, Pakistan.

## 1. Introduction

In Pakistan is developing country facing many fundamental factor that creates barrier in the adoption of e-Government in the Pakistan is a critic subject. The initiatives in e-Government are still in the infancy stage in terms of ICT development and users participation in e-Government services (Steffen and Irani, 2012).

The decline of public confidence in the administration has inspired various proposals for reforming governments, market-based approaches or entrepreneurs, in order to improve its efficiency and effectiveness, as well as other proposals focused on increasing citizen participation in the political process. In connection with these recent reforms, has been proposed electronic government (e-government) as a solution to increase communication citizens with the bodies of public administration (Tolbert and Mossberger, 2006).

The development of e-Government can be seen from two different approaches: entrepreneur and participatory the first aims to "provide a way to flexible and convenient communication with the government following the experience of transactions for information and services ". While the second" allows citizens have a better understanding of political and governmental issues, and the interactivity of the Internet allows new forms of communication with charges elected government and among citizens themselves-through chats, servers, mail, newsletters, etc. ". At first, empirical studies on e-government are focused on observing the level of development

of these websites, and format, volume and quality of budgetary and financial disclosures (Tapscott et al., 2007).

Currently, studies are designed to highlight those factors associated with the degree of development of entrepreneurial approach to electronic government. These studies focus mainly on identifying those socioeconomic and demographic characteristics of municipalities; states or countries help explain the innovations in this technological field, looking shyly factors associated with the style of public administration or political factors surrounding its development. Unlike previous studies, this paper examines the determinants of development of participatory approach to e-Government in 81 municipalities from various countries. To this end, various controlling factors socioeconomic and demographic influence is observed, the characteristics internal to the institution, represented by the organizational complexity of the public body, the availability of financial resources, its level of indebtedness and style (Gallego-Álvarez et al., 2010).

## 2. Literature Review

E-government is the phenomenon, which involves the introduction of the information and communication technology (ICT) in the management practice of general public and innovative administrative practices, which are introduced by these technologies (Accenture 2004, p. 5). The word has been coined according to the more general practice of employing the “e-” prefix to stress the electronic method of producing and distributing services (e.g., e-commerce, e learning, e-business, e-economy, etc.) (Accenture 2004). Increasingly e-Government is becoming a worldwide vision, which is becoming capable of catching the attention of political figures, strategic decision makers and general public (Accenture 2004). The Internet is a powerful new tool, and many authors have expressed the hope that it can transform the relationship between government and citizens (Gore 1993; Koprowski; 1995; Raney 2000; Verton 2000).

According to Asgarkhani (2005), “E-government is a way for citizens and businesses to receive convenient services, to enhance economic development, reshape and refine community and government processes, allow greater access to information, and to make government more accountable to their citizens” (p. 468). The term e-government is also used to specify the usage of ICTs to support public administration offices in delivering services and to aid citizens in accessing services. E-government uses the advances in technology to better serve citizens and businesses and the types of government services offered online, in some circumstances, continue to increase as Internet usage increases.

This is an important benefit that e-Government advocates believe comes when e-Government is implemented. This can happen when connecting people in remote places via Internet to receive and send information easily. The advocates and observers, also, think that as more young people become more familiar with technology and the Internet, they will become participant citizens once they reach the political age (Seifert, 2003). Making a friendly and responsive interface of a government will increase the participation by citizens especially if the Web site contains all useful information (Bezruki, Lecoanet, Bajkiewicz et al., 2001).

Developed countries are more technologically advanced than less developed countries and have better trained and qualified technologically trained workers (Jensen 2007). The attainment of education, skills and financial resources needed to support IT departments, which would implement E-government, remain a challenge for less developed countries. Comparisons of the size and capabilities of infrastructures reveal considerable differences between developed and developing countries (Jensen 2007).

## 3. e-Government services

The concept of e-Government is one of the innovative ideas for managing and controlling a country’s government. It has a variety of definitions, is multi-faceted, and is currently in a fluid state. Given the diversity of concepts of e-government around the world, creating a workable definition of e-government is becoming very difficult. At present, electronic government, or e-Government, is a largely amorphous concept of varying meaning for different people. E-Government is a concept that has been widely accepted around the world, but with different levels of applicability (Axelsson and Melin, 2008).

The Government of web-based internet applications and other information technologies (Yildiz, 2007) defined E-Government in the US e-Government Act of 2002 as the use. Combined with processes that implement these technologies, to (a) enhance the access to and delivery of Government information and services to the public, other agencies, and other Government entities; or (b) bring about improvements in Government operations that may include effectiveness, efficiency, service quality, or transformation" (116 Stat. 2899, at 2902 - as cited in Seifert & Relyea).

E-government is abbreviated for the term ‘electronic government’ and is commonly termed as online government, digital government or connected government. It mostly refers to a digital interaction between government and businesses (G2B), Government and Citizens (G2C), government and government (G2G), and sometimes between government and employees (G2E) (Asgarkhani, 2009). The specific definition of e-government is given as the employment of World Wide Web and internet for the transmission of government services and information to the citizens.

The concept of e-Government pertains to the usage of ICTs, IT and various other web based telecommunication technologies for the purpose of enhancing or improvement the effectiveness and efficiency of the delivery of services in public sector. Thus, it can be said that the e-Government involves the utilization of the technology to facilitate the dissemination of government information and facilitate its operations and service delivery in an improved manner. It heavily deals with the non-internet and internet applications to aid the functions and operations of governments (Arfeen and Khan, 2012).

### *3.1 Applications of e-Government*

As described above, there are numerous applications of e-government:

- a. Government to Citizens (G2C)
- b. Government to Business (G2B)
- c. Government to Employees (G2E)
- d. Government to Government (G2G)
- e. Citizens to Government (C2G)
- f. Government to Non-profit (G2N)
- g. Non-profit to-Government (N2G)

### *3.2 Outcomes of E-government Implementation*

The application of e-government enables the companies to share and disseminate the data with the help of information technology. In spite of several drawbacks and disadvantages, the implementation of the e-government has proven to be beneficial for the countries in the monitoring and supervision of their administrative techniques. Governments around the world realized that there are several advantages of e-government therefore; they try implementing it in order to benefit from these advantages. These benefits of the use and application of e-government are the same for both developing and developed countries (Ndou, 2004).

### *3.3 Cost Reduction and Efficiency*

Several researchers (Amt & Zott, 2001; Tapscott, 1996; Malhotra, 2001) agree that implementing Information Communication Technology (ICT) will contribute to efficiency gains and cost reductions (Ndou, 2004). By implementing e-government and using Information Communication Technology (ICT), governments anticipate improving efficiency. By automating their standardized tasks when implementing e-government, governments seek to improve consistency and reduce errors. In addition, e-government implementation will reduce cost and layers of organizational processes by streamlining and re-engineering operating procedures (Seifert, 2003). Comparing to the manual way of handling operations, putting services online reduces the processing costs of many activities. For instance, it costs the US Inland Revenue Service \$1.60 to process a paper tax form while it costs only \$.40 to process an electronic form (Al-Kibsi et al., 2001)

### *3.4 Improved Services*

According to Rubin and Wang (2004), one of e-government’s characteristics is that it is an opportunity to improve the performance of that government so that it can deliver the public service effectively and efficiently. By putting their services online, e-government initiative is to reduce bureaucracy and offer access to these services all the time, which enhances the quality of services (Ndou, 2004). People and businesses expect governments to provide them with services more quickly and easily and to be more responsive to their needs. As a result, the expectations are that these information and services should be available online (Bertot, John, Jaeger & Grimes, 2010). The evolution of e-government can also help governments create new services and combine

both new and existing services together in order to meet the increasing demand from citizens (Seifert, 2003).

### *3.5 Transparency*

One major initiative of e-government is to increase transparency. By offering citizens, the opportunities to participate directly in decision-making by making them submit their suggestions and ideas online in forums and online communities. These Web sites can be very valuable resources for transparency if they are designed carefully and openly (Ndou, 2004). For example, Seoul Metropolitan government took an initiative to permit Seoul's citizens to help combat corruption via the Internet. They came up with a system called Online Procedures Enhancement for civil applications (OPEN). A Web site let citizens of Seoul submit and monitor applications, permits, and services. The system promotes transparency by preventing unnecessary delays or mishandling by civil servants. Surveys show that 84.3% of the people of Seoul believe that OPEN is contributing to transparency (Bonham, Seifert & Thorson, 2001).

### *3.6 Citizen Participation*

This is an important benefit that e-government advocates believe comes when e government is implemented. This can happen when connecting people in remote places via Internet to receive and send information easily. The advocates and observers, also, think that as more young people become more familiar with technology and the Internet, they will become participant citizens once they reach the political age (Seifert, 2003). Making a friendly and responsive interface of a government will increase the participation by citizens especially if the Web site contains all useful information (Bezruki, Lecoanet, Bajkiewicz et al., 2001).

### *3.7 Increase Capacity and Improve Network Infrastructure*

Technology helps increase governments capacity by allowing them to share databases for common customers, which will result in faster transfer of information flow, faster goods delivery, better and faster decision-making processes. As a result, this approach benefits people, businesses, and the government itself (Ndou, 2004). Besides, as Seifert (2003) indicated improvement of the national information infrastructure is one of the benefits of implementing e-Government.

## **4. UTAUT Model**

The unified theory of acceptance and utilization of technology (UTAUT) is an innovation acceptance model formed by Venkatesh and others in "Client acceptance of data innovation: Toward a unified view". The UTAUT intends to disclose client plans to utilize a data framework and ensuing use conduct. The theory holds that four key builds: 1) expectancy theory, 2) effort expectancy 3) social impact, and 4) encouraging conditions; being the initial three direct determinants of utilization expectation and conduct, and the fourth a direct determinant of utilization conduct. Sexual orientation, age, experience, and wilfulness of utilization are placed to direct the effect of the four key develops on use expectation and conduct (Alshehri, 2012).

The expectancy theory suggests that chooses to act or act contemptuously certain way in light of the fact that they are spurred to choose a particular conduct on different practices in light of the fact that they expect that the result of that conduct will be chosen. The inspiration for the choice of conduct is dictated by the comfort of the outcomes. In any case, the center of the hypothesis is the cognitive methodology of how an individual methodologies the diverse components of inspiration. This is carried out before settling on the last decision. The outcome is by all account not the only determinant in choosing how to carry on (Alryalat et al., 2013).

Social influence happens when others influence one's feelings, suppositions, or practices. Social impact takes numerous structures and can be seen in similarity, socialization, associate weight, dutifulness, initiative, influence, deals and advertising. In 1958, Harvard therapist, Herbert Kelman recognized three expansive mixtures of social impact. Consistence is when individuals seem to concur with others, in any case keep their contradicting suppositions private. Distinguishing proof is when somebody who is enjoyed and regarded, for example, a renowned VIP, affects individuals. Disguise is when, individuals acknowledge a conviction or conduct and concur both openly and secretly (AlGhamdi et al., 2011).

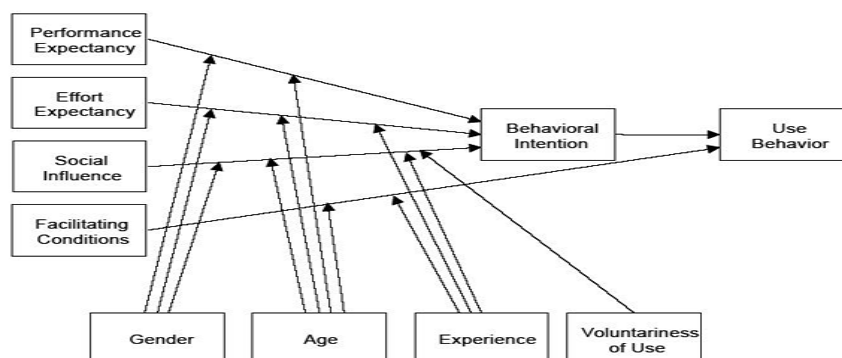


Figure 1: A Broad Schematic System for UTAUT model

The figure above shows the UTAUT models and applications. These applications are described below:

Government to Citizens (G2C) application pertains to the dissemination of information regarding the information and services of government to the citizens. This information dissemination process takes place through online documents and dynamic web pages through internet portal. In this case, telecommunication and internet is used to provide services to the citizens. Moreover, the channels supporting the direct democracy process are also established through enabling the communication process with the government and other related officials.

Citizen-to-Government (C2G) helps in the provision of the momentum to the public service online particularly through the use of delivery of service electronically for the purpose of communication and exchange of other information (Ahn and Bretschneider, 2011).

Government to Business (G2B) applications supports the e-procurement functions for the organizations. It helps in providing services to the functions of e-business and includes examples such as e-permits.

Business -to-Government (B2G) actively drives the initiatives of e-transactions such as developing an electronic marketplace where government could make purchases and establishing e-procurement functions. This technical application of the e-government also helps carrying out the procurement tenders for government electronically for selling the services and goods (Ojha et al., 2008).

Government to Government (G2G) applications enable the utilization of functions such as human resource management, payment and accounting and other departmental functions through the usage of telecommunication and web platform (Ahmed and Diesner, 2012).

Besides operating as the models given above, e-Government is used as the application of fax, telephone machines, tracking and surveillance systems and even functions as radio and television to provide the information and services related to government to the producers (Kihiu, 2012).

Government to Employees (G2E) application tends to embark upon the idea that will facilitate the internal correspondence with the employees of government and management of the civil services for the purpose of building paperless processing systems and establishing e-career applications in the office (Bannister and Connolly, 2009).

Government-to-Nonprofits (G2N) pertains to the provision of data and information related to the political parties, social and non-profit organizations, legislatures, etc.

Non-profit-to-Government (N2G) exchanges the communication and information between the non-profit organizations, political parties and government (Abie et al., 2004).

#### 4.1. E-Government's UUAUT Contributions

The concept of e-Government and its applications contribute extensively to the society, government and citizens. The following section takes a glimpse into the contributions of e-Government:

Electronic government guarantees more than snappy, precise trades and conveyance of information administrations in the government-to-native, government-to-business, and government-to government modes. E-government also contains the seeds of a considerably higher worth: the more noteworthy wellbeing and better



practice of majority rule government. Despite a reinforced vote based system, there are different profits of e-government. These social advantages incorporate more expert improvement opportunities got through online get-togethers, information offering, and notice sheets inside expert and exchange clusters. At the point when cooperating with the government, residents are presently ready to have the kind of comfort and access that the private area gives. Governments have perceived the Internet as a powerful administration conveyance channel. It gives access to government information and administrations any place, whenever, and for anybody with access to a PC and a phone line or a data stands (Abdallah and Fan, 2012).

It is to be understood that e-Government program can become an asset for any government who wants to gain trust of its citizens and encourage the country to prosper. The concept of Electronic government does not only offer unlimited pros to the citizens but also a great blessing for the government. This is so because the government would be able to provide improved services to its citizens at low operational cost.

Doing business with the government becomes easier if the government employs the tools of electronic government effectively, which will drastically increase the investment returns of the government. But, the employment of electronic tools in various government departments is a die hard target for under-developed countries which are already facing persistent deficits in budget and TOT, rampant corruption, and unbridled bureaucratic and political influence, for example, Pakistani are deprived of state postal services like developed countries (Axelsson and Melin, 2008).

With the implementation of electronic government, the sector of public administration will become less hierarchal and more efficient in satisfying the needs of citizens effectively. However, this benefit can only be reaped if bureaucratic sector do not resist against the execution of electro government. According to academics, the key internal barriers in the way of the provision of government services electronically are rigid attitude of organizations and bureaucrats and lack of political assurance and determination.

The involvement of IT in government sector reduced the loss which government has to face in shape of frauds, false claims, and over-payments etc. (Isaac, 2007). However, this is possible only when the government addresses the technological and infrastructural issues like incorporation of back office systems with that of internet-based systems with competence.

In regard to the environment e-Government provides a number of benefits are including such as (a) coordinating the collection of detailed data on waste management; (b) Improving access to public information on recycling through developing a web-based portal of coordinated information; (c) Providing new technologies to support waste management and recycling; (d) Electronically registering and tracing vehicles with a history of pollutant emission; (d) Enabling citizens can use emails to inform the government of the environmental problems of neighbourhood; and (e) Facilitating environmental protection projects on proposed tree plantation, rate of deforestation through electronic data storage and sharing of data at a regional level (Rashid, 2009).

Counties	Overall Score	Connectivity & technology infrastructure	Business Evt.	Social & Cultural Evt.	Legal Evt.	Government policy & vision	Consumer & Business adoption
Category Weight		20%	15%	15%	10%	15%	25%
India	4.66	2.90	6.25	5.20	5.50	4.60	4.50
Sri Lanka	3.93	1.80	5.90	4.40	5.40	3.75	3.70
<b>Pakistan</b>	<b>3.79</b>	<b>2.90</b>	<b>5.34</b>	<b>3.00</b>	<b>4.65</b>	<b>3.90</b>	<b>3.65</b>
Iran	3.08	2.80	4.17	4.60	2.10	2.50	2.50

Table 1 Overall score of Developing Countries for e-Readiness with reference to different factors. Source: Economist Intelligence Unit, 2009.

E-Government is being implemented in many forms for management of urban governance. Governance is leaning towards e-government applications as a means of transparency and accountability in public sector administration. Electronic mail, list servers, and the WWW are becoming key telecommunication tools to deliver information and services. By the end of the 1990s, Web-based services were already an integral and significant part of new 'e-Government. The management and organization of urban government is, fundamentally, an "information business," and this led Hepworth (1989) to coin the term "municipal information economy."

Goals for e-Government websites are as diverse as the governments that create them. Some define e-government as installing info-kiosks where citizens can access public services online. Others define it as the storing of

government agencies' data in electronic format for better administration of the public (Arfeen and Khan, 2012).

#### 4.2. e-Government in Pakistan

The ideas of e-governance are being implemented in most of the developed and developing states. The countries, which have progressed economically and politically, prefer to reap the benefits of technology by applying it into their everyday operations. It includes Japan, US, Germany, Pakistan and other faster economies, which have been moving towards the implementation of the e-government within them so that their supervision and communication functions could be made stronger and more efficient and effective (Alshehri, 2012) .

The e-Government in every country is associated with the development and functioning of information technology and the emergence of new measures of the administration of government. In Pakistan, the development and modifications of the e-Government has accomplished commendable outcomes in the past few years through the utilization of government agencies, information technology and the application of the resources and means of producing information (Malik et al.).

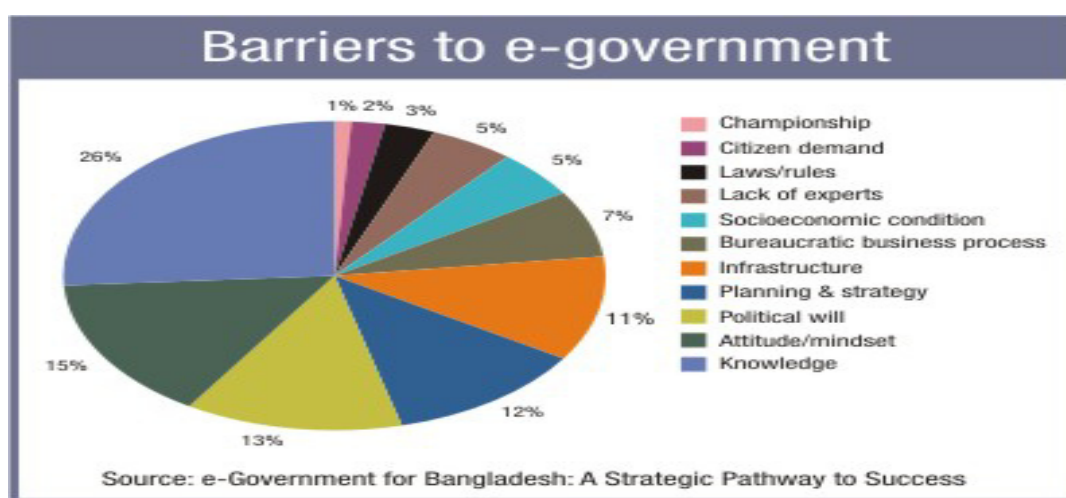


Figure 2 Barriers to e-Government

On the contrary, the administrative structure of Pakistan does not apparently seem to be appropriate for the development and applications of the functions of e-Government for the reason that the administrative and organizational structure of Pakistani government is split into a two-dimensional model. There is a relatively independent and autonomous system in each of the departments continuing of vertical leadership and puts into practice specific functions and activities. However, the basic requirement of the e-government implementation is a parallel and open system to accomplish the purpose of information integration. This is one of the primary and major difficulties for the e-government functions to operate in Pakistan in order to solve the problem of information sharing (Alryalat et al., 2013).

The national economy of Pakistan and its "Eleventh Five-Year Plan" put the Pakistani e-Government standards as decisive goal in the past years (Haider et al.). The country launched the concept of order to make it a driving force to improve and enhance the transparency of the government and utilize the prosperity of information technology. In the country of Pakistan, the idea of e-Government has become a hotspot, and is likely to show potential progress and prosperity in future.

#### 5. Factors of e-Government UTAUT

We have seen a growing interest in the adoption of GIS (Geographic Information System) technologies for public and private companies, as this technology contributes to carry out an effective information management, improvement of activities as well as the planning and execution of public policies that benefit society (Xu, 2010). GIS can contribute to actions aimed at public safety, and reducing crime by enabling the realization of a mapping crime through the integration of information contained in different banks data, which facilitates the identification and combating security problems public that both annoy society (Abdallah and Fan, 2012).

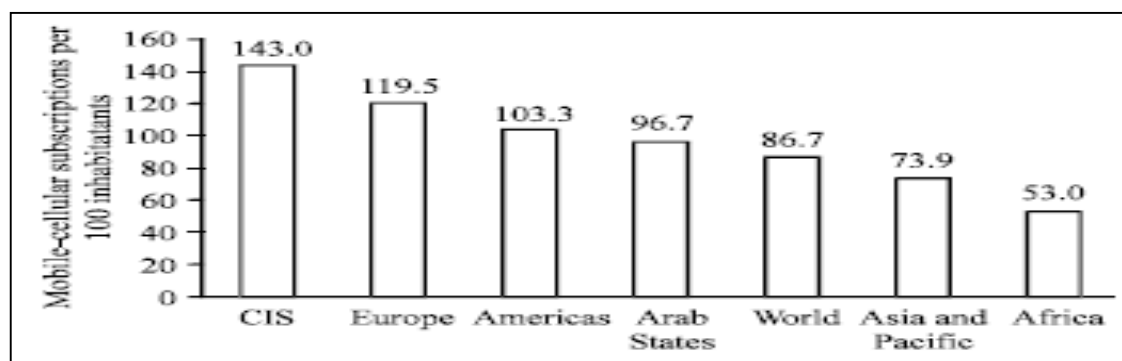


Figure 3 Mobile cellular subscriptions per 100 inhabitants

It is observed increasing GIS application also in health care, in activities that attempt to estimate the areas of risk for diseases, relating to economic and educational status of the population in order to prevent recurrence and make proper planning for treatment diseases. In the environmental area, GIS broadens and deepens the knowledge of given territory, enabling the discovery and use of resources natural, natural disaster prevention, planning and execution of projects infrastructure, regional planning and environmental management. Geographic information systems allow the creation of profile given region, and may point, for example, the risk areas landslides in the event of heavy rain, becoming a tool extremely important for prevention of natural disasters, such as floods and slips; it facilitates the creation of a plan to prevent new tragedies.

### 5.1 Education

The importance of technology in schools can't be disregarded. Truth is told, with the onset of PCs in training, it has gotten to be less demanding for the instructors to render information and for the understudies to handle it. Computer technology has enhanced the level of learning in the classroom because it is a hands-on approach to education. Visual elements, such as PowerPoint are included at the instructor's disposal to impart information. This medium affords students the ability to learn using their sense of vision and hearing to respond to the lesson being taught. Moreover, audio-visual teaching supports have realized huge changes in understudies participation and mindfulness. Intelligent media have turned out to be helpful in upgrading the focus levels of understudies.

This underlines the significance of PC teaching against course book teaching. The Tertiary institution offers a flexible educational tool known as distant learning. This allows persons in their comfort zone to access lectures in real time through an internet connectivity medium provided by the institution (Shah et al., 2011).

### 5.2. Corruption in Government

The government of Pakistan is vulnerable to the effects of authoritative law-making officials. Public servants have a duty to watch over their interests with integrity and loyalty to the citizens of this country. When an official goes against that obligation, it undermines the integrity of all public officials. The past myriad of government corruption has caused a lack of trust in the government's ability and efforts to keep Pakistanis safe. It also causes distrust in what the government says to the public about their ability to curb corruption and in their promises to fight the corruption. Corruption has caused governments to fall, public figures to leave office in disgrace, and reputations of well-known and revered businesses ruined. Two causes of corruption include discretionary powers and accountability.

Discretionary powers used by authorities in government, the legal profession, public officials, and public servants are often not monitored constructively, giving a free reign on how and when to utilize their powers. Privileges are associated with high-level officials because of their particular skill or worth in the government or society. Those with discretionary power have a generous paycheck so the motivation for corruption must be greed. With a high income, their corrupt actions cannot be attributed to necessities of meeting cost of living needs or feeding their family. Other causes or motivations for a high-level administrator could be to continue their power inside that field or office. Candidates running for an office may have a motivation of paying for their election campaign because running for an office or a seat is costly. The more discretionary powers a person holds, equates a greater chance for corruption. Besides the power, people hold with their positions the accountability factor when it is lacking can be an important cause for corruption (Hwang et al., 2004).



### *5.3 ICT and Health System*

In creating nations like Pakistan, preventable maladies and unexpected losses still incur a high toll. Disparity of access to fundamental wellbeing administrations influences particular areas, groups, and social gatherings. Under-financing of the wellbeing range in numerous countries has provoked quantitative and subjective insufficiencies in organization transport and to creating cleft in office and apparatus upkeep.

Inefficient assignment of uncommon resources and nonappearance of coordination among key accomplices has endeavored duplication of attempts, covering commitments, and resource wastage customary and troublesome issues. Most countries are at some period of wellbeing portion change to endeavor to give stretched out and impartial access to quality organizations while decreasing or potentially controlling the expanding cost of wellbeing mindfulness. Wellbeing change procedures have numerous features and there is no single model being received by all nations. Be that as it may, ICTs can possibly make a real commitment to enhancing access and nature of administrations while containing expenses. Enhancing wellbeing includes enhancing general wellbeing and therapeutic projects intended to provide elective, crisis and long haul clinical consideration, instructing individuals, enhancing sustenance and cleanliness, and giving more sterile living conditions.

These thusly eventually include enormous social and financial changes, the same number of wellbeing difficulties go well past the wellbeing part. The wellbeing segment has constantly depended on advancements. As indicated by WHO (2004), they structure the foundation of the administrations to counteract, diagnose and treat ailment and infection. ICTs are one and only classification of the inconceivable exhibit of advancements that may be useful. Given the right approaches, association, assets and foundations, ICTs can be capable devices in the hands of those attempting to enhance wellbeing (Al-Adawi et al., 2005).

### *5.4 ICT Importance for E-Government*

The blast of advanced integration, the critical enhancements in correspondence and data advances and the upheld worldwide rivalry are upsetting the way associations contend. Another, complex and quickly changing monetary request has raised taking into account troublesome development, discontinuities unexpected and rebellious change. In this new scene, learning constitutes the most vital variable, while realizing, which rises through collaboration, together with the expanded dependability and trust, is the most essential procedure.

The aggressive survival and progressing sustenance of an association rely on upon its capacity to rethink and embrace ceaseless objectives, purposes and its method for doing things. These patterns recommend that private and open associations need to rehash themselves through 'consistent non-direct development' to support themselves and attain to vital game changer. The surviving writing highlights the immense capability of ICT devices for operational effectiveness, cost diminishment, nature of administrations, accommodation, and advancement and adapting in private and open divisions. Nonetheless, insightful examinations have concentrated principally on the impacts and results of ICT's (Information and Communications Technology) for the private segment.

The general population area has been sidelined in light of the fact that it has a tendency to linger behind during the time spent innovation selection and business re-examination. Just as of late has general society part come to perceive the potential significance of ICT and e-plans of action as a method for enhancing the quality and responsiveness of the administrations and open framework and permitting subjects to experience a quicker and a more straightforward type of access to taxpayer driven organizations.

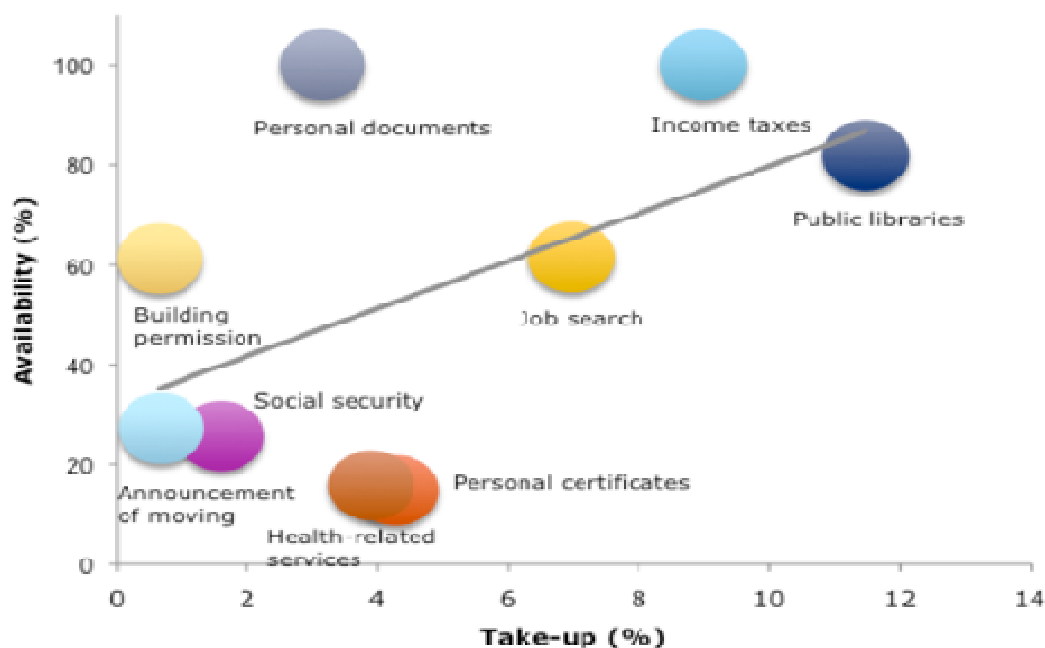


Figure 4 Activity of government organizations and divisions to utilize ICT

The activity of government organizations and divisions to utilize ICT mechanical assemblies and applications, Internet and cell phones to reinforce extraordinary administration, fortifies existing connections and manufactures new associations inside normal society, are known as e-Government activities. As e-business, e-government speaks to the presentation of an extraordinary wave of mechanical progression and government re-examination. IT speaks to a colossal stimulus to advance in the 21st century with higher quality, monetarily keen government administrations and a superior relationship in the middle of residents and government. Various government offices in created nations have made dynamic strides toward the web and ICT utilization, adding soundness to all adjacent exercises on the web, augmenting neighbourhood access and aptitudes, opening up intelligent administrations for neighbourhood civil arguments and expanding the collaboration of nationals on headway and administration of the region.

The potential for e-Government in creating nations, then again, remains largely unexploited, much nevertheless. ICT id accepted to offer impressive potential for the maintainable advancement of e-government. Diverse human, various levelled and mechanical components, issues and issues relate in these nations, obliging centred studies and fitting methodologies. ICT overall is alluded to as an "empowering influence", however then again it should similarly be viewed as a test and a hazard in itself. The affiliations, open or private, which overlook the potential esteem and utilization of ICT, may endure vital focused disservices (Khan et al., 2011).

### 5.5 E-government opportunities Using ICT

ICT can conceivably add to effectiveness gets and cost decreases for private affiliations. Besides, these profits constitute a huge part of e-government activities. Putting administrations on-line essentially diminishes the handling costs of various exercises contrasted and the manual strategy for dealing with operations. Case in point, it costs the US Inland Revenue Service \$1.60 to process a paper duty archive, however just \$0.40 to process an electronic structure. The fitting usage of ICT may possibly lessen the quantity of inefficiencies in methodologies by allowing document and data offering across over government offices, in this way adding to the end of slip-ups from manual techniques, diminishing the obliged time for trades transforming.

In the ordinary model of open administration conveyance, the methodology is long, time exhausting and need straightforwardness. A business that wishes to secure a permit or a grant needs to round out various usage structures, needs to visit various distinctive workplaces and invest an extensive measure of time. If a national

wishes to be issued with an authentication or some other power record, he or she will need to go to focal government office, go to diverse workplaces and invest a lot of time for a straightforward administration. An e-government activity, then again, which puts government administrations on the web, subsequently diminishing the bureaucratic offers round the clock availability, speedy and helpful trades, and obviously upgrades the way of administrations, as far as time, substance and openness (Shah et al., 2011).

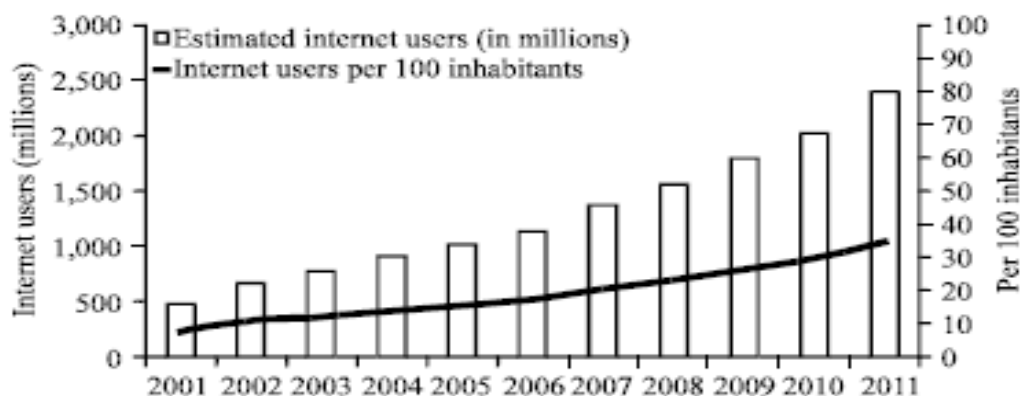


Figure 5 Estimated internet users

E-government serves to build the straightforwardness of choice generation forms. A great part of the time e-government offers open doors for subjects to specifically partake in choice making, by allowing them to give their own thoughts and recommendation in dialogs and on-line groups. In case sites are outlined painstakingly and straightforwardly, they can be profitable assets for straightforwardness as nationals, organizations and different partners should have the capacity to see political and governmental information, parts and strategies. Already it was regularly important to go straightforwardly to governmental workplaces to get information, however now this information should be accessible on the web. The openness of conveyances with respect to the exercises of individuals when all is said in done association, and financial and administrative viewpoints, expands the straightforwardness also.

The utilization of ICT for the rearrangement of inside association trades, correspondence, interrelationships and for simple information stream and exchange offers extensive opportunity to expand government limit. Intranets license distinctive offices to impart database of fundamental clients and to pool aptitudes and limits of their individuals for issue clarifying. These offices hence will promise speedier information stream, exchange, faster, and less expensive obtainment of stock and administrations quicker and better choice making methodologies, and unplugged paper bottlenecks. Information based or master framework help to make a more responsive and rule base process this approach guarantees advantages for organizations, which get to be both customers of government administrations and suppliers and stock and administrations to the government. It similarly guarantees advantages to the government itself through decreased costs and spending, which could oblige lower taxes to finance (Hwang et al., 2004).

ICT makes both weights and open doors for system creation and gathering building. As contended before an e-Government activity obliges a complex web of interrelationships among government, clients, organizations, representatives and other governmental offices. Besides, the very nature and limit of e-Government oblige a system approach to manage set up together capacities, innovations, information and learning that compass the limits of distinctive government organizations. It is for the most part difficult to find each one of them in one single governmental organization. The requirement for learning and planning, for instance, obliges an association between government orgs/offices and colleges of exploration associations.

The acquirement of coordinated administrations at in contact point requires the participation and facilitated exertion of diverse divisions and orgs, level and vertical combination and in this way the making of a substantial and enhances system of relationship. The effective utilization and scattering of ICTs in individuals as a rule area includes an aggregate multi-disciplinary and component learning methodology. In addition the acknowledgment of electronic trades triggers system creation among privately owned businesses, money related establishment, and telecom. Then again, an e-government activity empowers bunch creation giving subject and business the

probability to partake in get-together and in choice making procedure, contributing effectively to diverse political and governmental talks.

Bunch creation, social occasions, steady cooperation and correspondence in the middle of government and its residents contribute further to the choice making methodology. By method for dynamic interest in political and government examinations, nationals can contribute their own particular thoughts, and impart their insight and information. This will accordingly prompt building trust in government and upgrading the connections between the government and residents could enhance the way of administrations by allowing government to tap more extensive wellsprings of information, points of view and answers for meet the difficulties of procedure making under conditions of expanded (OECD, 2001). Considering subjects as governmental clients, listening and comprehension to their needs and prerequisites, is key for a superior choice making methodology.

The suitable utilization of imparted data and information by all governmental offices and divisions offers the probability to settle on lively choices thusly to serve the gathering better. However upgrades in the velocity and nature of choice making depend enormously on the ability of governments to be engaged with new information, the limit of staff to process the huge measure of information, the predominant social qualities and the motivation of governments to move from a high various leveled open association model to an adaptable, less concentrated model (Shah et al., 2011).

Consistent cooperation and correspondence in the middle of government and its partners adds to the making of mindfulness about the potential duty of ICT to neighborhood bunch exercises. Consequently, e-Government accepts a vital part in promising business drove activities and in dispatching the methodology of limit building and in sorting out the exercises of an expansive number of intrigued partners. Really, one of the principal advantages of an e-government activity includes the progression of ICT use in different parts. In place for e-Government staff to connect, execute and correspond electronically with organizations, natives and other state holders, it is important to order the utilization of ICT contraptions and applications. For a government to-business electronic trade to happen the business itself need to make utilization of electronic hardware.

Then again, cash related establishments need to make secure and dependable strategies for electronic trade. The advancement of new mechanical; and administration limits needed for e-government convenience empower the improvement hence of new instructional classes modules in school and colleges endeavoring to supply the obliged aptitudes and capacities to the business sector (Khan et al., 2011).

#### *5.6 E-Government Judicial System Using ICT*

The proposed e-judiciary services will represent a completely different way of transacting with the judiciary. Further, the decision to switch to the e-judiciary services will become an important and complex one when the cases, the value, and the importance of each case are high. The switching decision will also be more complicated if the users lack the necessary appreciation of e-judiciary services and its value to them. With more detailed analysis of the market, market segment will be refined to target the required audience. Preliminary, we will position the proposed e-judiciary services as an efficiency tool.

It will be the electronic gateway for lawyers to process their cases and access legal research at the comfort of their offices. It will streamline case filing, eliminate the preparation of manual copies and statutory forms, and dispatch to the judiciary. Case filing process will never be the same again. Through electronic services, it will enable low-volume law firms to compete more effectively with larger firms. Indeed; such efforts help to ensure that the 'digital divide' does not impede the growth of the legal fraternity and skewed towards the big players.

This selection elaborates on the proposed e-judiciary services. The identification of these services is a result of analysis of the judiciary's needs and matching them with the overall judiciary strategy. During the process of developing the e-judiciary program strategy and business process re-engineering, the actual definition of each e-services may varies but based on our experience, the listed e-services are essential to any modern Judiciary throughout the world. These proposed e-services acts like the catalyst of change in the way the judiciary functions and interacts with its stakeholders (Khan et al., 2011).

The e-judiciary portal is not simply a static website that hosts "dead" information of the judiciary. Instead, our proposed portal will be highly flexible and dynamic that provides support for both French and English language. The judiciary staff will be trained to use the portal to publish and update information accordingly. In addition, the process of content publishing will be automated with a workflow engine, which controls the drafting, reviewing, editing and approval of the content to be published. Essentially, it empowers the trained judiciary staff to decide what is to be displayed in the portal.

All users managing the portal will be provided with an ID and password. Each user will also be assigned one or more roles. Based on their role(s), they will then be given rights to perform authorized transactions on the portal. For example, a certain user may be given the role of drafting a section of the portal that list the court hearing schedule. There may be multiple such roles in the judiciary (at least one in each court responsible for updating the schedule of a particular court). Their rights allow them to only draft the schedule. Once done the system will automatically route the content to the approving user. Such control ensures that there are checks and balances before any information is being published to the portal. In addition, all actions made by the users will be logged into an audit trails that can be viewed and analyzed.

### 5.7 E-Government UTAUT and Transparency

As e-Government becomes a common public interface, it increasingly becomes an integral part of public management. As per Waldo, bureaucracy was instrumental to executing progressive advances into cutting- edge social orders. In 2006, more than half of all grown-up Pakistani utilized government sites to ask, be served, and connect with government. In 2010, 67% of all Pakistanis online utilized administrative sites, which is a higher rate than the quantity of Pakistanis who participate in social networking and long range informal communication locales, for example, My Space and Facebook (Pew 2010a). The Internet is utilized by 79% of all Pakistan grown-ups (Pew 2010a) (Bertot et al., 2012).

Recent developments include increases in transparency, accountability, and steps to empower citizens such as the Honest Leadership and Open Government Act of 2007. The purpose of the act is to open government up to the people by introducing a system-wide standard for transparency. It is an extension of the existing Freedom of Information Act (FOIA) that gives access to public, non-classified documents. Transparency also serves as a vehicle for explaining what government does with taxes and how agencies operate; it also lays a foundation for civic engagement. Transparency measures have been implemented in state and local governments with one notable example being the State of Texas Transparency Project (State of Texas 2010). An example of local implementation is the City of Fort Collins, Colorado, which opened its ledgers to the public in a project named "Open Books" (City of Fort Collins 2011b). The theoretical underpinnings of increased transparency are that it reduces wasteful spending, explains public allocation of resources, and increases civic engagement by opening up agencies and making documents and financial reporting accessible over the Internet (West, 2004) .

Transparency has a political dimension. Critiques of government, political decisions, and resource allocation have been immense, evidenced by the millions of Pakistan's who post comments, write blogs, and interact in online forums. The 2008 presidential election was influenced by online support for presidential candidate Barack Obama; online opposition of the same person, now president, influenced the 2010 mid-term elections. Online opinions can form, shift, disappear, and move at a pace that differs from traditional creation of public opinion. Transparency fills a role to mitigate online opposition and explain why politics and government are done the way they are.

The theory behind transparency suggests it leads to more effective use of funds, increased voter confidence in public entities, and a strengthening of democracy through deliberation and participation. If the government collects taxes under the assumption that it solves problems citizens cannot, it is natural that citizens wonder how well the job was done. It is a justified question in the same way that we wonder if we paid the right price when buying products and services. When government does not provide full transparency and accountability, the Internet serves as an information source where bloggers, radio hosts, pundits, and news outlets feed the need to know according to an agenda. The Internet will not go away, it is here to stay. Therefore, public administration must address e-government, transparency, accountability, and online reputation because these factors convert to political influence that impacts government (Ahmed and Diesner, 2012).

According to Piotrowski (2007), government transparency occurs using one of four channels including proactive dissemination by the government, release of requested materials by the government, public meetings, and leaks from whistleblowers. Online transparency is voluntary dissemination by the government that combines proactive dissemination, release of requested materials, and public meetings. Transparency in the form of open financial books makes information available that otherwise would have to be requested under the Freedom of Information Act. Public meetings are accessible by online multimedia and social media when posted on a government's website.

Openness limits corruption and ushers in a culture of openness. Questionable outlays and projects would be disclosed in an open government. It is also important for impartiality. Rothstein and Teorell (2008) state that there are two important principles: political equality and equality before the law. To determine if the government



underserves an area, ethnic group, or specific segment, transparency is pivotal. Any person or group that wants to question the distribution of an unrestricted public good needs to be able to retrieve information on how it is distributed (Abie et al., 2004).

E-Government itself cannot be the solution for transparency and accountability since it requires participation and commitment from the political elite, institutional stakeholders, and various departments.

## 6. Technical analysis and findings

From the selected variables to test the proposed hypotheses defined the following model in which the level of development of a government participatory address will depend on socioeconomic characteristics and population of the country, the internal characteristics of the national administration and set of political factors.  $GOVELPART = f(\text{Socioeconomic factors, internal characteristics of the public body, Political factors})$  (1) the model (1) can be estimated empirically from model where, Groveport is the level of development of a participatory e-government; VC are proposed control variables that define the characteristics socioeconomic characteristics of each country (Axelsson and Melin, 2008).

Results of multivariate dependency model Regarding the linear regression model to estimate the rate of development of e- participatory government, varying GOVELPART, the results are reflected in the. The explanatory power of the proposed model is 77.1% to a level of 99% confidence. You can finds that are statistically significant with a positive effect, DT variable control and independent variables TAM and CAPINS, all for a confidence level of 95%. In relation to the rest of variables to be noted that GDP, EUROP and COMPOL have a positive effect, while variables, NORTAM, OECD, Preservation and COALIC have a negative effect, although none of them can be considered statistically relevant. These results indicate that the development of participatory e-Government is positively associated with the technological development of the municipality and the Town Hall complexity and volume of budgetary resources, lacking administrative culture and political factors influence statistically may be considered relevant.

Also are included as control variables wealth or development economic (GDP, EUROP, NORTAM) and technological development (DT). The development of e-Government in general depends on the performance economic development of the country, which is directly related with the ability to buy computers and technological tools and to Internet access. In this sense, the less developed countries have notable disadvantages in the adoption and application of information technology and Communication to the Public Administration due to insufficient human resources and financial. Consequently, previous literature has considered the economic wealth found a positive association between the level of wealth and the use of e-government. To represent economic wealth has used the variable GDP or Product GDP per capita. It has also included two dummy variables, representative of the two continents mainly grouped different countries observed.

Moreover, the adoption of e-Government also requires considerable investments in technical and administrative infrastructures. Therefore, it takes a certain level of technological development to update web pages using software and advanced technologies. In relation to technology development, vital factor when managing e-government is the extent of Internet use. As more number of people accessing the Internet, the usability of increase web platforms for citizen-management, relationship since Internet use by the Administration may be conceived as a response to the growing demand for population using the Internet. The variable used to represent technological development is the ratio degree Internet penetration per 100 users (DT) (Ndou, 2004).

## 7. Conclusion

E-Government thus can be made to use as a tool that can enhance the life of the citizens and thus achieve better governance. The use of information and technology in all the Government sectors thus will allow the government to see the success their strategies are bringing at the broad way level. In order to make sure it happens, there is some need for comparative measure that can improve the performance at the international standards. Government can move forwards in the development of the e-government and keeping in mind the rising demands of the e-government in the public sector, these policy measures can help the government in a long way. It has to be kept in mind thought that the delivery of the services can be a bit slow at times and thus there are not many Governments that can take care of the necessary capital to take care of all these operational difficulties (Nour et al, 2008, p.461).

Webs using constitutes governmental activities higher growth in the Internet field, giving rise to so-called government electronic tool to increase the fluidity in the relationship citizens- Public Administration. Although there is full recognition of the existence of two approaches in the development of e-Government and the participatory emprendedor, studies generally focus on observing the development of entrepreneurial approach

and the factors that determine the same.

In this paper, we set an objective to determine the factors explaining the level of development of e-Government participatory page 81 websites that municipalities have internationally. The results have shown that as the municipalities increase their complexity and have more resources budget, municipalities strongly encourage the development of an e-Government participatory and dynamic. Political parties, regardless of their ideology and stability they govern, they tend to promote common e-Government systems dynamic internationally observed that the use of the Internet as a tool for citizen participation in the political process does not provide electoral advantages. Future studies could perform validity tests that allowed expanding and consolidating knowledge about the properties of the instrument in the Pakistani population.

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### References

- Abdallah, s. & fan, i.-s. 2012. Framework for e-Government assessment in developing countries: case study from Sudan. *Electronic government, an international journal*, 9, 158-177.
- Abie, H., Foyn, b., Bing, j., Blobel, b., Pharow, p., Delgado, j., Karnouskos, s., Pitkanen, o. & Tzovaras, d. 2004. The need for a digital rights management framework for the next generation of e-government services. *Electronic government, an international journal*, 1, 8-28.
- Ahmed, s. & diesner, j. 2012. Information network analysis to understand the evolution of online social networking sites in the context of India, Pakistan, and Bangladesh. *Growth*, 3, 1.6.
- Ahn, m. J. & Bretschneider, s. 2011. Politics of e-government: e-government and the political control of bureaucracy. *Public administration review*, 71, 414-424.
- Al-adawi, z., Yousafzai, s. & Pallister, j. Conceptual model of citizen adoption of e-government. The second international conference on innovations in information technology (iit'05), 2005. Citeseer, 1-10.
- Alghamdi, r., drew, s. & Alshehri, m. Strategic government initiatives to promote diffusion of online retailing in Saudi Arabia. *Digital information management (icdim), 2011 sixth international conference on*, 2011. Ieee, 217-222.
- Alryalat, m., Dwivedi, y. K. & Williams, m. D. 2013. An analysis of electronic government research from the perspective of developing countries. *International journal of Indian culture and business management*, 7, 461-527.
- Alshehri, m. A. 2012. Using the UTAUT model to determine factors affecting acceptance and use of e-government services in the kingdom of Saudi Arabia.
- Arfeen, m. I. & khan, n. Factors influencing e-governance in Pakistan: case study of e-governance projects in Baluchistan. *Proceedings of the 13th annual international conference on digital government research*, 2012. Acm, 192-199.
- Asgarkhani, m. 2009. The effectiveness of e-service in local government: a case. *Asymptotic and computational methods in spatial statistics*, 22.
- Axelsson, k. & Melin, u. 2008. Citizen participation and involvement in e-Government projects: an emergent framework. *Electronic government*. Springer.
- Bannister, f. & Connolly, r. 3geg: exploring the hidden dimensions of government ICT. *Proceedings of the 8th European conference on information warfare and security, military academy, Lisbon and the university of minho, braga, Portugal, 6-7 july 2009*, 2009. Academic conferences limited, 105.
- Bertot, j. C., jaeger, p. T. & hansen, d. 2012. The impact of polices on government social media usage: issues, challenges, and recommendations. *Government information quarterly*, 29, 30-40.
- Gallego-álvarez, i., rodíguez-domínguez, l. & garcía-sánchez, i.-m. 2010. Are determining factors of municipal e-government common to a worldwide municipal view? An intra-country comparison. *Government information quarterly*, 27, 423-430.

Haider, z., Shuwen, c. & Hyder, s. Citizens' participation in e-government services: a comparative study of Pakistan & Singapore.

Hwang, m.-s., li, c.-t., shen, j.-j. & chu, y.-p. 2004. Challenges in e-government and security of information. *Information & security*, 15, 9-20.

Isaac, w. C. 2007. Performance measurement for the e-government initiatives: a comparative study, ProQuest.

Khan, g. F., moon, j., park, h. W., swar, b. & rho, j. J. 2011. A socio-technical perspective on e-government issues in developing countries: a scientometrics approach. *Scientometrics*, 87, 267-286.

Kihui, s. N. 2012. Factors influencing ict integration in quality service delivery among government ministries in kenya: a case of the ministry of public works. University of nairobi, kenya.

Malik, f. M., siddiqi, a. H., gilani, i. S., ann, c., mutee-ur-Rahman Mirza, f., Ismail, n., hackley, c., osmanwich, s., kang, k. & kaur, h. Conference proceeding.

Ndou, v. 2004. E-government for developing countries: opportunities and challenges. *The electronic journal of information systems in developing countries*, 18.

Ojha, a., palvia, s. & gupta, m. 2008. A model for impact of e-government on corruption: exploring theoretical foundations. *Critical thinking in e-governance*, 160-170.

Rashid, n. E-government as a tool to promote transparency and openness the case of Bangladesh. *Proceedings of the 5th international conference on e-government: iceg 2009*, 2009. Academic conferences limited, 156.

Shah, s. R. A., khan, a. Z. & khalil, m. S. 2011. Project management practices in e-government projects: a case study of electronic government directorate (egd) in Pakistan. *International journal of business and social science*, 2, 235-243.

Tapscott, d., Williams, a. D. & Herman, d. 2007. *Government 2.0: transforming government and governance for the twenty-first century*. New paradigm, 1.

Tolbert, c. J. & mossberger, k. 2006. The effects of e-government on trust and confidence in government. *Public administration review*, 66, 354-369.

West, d. M. 2004. E-government and the transformation of service delivery and citizen attitudes. *Public administration review*, 64, 15-27.

Xu, c. 2010. Exploring volunteered geographic information (vgi) for emergency management: toward a wiki gis framework. Texas University.

Yildiz, m. 2007. E-government research: reviewing the literature, limitations, and ways forward. *Government information quarterly*, 24, 646-665.

## Appendix 1

### Questionnaire

Please rate each of the following on 1-5 scale, where (1) is "Strongly Disagree," (2) is "Disagree", (3) is "Neither

Agree or Disagree", (4) is "Agree", and (5) is "Strongly Agree".

Performance expectancy (PE), Effort expectancy (EE), Social influence (SI), Facilitating condition (FC) and Behavioural

*Intention (BI).*

### SECTION A:

The UTAUT Survey in adoption of e-government in Pakistan

[1]PE1. I find the ICT systems offered at e-government is useful.[ ]

[2] PE2. Using the ICT systems available enables e-government to accomplish tasks more quickly [ ]

[3]PE3. Using the ICT systems available increases e-government productivity.[ ]

[4]PE4. If I use the current ICT system, e-government will increase chances of getting a raise. [ ]

[5]EE1. E-government interaction with the ICT systems available is clear and understandable.[ ]

[6]EE2. It would be easy for e-government to become skilful at using the current ICT system.[ ]

- [7]EE3. E-government would find whatever ICT system available easy to use.[ ]
- [8]EE4. Learning to operate an ICT system is easy for e-government.[ ]
- [10]SI2. People who are important to e-government think e-government should use the ICT system. [ ]
- [11]SI3. The senior management of this institution has been helpful in the use of the ICT system.[ ]
- [12]FC1. E-government have the resources necessary to use the current ICT system.[ ]
- [13]FC4. A specific person (or group) is available for assistance with ICT system difficulties.[ ]
- [14]FC5. E-government could complete the job or task using the ICT system

## **SECTION B**

Demographic Information:

[15]Gender: 1=Male

[16]Age: 2=Female. 1= Under 30years

[17]What is your job status: 1= Part-time, 2= 30-44 years , 3= 45years and above 2= Full-time

[18]Work Experience: 1= 1-5years, 2= 6-10years, 3= more than 10years