

Factors Motivating Youth for the Adoption of e-Government Services in Pakistan

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ABSTRACT

E-government is the emerging concept attracting a massive attention around the world in the developing countries. This paper explores the factors motivating youth for the adoption of e-government services in Pakistan. In this research we have applied Unified theory of acceptance and use of technology (UTAUT) to discover factors that lead to acceptance and adoption of e-government services by youth in Pakistan. This research is based on primary data, which has been collected by survey methodology based on random sampling technique and the sample of this research consists of the youth of different demographics of the country. The findings of this empirical analysis allow us to conclude about the key factors that lead to adoption of e-government services in Pakistan specifically by the youth. We found that there is much awareness of e-government and majority of the young people have access to internet facilities and they prefer to use online portals. Moreover, this study finds that there is greater need of innovations and reforms in the area of e-government. This paper suggests targeting young generation for the adoptability of e-government services as they are the best target audience who can accept and adopt change and innovations. This is also an opportunity for the government to minimize the gap and to connect with youth of the country through non-conventional and effective reciprocal e-communication.

Keywords: UTAUT, e-Government, Youth, Pakistan

INTRODUCTION

Electronic government (e-govt) is referred to delivery of national/federal and local government information and services to the public through the Internet in timely and efficient manner for better and effective communication and quality service catered to the stakeholders (Palvia & Sharma, 2006). Government is an institutional superstructure for translating politics into policies and legislation, while Governance is the result of the multiparty interaction of government, the public service, and citizens for carrying out various processes for developing policies, designing programs and delivering services (Kettl, 2002). Government and governance both require consensus and support of the governed. Whereas government is the formal structure to achieve this objective and governance is the outcome of this endeavor. E-government can prove to be better and efficient form of government when it is implemented and managed in proper manner (Riley, 2003).

Online presence of government agencies has advantages over traditional offline approach, like instant and timely information collection and disbursement, easy all time access, freedom of information search, and two-way communication and policy consultation with public. E-government initiatives can resolve many issues leading to effective collaboration among different levels of public administration and enhanced customer-centric quality service delivery (Torres, Pina, & Acerete, 2005).

With the emergence of global concept of making government information easily accessible for public, many developing countries including Pakistan strive to move towards e-government. Besides, in the international arena of the Internet, it is also getting mandatory to adopt the technological changes and innovations to pace with the other countries of the world. But according to (United-Nations, 2014), Pakistan has only 10 percent of population using Internet, which shows there is much more need of creating awareness and that there is potential of introducing electronic innovations to increase adoptability.

This paper explores the factors influencing youth for the adoption of e-government services in Pakistan. It is based on primary data, which has been collected by survey methodology based on random sampling technique. The paper proceeds as follows. Next section reviews the empirical literature followed by the section 3, which is about theoretical background & methodology. In section 4 we present our analysis. Finally, section 5 concludes.

REVIEW OF THE LITERATURE

Youth are the major portion of population especially in the developing countries. It is therefore important and wise to target and train young people to inculcate the culture of online interaction between government and the governed. As (Valor & Sieber, 2003) found in their research that young people adopt new technologies even with less knowledge of handling them. Young people are most of the times the earlier adopters and acceptors of new technologies. It is therefore most important and useful to understand their attitude and behavior towards emerging technological innovations, like e-government. It is a necessary for the developing countries to educate and train young people about benefits and applications of adoption of technological tools if they really want to successfully implement e-government services in the system (Hamner & Al-Qahtani, 2009). More important is the fact to know the factors that really inspire and influence these young people to adopt the different technological inventions which may lead to understand their attitude towards e-government services as well.

E-government can use already existing and informal forums for information delivery, like social media and mobile networks. Through e-government strategies, collaborative mechanism can be introduced to engage community and citizens in service delivery and decision making process, including various groups like youth and disadvantaged citizens (United-Nations, 2014). The developed countries that are already enjoying the benefits and use of internet are pressurizing the developing countries to share their information online. And to disseminate this information the developing countries strongly require transforming their self and implementing the modern practices and e-government as already implemented by developed countries (Tapscott, 1996). (Ndou, 2004) confirms this challenge and narrates that many developing countries face this challenge to transform and modernize their administrative services, processes and management information systems.

Pakistan is one of the developing countries and majority of the population do not enjoy the digital facilities, which can help them for their socio-economic development (Ahmad, Markkula, & Oivo, 2012). The aim of implementation of government is always focused to improve the living standard of the citizens and to develop business and employment but it's not an easy task to accomplish. So many hindrances come on the way to implementation. Most important are the lack of awareness among citizens about e-services and the shortage of workers equipped with knowledge and technical skills. Around the world, Governments are implementing electronic government. There is also a critic on developing countries for distributing essential information to the public. Pakistan is a developing economy and is in

implementation process of e-Government and facing all of the above challenges (Kayani, Haq, Perwez, & Humayun, 2011).

One of the motivations for e-government adoption in the country like Pakistan is the GDP growth. Many empirical studies have been conducted and they have proved a positive relationship between investments in ICT and GDP growth. An (OECD, 2002) research conducted on a sample of many countries over the period of 1995-2002 and they showed that there is the annual Growth in GDP from 0.5%-1.3% due to the investment in ICT. Another motivation is the Cost reduction and the efficiency gains. Many researchers i.e. (Amit & Zott, 2001; Malhotra, 2001; Tapscott, 1996) have conducted researches and have agreed to the argument that ICT contributes much to reduce the cost and to enhance the efficiency for private organization. Furthermore these benefits establish a major portion of e-government initiatives.

E-Government increases the transparency in the system and also facilitates the decision making. Through government, citizens are invited to participate in decision making in some cases and situations. This decision making is facilitated by the government by involving and allowing the citizens in online communities and e-forums and the citizens can give their suggestions. It facilitates the government on one hand and on the other end the citizens are also updated by the information shared by government which is very difficult in the traditional systems (Ndou, 2004). In order to deliver key impacts, it is necessary for e-government strategy to focus upon usage and uptake of the services to be delivered online. Beside supply side, it is also important to understand the users' motivation factors for the adoption of e-government services. For this, it is necessary to align and integrate appropriate channels to specific user groups, like youth.

THEORETICAL FRAMEWORK (UTAUT MODEL) & METHODOLOGY

Out of all the models applied in the previous researches, UTAUT model best suits the research. It has almost no limitations.

Table 1 - Summary of Studies where UTAUT model have been used

<i>Authors</i>	<i>Studies</i>
(Harby, Qahwaji, & Kamala, 2012)	End-Users' Acceptance of Biometrics Authentication to Secure E-Commerce within the Context of Saudi Culture: Applying the UTAUT Model
(V. Venkatesh, Sykes, & Xiaojun, 2011)	Just What the Doctor Ordered: A Revised UTAUT for EMR System Adoption and Use by Doctors
(Schaupp, Carter, & McBride, 2010)	E-file adoption: A study of US taxpayers' intentions
(Wang & Shih, 2009)	Why do people use information kiosks? A validation of the Unified Theory of Acceptance and Use of Technology
(Al-hujran & Chatfield, 2008)	Toward a Model for E-government Services Adoption: The Case of Jordan
(Hung, Wang, & Chou, 2007)	User Acceptance of E-Government Services. Kaohsiung
(Fu, Farn, & Chao, 2006)	Acceptance of Electronic Tax Filing: A Study of Taxpayer Intentions
(Ebrahim, 2005)	The adoption of e-government in the Kingdom of Bahrain

Source: (Ahmad et al., 2012)

UTAUT model has four dimensions i.e. Performance expectancy, effort expectancy, social influence, and facilitating condition. These four constructs explain 70% of the technology acceptance and usage behavior (Ahmad et al., 2012) (Viswanath Venkatesh, Morris, Davis, & Davis, 2003) confirms the above argument and narrates that these four constructs of UTAUT are considered as direct determinants of user acceptance and usage. He also endorses his argument by saying that UTAUT model is used and suggested for use in a similar context by many researchers. (Rosen, 2005) is of the opinion that UTAUT model should now be considered as a benchmark for the acceptance literature it explains user acceptance in better way in forms of completeness and accuracy as compared to all other models available.

This research is based purely on primary data. A survey was collected among the young people of different cities of Pakistan through random sampling. A questionnaire was developed to get responses through variables suggested by UTAUT model. After the collection of data it was filtered and empirical analysis was applied to get the results. The variables were tested to find factors leading towards adoption of e-Govt. services by the young people. Through empirical analysis, internet and e-Govt. service adoption patterns were analyzed.

ANALYSIS & FINDINGS

Demographics

This research is based on survey conducted through 104 respondents, out of which, 80 percent is based on Male participants and 20 percent female respondents (Table-2). As the research is mainly based on youth population, most of them are in late 20s of the age, majority of them having Bachelors (24 %) and Masters (60%) degree or currently pursuing the same. 30 percent of the whole respondents are students and 60 percent are employed somewhere.

Table 2. Demographics (Gender)

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid	Male	84	80.8	80.8	80.8
	Female	20	19.2	19.2	100.0
	Total	104	100.0	100.0	

Table 3. Demographics (Age)

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid	14-17	1	1.0	1.0	1.0
	18-24	33	31.7	31.7	32.7
	25-29	70	67.3	67.3	100.0
	Total	104	100.0	100.0	

Table 4. Demographics (Education level)

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Intermediate & below	2	1.9	1.9	1.9
Bachelors	25	24.0	24.0	26.0
Valid Masters	62	59.6	59.6	85.6
M.Phil./PhD	15	14.4	14.4	100.0
Total	104	100.0	100.0	

Youth Internet Usage Pattern and E-Govt.

This research finds that majority of Youth (52%) are always online, while others have random pattern of using the Internet (Figure-1). This shows the maximum time of young people spent on the Internet, which is indicating a great opportunity for the government to customize their e-Government Services to young people’s needs and internet usage patterns and their frequently used portals.

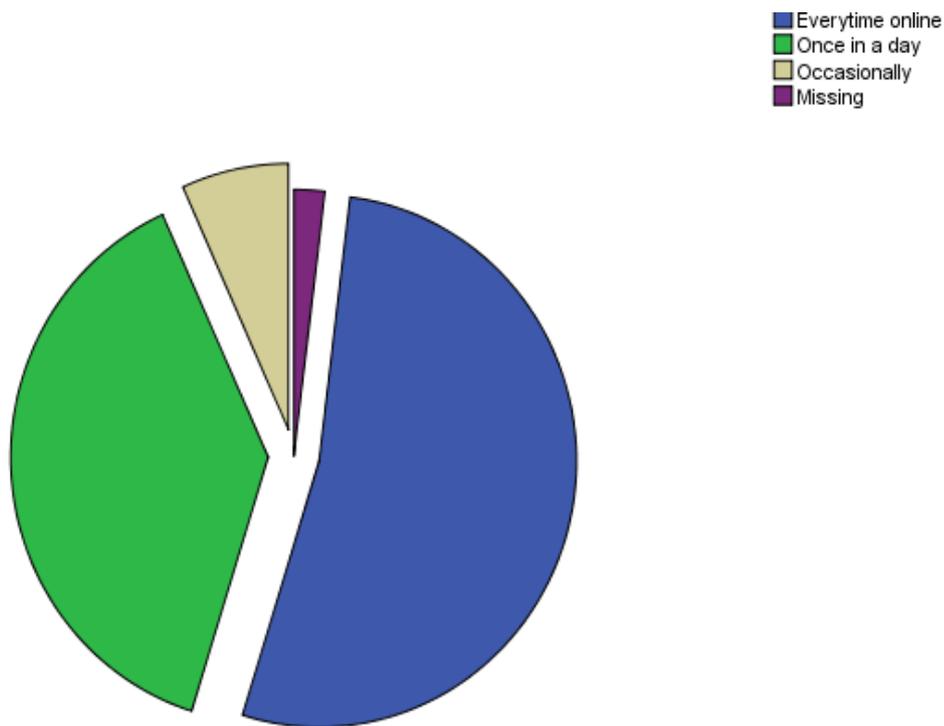


Figure1. The Internet usage pattern among Youth

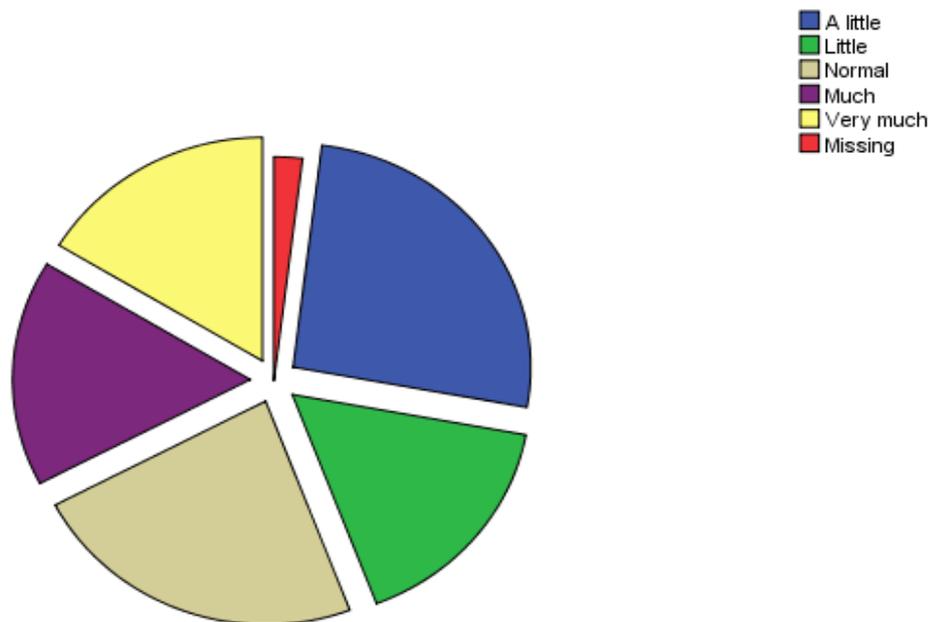


Figure 2. Familiarity of Youth with e- Govt. Services

E-Govt Services adopted by Young People

As figure-2 shows there is evidence of awareness among young people of Pakistan regarding e-Govt. services and there are different patterns of familiarity. There is more need of creating awareness among young people to adopt e-Govt. services, as average of the young people have normal or a little familiarity with such services in Pakistan.

Types of e-Govt. Services sought by Youth

This research asked the young people about different types of services they seek online via e-Govt. portals and found that there are some of the important categories of services related to youth. Young people navigate through different Govt. websites for information and services mostly regarding three of the main areas: Education (25%), Scholarships (20%) and Job search (27%) with small portion of other service areas. (Figure-3)

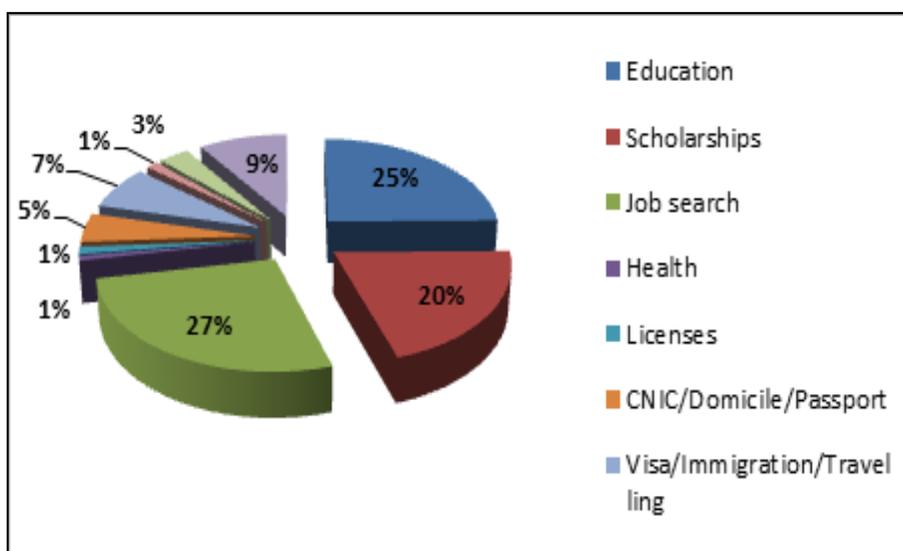


Figure 3. Types of e-Govt. Services sought by Youth

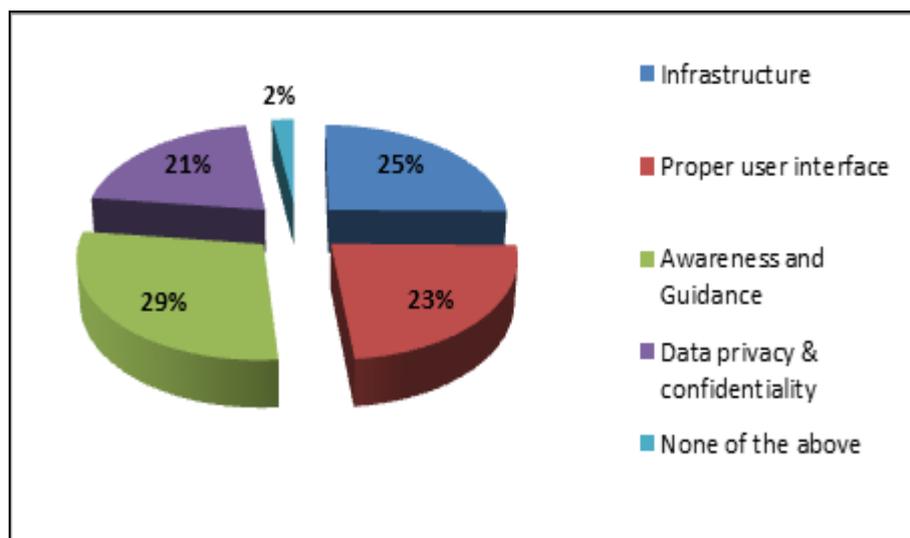


Figure 4. Facilitating conditions for adoption of e-government services

It is evident from the table-4 that young people’s intention to adopt e-Govt. services is affected by different facilitating conditions, having almost equal importance weightage i.e. Infrastructure (25%), proper user interface (23%), awareness and guidance (29%) and Data privacy and confidentiality (21%).

Performance Expectancy

As per the UTAUT model, Performance Expectancy factor was measured by asking two main questions from the youth respondents, depicted in the table given. As per the results, people seek to adopt e-Govt. services expecting convenient task completion. Moreover, most of the respondents expect easy and efficient task completion through e-portals (Mean 3.86). When we see the average mean of the Performance Expectancy, it is approximately 3, which means young people also expect to have better performance through e-government services adoption. These findings suggest positive attitude of young people to adopt e-Govt. services in Pakistan.

Table 5. Performance Expectancy- Mean Score

Performance Expectancy	Mean	Median	Mode	Std. Deviation
Convenient task completion	2	4	1	.96
Easy and efficient task	3.86	4	1	1.14

Effort Expectancy

Another factor in UTAUT model, *Effort Expectancy* was tested by asking four questions as given in the table given below. This study finds that most of young people in Pakistan consider e-Govt. services not that much easy to learn (Mean 2.07). Though, it is found that young people consider e-Govt. services to be easy to use with sufficient trainings (Mean 3). Meanwhile it is clear from the table that young people have positive attitude towards e-government adoption considering it to be useful (Mean 3) and cost effective (mean 4.0). And the average mean of the *Effort Expectancy* is more than 3. It is also evident that *Effort*

Expectancy is a major factor motivating the young people to adopt the e-Government services in Pakistan.

Table 6. Effort Expectancy- Mean Score

<i>Effort Expectancy</i>	<i>Mean</i>	<i>Median</i>	<i>Mode</i>	<i>Std. Deviation</i>
Easy to learn	2.07	2	1	1.26
Easy to use	3	3	3	.62
Useful	3	2.5	4	1.18
Cost effective	4.05	4.5	5	1.23

Social Influence

As previous researches indicate and UTAUT model include *Social Influence* as a factor leading towards adoption of e-Govt. services, this research also tests this factor by asking two questions as shown in the table. It was proved that young people in Pakistan are willing to adopt e-Govt. services because they consider it to be respectful way to avail the services, as compared to the traditional methods (Mean 4.2). Moreover, majority of the young people are influenced by the important people surrounding them (3.6).

Table 7. Social Influence- Mean Score

<i>Social Influence</i>	<i>Mean</i>	<i>Median</i>	<i>Mode</i>	<i>Std. Deviation</i>
Respectful using e-govt. services	4.2	5	5	1.04
Suggested by important people	3.6	4	5	1.30

CONCLUSION

This research has found empirical evidences that young people are willing to adopt e-Govt. services influenced by the factors mentioned in UTAUT model which were applied in this research paper and proved. Young people of Pakistan have access to the Internet facility and are most of the time found online. This suggests e-Govt. services can be better targeted to the youth of the country who can be better adopters and users of the different government services provided online. It will not only reduce the service delivery cost and time, but will also prove useful to reach out the young population, to understand their needs, to provide them proper services for development and to reduce the gap. Pakistan, a developing country can get most of the concept of e-Govt. services by digitalizing its service delivery through interactive websites and e-Govt. portals. The previous researches based on UTAUT model were conducted randomly on different population demographics, but this research applied UTAUT model especially upon youth of Pakistan because it is important to focus on the factors that motivate and influence young people, who are the majority of the country’s population. It is recommended to understand the influencing factors mentioned in this research to customize e-Govt. services to the young people’s needs and expectations. Moreover, it is necessary to align and integrate appropriate channels to specific user groups, like youth.

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