"Digital Divide and E-governance in Pakistan; Factors Affecting the Citizen Portal

App Pakistan"



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Abstract

The Government of Pakistan has in 2018 launched Citizen Portal App an android/IOS based complain lodging system. Motive behind this technology intervention was to get rid of the traditional obsolete method of physically reaching a government department and lodging complaint and bringing e-governance for ensuring good governance. The app covers the entire jurisdiction of Pakistan and is available for overseas Pakistanis to use. Like every initiative, the success of the project depends upon the adoption, implementation and impact it brings. This research has analyzed the issues in adoption, factors affecting the adoption and user satisfaction/experience of the application and the government officials managing the complaints received. This qualitative study conducts interviews with citizens who have used the application, regarding their experience, with the government focal person to get insight from public officials regarding the app and brief interviews were conducted with random sampling done for one data set to know how many knew about the app, and what were the reasons for it. This study explores the reason why people are using the app, and what are the reasons affecting their feedback of the app and what can be done so masses use it and how the experience can be effective for all. This study recommends mass awareness among citizens about the presence and the use of the app, cutting back the redressal time of complaints and making government officials more accountable for the successful implementation of the project.

Chapter 1: Introduction

Ever since the rise of separate nation states, the role of governance has increased in shaping up the destiny of a country. Governance is often perceived as a main route to development. Political leaders for the well-being of their country's citizens or subjects commonly define governance as the exercise of power or authority. Governance deals with the public sector, power structures, equity and ideals of public administration. The citizens now days are well aware for the need of good governance, as good governance will lead to the empowerment of citizens and is crucial for their sustainable development. Emerging trends point to the fact that development and good governance tend to go hand in hand. The Sustainable Development Goals adopted by the United Nations General Assembly to achieve a better sustainable future for the entire world are also dependent on governance. A positive relationship between all 17 SDGs has been found with governance (L-M.Glass &J.Newig, 2019).

Good governance is vital for developing countries of South Asia in order to curb corruption, reduce poverty and to ensure a dynamic economy and development which leads to an improvement in per capita income and other social indicators(Uddin &Joya, 2007).

E-governance is now regarded as the need of the hour by countries all over the world and is demanded by the citizens now as the citizens now perceive it as a form of good governance. (Kalsi and Kiran 2015). Instead of travelling long distances, meeting public officials, seeking public documents, information or services which would lead to loss in daily wage and high transportation cost and wastage of time, communicating can be done quicker, faster, easier and cheaper way through the use of ICTs by both the citizens and the government (Nisar and Yakoob 2014). Sheridan and Riley (2010) say that e-governance "deal with the whole spectrum of the relationship and networks within government regarding the usage and

application of ICTs". According to Chen and Hsish (2009), e-governance is the use of ICT to improve the quality of services and governance. UNPAN (2011) defines e-governance as the application of ICT tools in: the interaction between government and citizens and businesses; and in internal government operations to simplify and improve democratic governance.

E-governance is being adopted by many countries because of the various benefits it brings. The three main benefits of e-governance are improving government processes (e-administration); connecting citizens (e-citizens and e-services); and building external interactions (e-society) (Heeks, 2001). Also, E-governance give rise to increased transparency and accountability of government processes, reflect on the relationship between government and citizens and help build new spaces for citizens to participate in their overall development. (Madon, 2004). The introduction of ICT can reduce corruption by improving the enforcement of rules, lessening the discretion of officials, and increasing transparency (N.D. Oye, 2013).

E- Governance or electronic governance is a paradigm shift in public administration over the traditional approaches (UNPAN, 2004). A mean for carrying out government functions effectively and providing an interface between government and its citizens, thus bridging the gap between them. Traditionally, interaction between the governed and governors used to be face to face in public offices; however, with the revolution in information and communication technologies (ICTs), these interactions are now happening at virtual environment thus reducing the burden on public offices in terms of time and material resources.

Now public services or access to information is closest to the citizens in the form of computer, mobile phones and internet (Barthwal 2003). The last two decades have seen the widespread practice of placing the letter 'e' in front of many words such as democracy, business, government and commerce etc. However, an important question in this regard is

whether ICT has brought any improvement in these fields or is it simply a cow path paving case (Bannister & Connolly, 2012).

E-governance is among one of those expressions. The term has been in circulation for the last two decades and has gained attention in the arena of technological and transformative governments, and mostly considered as a synonym with the term e- government nonetheless they are different. The comprehension and demarcation of e-governance and e-government is hard to elucidate and has some hurdles to pass through. Among those hurdles are ICT industry per se which has a long tradition of re-labeling technologies (Bannister, 2009); and the lack of attention of politicians while using these terminologies. For vivid demarcation, it is required to know the difference: between governance and government; between governance and e-governance; and between e-democracy and e-governance.

M-governance is mobile phone applications for good governance is more about using the mobile technology to make government ministries "even more accessible and citizen-centric by extending the benefits of remote delivery of government services and information to those who are unable or unwilling to access public services through the Internet or who simply prefer to use mobile devices" (World Bank, 2007). Mobile phones make it possible to create a bottom up participation and ultimately – what m-governance is all about – empowerment. (J Hellstrom, 2009)

E-governance projects success hinges on many different factors, especially in developing countries. None more so than Digital Divide. Digital divide is defined as two interdependent gaps; gap between skills of people who use technology and gap caused by access to the technological tools (Kularski and Muller 2012). Digital Divide can be across demoghraics, geography or gender. Digital Divide determines which sector of the population would be able to benefit from the E-governance initiatives and whether or not it would truly benefit people at the grassroots level. Roughly 4.2 billion people are outside the digital revolution. With

Internet usage growing only 9 percent a year, around 58 percent of the world lacks Internet access. Those individuals are unable to enjoy the social, economic, and civic benefits that derive from digital connectivity (DM West 2015).

Emulating many developed countries, developing countries are starting their own Egovernance projects to facilitate its citizens. In this regard, a study by (Shaikh & Wijekuruppu, 2016) posit that e-governance has played a significant role in the eradication of crime and also allowed the public to play active role in making policies and highlighting the issues to the politicians and government. To make this happen, the Government of Pakistan in 2018 launched the 'Citizens Portal App Pakistan', a mobile phone application which aims to ; solve the probems of the citizens, provide feedback to queries of the citizens, take valuable feedback from the citizens for policy making. This research has examined the digital divide in Islamabad, and whether or not the 'Citizen Portal App Pakistan' inclusive in it's approach, effective in it's approach as a form of good governance, catering to the needs of masses. The fragment of the society which can take benefit from this e-governance initiative and what are the hurdles of the fragment of the people who cannot avail the benfits of this e-governance initiative. The national IT policy and action plans (ITPAP) stated vision is "to harness the potential of information techoionlogy as the key contributor to the development of pakistan" and it is " encourage and assist the interpreneural spirit make availabe information knowlodge and techonology to every citizen". (Zaidi, 2003)

1.1: Background

The current Pakistan Tehreek-e-Insaaf (PTI) government lead by Imran Khan went into the 2018 general elections with the slogan of accountability, transparency and better public service delivery which will truly help in uplifting of the common man of Pakistan. The party

would try and digitize government processes to increase transparency, curb corruption and ensure fast, smooth public service delivery to the marginalized people of Pakistan to ensure their well-being instead of the government employees and state apparatus being used to help the influential and wealthy.

After coming into power, the government of PTI revamped the Prime Minister's Delivery Unit (PMDU) and launched an online facilitation system to redress complaints of citizens and improve coordination among ministries and different tiers of governance.

PMDU was reorganized and revamped by utilizing ICT-based systems to make it more efficient and improve its effectiveness. The 'Citizens Portal App Pakistan' was launched by the PMDU. The App also secured second place out of over 4600 entries at the World Government Summit in Dubai in the category of best mobile government Apps.

In order for the App to be a success and to ensure better public service delivery, citizens of the country need to have the means to access, know how to use and be aware of the App.

1.2: Problem Statement

E-governance is often perceived as good governance with the numerous benefits it has brought to the general public. In developed as well as developing countries, numerous studies like Madon(2004), Uddin and Joya (2007), Oye (2013), L-M.Glass & J.Newig (2019) highlighted the importance of e-governance initiatives in fighting corruption, reducing poverty and ensuring sustainable development. Likewise, many developing countries, Pakistan is also prone to bad governance, with Pakistan lowly ranked at 120 out of 180 countries in the Corruption Perception Index 2019 by Transparency International. A report by Transparency International (2013) stated 65% of the citizens reported of paying bribe to police, 75% to land services, 55% and 57% to utilities and tax revenue, even 23% paid a bribe for medical and health services. To tackle this problem and to ensure timely and quality public service delivery, recently the government of Pakistan also took a step towards good governance through e-governance by launching the Citizen Portal App, an app to address the complaints of the citizens of Pakistan. E-governance initiatives are only beneficial when majority of the society get equal benefit from it. According to the government, by digitizing the process, it increases accountability, curbs corruption, provides a better check and balance system and also facilitates the citizens, as citizens can easily file a complaint at the comfort of their home.

The current statistics of the Citizen Portal App shows that only 1.3 million registered members, as of January 10, 2020, out of a population of 21.2 million (2017 population census). If we probe further, only 6.7% of the registered users are female. The reasons of these low numbers could be digital divide. Now it has been more than 2 years that the app has been launched and government claim that it proved helpful in the solving the problems of the citizens. Therefore, it is the best time to do the survey of public's response towards this claim and to check whether it really helped the people or not.

1.3: Research Question

- 1. What is the overall user experience of the Citizen Portal App?
- 2. What are the factors affecting the adoption of the Citizen Portal App adoption?
- 3. What are some of the key achievements of the Pakistan Citizen Portal App?

1.4: Significance of Research

A lot of statistics have been shared by the government in the previous year that how many citizens have registered and benefitted from this App. Also, the government has run media campaigns, about how much of a success of the App has been. However, in November 2019, the Prime Minister took notice of officers' inaction on the complaints of the Portal. A lot of government resources have been spent on the media campaign, revamping of the PMDU,

investing on the digital infrastructure to connect various government departments with App and salaries of the government employees responsible of the App. This study highlights; whether or not this initiative has been perceived as a form of good governance by the general public, has the Portal App benefited the segment of people which needs government's attention the most or are they oblivious to it and do not know how to use it. This research also provides the insight about the socio-economic background of people who are aware of Egovernance initiatives in Pakistan and those who aren't and what factors contribute to it.

1.5: Objectives

The objective of this research is to assess whether such initiative towards e-governance would be beneficial and carter to the needs of the masses in Pakistan or not.

The objectives of this study are

- To identify the factors which contributes to the usage of the App?
- To identify the reasons of the positive or negative user feedback on the complaints.
- Citizens' perception and experience about E-governance, through Pakistan Citizen Portal App.
- The achievements of ICT administration on receipt of complaints via Pakistan Citizen Portal App.
- Policy recommendations by the respondents for increasing the usage and user experience of the app.

Chapter 2: Literature Review

The emergence of new and improved technology has evolved how we communicate with each other. The communication has become faster, easier. Governments are now using it for communication, service delivery and connecting with its citizens. Scholars, since the turn of the century have begun exploring the different aspects to how ICTs can improve the different aspects of our existing dealings with the government, highlighting the numerous advantages it brings. Governments all around the world are starting e-governance initiatives to reap the benefits from it. Scholars around the world have highlighted how important a role governance/e-governance plays in attaining development and what are necessary prerequisites for a successful e-governance initiative and what things need to be considered while starting an e-governance initiative. The literature below will build the case for present study by explaining why this innovation is grabbing everyone's attention in the developing countries and is being adopted at a faster pace, focusing on its impacts and the factors influencing its diffusion and adoption rate in these countries. As the Citizen Portal App is a mobile phone application it falls under m-governance, according to this study by (Narayan, 2007), m-governance is used to supplement e-governance and falls under the umbrella of egovernance.

2.1: Governance

According to the United Nations Development Program (UNDP), governance is defined as, "the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It comprises mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences." Ukwandu, D. C., & Jarbandhan, V. (2016) in their study highlights the different forms of governance prevalent in the African countries and the different outcomes it gives. After analyzing different countries, the scholars concluded that without good governance, moving beyond poverty and underdevelopment would be very difficult. Good governance spurred economic growth and development, created jobs, reduced inequality. The researchers compare the coffee producing countries of South America with coffee producing countries of Ethiopia, Ivory Coast, Uganda and Kenya and the researchers found one of the main reasons in difference in output was governance and lack of interest of the political ruling parties of the countries.

Many scholars have shed light on the numerous benefits good governance brings. M.Lockwood (2010) in his paper discusses how good governance is not only based on these seven principles, but how it increases transparency, legitimacy, accountability, inclusiveness, fairness, accountability, connectivity and resilience. Governance plays a vital role in areas like health, education, infrastructure, capital market regulation, macroeconomic stability, safety net provision, the legal system, creation of a good business environment, and the environment protection, all of which are preconditions and basic features of the developed economy(Brautigam, 1991; Landell-Mills and Seragedin, 1991; Boeninger, 1992; Obadan, 1997; Frugoni, 1988)

N.D. Oye (2013) in his paper discussed how good governance in developing countries reduces corruption and poverty which are one of the biggest obstacles towards development. Sebudubudu (2010) details the impact of good governance has had on development and poverty in Bostwana. After gaining independence, Bostwana faced high unemployment rates, majority of the population living under poverty but with good governance which helped in effective use of natural resources the country was able to get on the path of equitable human development and successfully dealing with challenges. Bostwana is considered as a model of

good governance among the African countries. Much of this development is attributed to Botswana's democratic governance, which is based upon, transparency, accountability, low levels of corruption and a decentralized decision-making structure. The case of Botswana's good governance for development is also highlighted by the findings of Tsie, 1996; Theobald and Williams, 1999 and Holm, 2000. Pradhan and Sanyal (2011) found in their study after conducting a cross sectional analysis of 15 Indian provinces over the last two decades that provinces which saw improvement in governance efficiency also saw an improvement in their human development. The study highlights that good governance is the potential factor through which human development can be improved in the Indian economy.

Governance means dealing with rules and regulation with the help of which society is governed; and it also include processes of negotiation where these rules are exercised, interpreted and changed. Lastly, that governance can be seen in different forms from markets to hierarchies and that different mechanisms can manifest per se in different circumstances according to their suitability.

2.2: Digital Globalization:

Advancements in technology and innovations have altered every sphere of life and how we interact with each other. Governance is not immune to this. With the latest development of information and communication technologies, government has also changed its approach in how to interact, deal and provide service delivery to the civil society, businesses and non-profit organizations through the adoption of these ICTs. This all comes under the domain of digital governance, electronic governance or E-governance (Akrivopoulou, 2013).

South Korean government launched OPEN system (Online Procedures Enhancement system for civil applications due to existence of corruption in the local government permits and licenses. This was an anti-corruption drive against the mal practices in the existing structures which enable the citizens to access to a range of information. The portal also provided rules and procedures for the issuance of licenses and permits. Moreover, the Portal decreased corruption dramatically and saved the valued time of the masses (World Bank 2000a). Similarly, the same world Bank report talks about an e-governance in Chile. Chile's Internal Revenue Department introduced a web-based service for filing tax returns. The process was completed in three steps: first step was information of procedures, plans and taxation rates. Second stage was that of entering ID number, tax return ID number and password and third step involved transaction stage allowing the citizens to file their income tax online. The system reduced the cost and improved the speed and accuracy of the process. Previously the same paper-based procedure took 25 days but with the use of ICTs based web it now takes only 12 hours. The Tanzanian government started a HR and Payroll system covering more than 280,000 public officials, the cost of the program was around US \$6.5 million but played a significant role in reducing ghost workers and improving control, accuracy and management in the concerned department.

2.3: Transition to E-governance

Ever since the emergence of internet and information communication technologies, individuals, businesses, organizations and government, all have been utilizing it for their advantage. Also, the citizens all around the world started demanding effective and easier ways to communicate with the government which is hassle free and quality government service. In the instance of government making the transition from traditional governance methods and service delivery to e-governance, Roy (2003) in his paper finds that three set of values determine the transition. Roy states for starters an effective portal, should meet the technical and demand challenges of multichannel environment. Secondly, relational facets of the e-governance should be kept in mind, as social structure is prepared to the emerging

contours of Information and communication technologies. Lastly, the analysis of the political factors should be done prior to the consideration of e-governance, as these are equally significant both democratically and organizationally.

2.4: E-Governance

Oye (2013) discusses how poor people usually get the poorest service because mainly the budget for public service is acquired by corrupt officials. Oye finds that this corruption can be reduced with introduction of ICTs corruption by improving the enforcement of rules, lessening the discretion of officials, and increasing transparency. Also, the already poor would not be exploited by having to give bribes to get service delivery which is their fundamental right.

E-governance is defined by UNESCO as, "E-governance is the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective."

Since the turn of the century, both governments and citizens have started to view "Egovernance as a form of good governance." Okot-Uma in his paper discusses many egovernance initiatives in more than 10 countries and the numerous benefits it has brought with it and has influenced developing countries around the world to follow suit and catch up in order to reap benefits of e-governance. A.Kolsaker, & Lee-Kelley (2009) in their paper find that the citizens now see e-governance as positive and it is viewed as a mean towards good governance. Likewise, numerous studies show the perception of citizens towards of Egovernance. Pathak, Belwal , Naz , Smith and Al Zoubi in their paper 'Citizens Perception of Corruption and E-Governance in Jordan, Ethopia and Fiji-the need for a marketing approach' find that according to citizens of Jordan, Fiji and Ethopia, public sector demand for corruption is increasing, and those who are aware of e-governance services see it as a mean to curbing corruption. The paper also finds that urban bias and digital divide restricts the scope of e-governance to only major cities and only a small fragment of the society benefits from it. Pakistan, like them a developing country, face similar problems.

Bussell (2012) says traditionally the dealings between public or business and government agencies takes place in government setup, but with the evolution and advancement of ICTs it has now become possible to locate a service close to the public or use the help of ICTs to get things done. Resultantly, it has brought a drastic change in the whole governance process. With the help of these technologies we can access a service and information 24 hours a day, and7 days a week. These ICTs can serve multiple of ends: easy access to information, improved relation between the citizens and government agencies, reducing corruption, cheaper and efficient services, bureaucratic barriers, cost reductions and increased transparency.

Electronic governance has changed the traditional mode of governance and using the potentialities of Information and Communication Technologies (ICTs) at the different levels of government and private sector and beyond, for the purpose of good governance (Bedi et al., 2001; Holmes, 2001; Okot-Uma, 2000). According to (Okot-Uma, 2001), the notion of e-governance is contextually inclusive of e-government and e-democracy as they reinforce the underlying principal of the same notion.

Dawes (2008, p. S36) defines e-governance as the use of information and communication technologies (ICTs) to support public services, democratic process, government administration and relationships among citizens, the private sector and, civil society, and the state.

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The main objectives of e-governance are to bring transparency, accountability, effectiveness, and efficiency in government and provide citizens an access to government information. Thus, it strives for innovative, cheaper, and quicker governmental practices.

2.5: Glance of E-governance worldwide

Yeasmin, S. (2020) in her paper states that broad level digitization has helped climb Bangladesh up the income level. The people of Bangladesh perceive e-governance initiatives in the country as saving time and money as it has removed the intermediaries involved as compared to the traditional form of governance. In Uganda Bjorn (2018) in his study evaluates the impact of 'Bazara' project which has changed public service delivery and has gained popularity among the citizens through the provision of information through information and communication technologies.

South Korean government launched OPEN system (Online Procedures Enhancement system for civil applications due to existence of corruption in the local government permits and licenses. This was an anti-corruption drive against the mal practices in the existing structures which enable the citizens to access to a range of information. The portal also provided rules and procedures for the issuance of licenses and permits. Moreover, the Portal decreased corruption dramatically and saved the valued time of the masses (World Bank 2000a). Similarly, the same world Bank report talks about an e-governance in Chile. Chile's Internal Revenue Department introduced a web-based service for filing tax returns. The process was completed in three steps: first step was information of procedures, plans and taxation rates. Second stage was that of entering ID number, tax return ID number and password and third step involved transaction stage allowing the citizens to file their income tax online. The system reduced the cost and improved the speed and accuracy of the process. Previously the same paper-based procedure took 25 days but with the use of ICTs based web it now takes only 12 hours. The Tanzanian government started a HR and Payroll system covering more than 280,000 public officials, the cost of the program was around US \$6.5 million but played a significant role in reducing ghost workers and improving control, accuracy and management in the concerned department.

Thomas (2009) argues that in developing countries citizens are concerned with the access to information for policy implications like health, education and municipal services etc. in contrast to developed countries where right to information encompasses the very essence of participatory democracy. Thus, there arose a well knotted connection between development and information and owing to this reason, governments in developing countries have legislated access to information.

The developing world is having different implication of the e-governance as compared to the developed world. The NPM and public sector reforms in the developed world was internally driven e.g. USA, UK etc. while that of developing world was externally driven with the help of World bank or other financial Institution (McGill, 1997). Countries like Turkey, Malaysia and Taiwan faced no pressures while implementing their reform agenda (Sozen & Shaw, 2002). Resultantly, despite the fact that economic reformation of the developing world like India, Pakistan and including others, public administration remained in the control of bureaucrats and is highly centralized (Saxena, 1996).

The other marking difference of the e-governance between industrialized and developing world is the availability of ICT infrastructure. Experiencing the phenomena of e-governance, the Developed world was largely affected by the internet which made access so easy and convenient between government agencies. However, for the internal operations the Developed world used these ICTs since long (Bhatnagar & Bjorn-Andersen, 2003; Yong, 2003). While the case of the developing world was different i.e., first they introduced computerization for their internal operations to switch over from paper-based structure and

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services to computer and internet-based operations. So, for them e-governance was significant, costly and infrastructural undertaking to change the dynamics of governance process.

2.6: Benefits of E-Governance

Different dimensions of value have been found in various studies of e-governance. Value to government, citizens and community or society at large are affected with ICT intervention. In World Bank (2007) report, it is found that through e-governance of integration, tax-returns filling is increased. In the same study, citizens are found to be favoring e-governance applications vis-a- via conventional manual procedures owing to decrease office visits and waiting time. Society at large has seen the improvement in governance patterns and attainment of development. Studies undertaken by Bhatnagar (2003, 2009) and Sturges (2004) shows enhanced accountability and transparency, thereby increasing democratic norms.

2.7: Digital Divide

Since the start of the 21st century, many countries have now viewed digital divide in the context of 'social inclusion.'Digital divide is defined as two interdependent gaps; gap between skills of people who use technology and gap caused by access to the technological tools (Kularski and Muller 2012). Billon, M.; Lera-Lopez, F.; Marco, R.(2009) found in their paper that digital divide can be classified by countries, geographic regions within a country, degree of economic development demograhic factor and infrastructure. The researchers also found that income was one of that main factor of technology adoption as income was the reason people could afford information communication technologies such as computers, mobile phones, tablets , internet etc. Bélanger and Carter (2009) identified demograhic variables that shaped up the digital divide in the usage of e-governance services. The authors findings reitretaed previous scholars findings that income, age, education the frequency of

internet usage significantly effects the usage of e-governance services. The people who are more likely to use e-governance services are those who are younger citizens, citizens with higher income levels, similarly citizens with higher education level and those who used the internet for other tasks used e-governance services more as compared to the rest of the people.

Digital divide is now recognized across the board by scholars, policy makers and the public as a major problem towards development because 'potential of the Internet to improve everyday life for those on the margins of society and to achieve greater social equity and empowerment.' In his paper Zaidi (2012) stressed upon how much the importance ICTs have gained as a facilitating factor in development. However, most developing countries like Pakistan face a widening digital divide mainly due to three reason; cost of access, language barrier and urban bias of infrastructure. According to a report by World Bank (2015)24% of Pakistan's total population lived under \$1.90 per day, the global poverty line and over 40% of the population was suffering from multidimensional poverty. According to statistica.com, the average price of a smart phone worldwide is \$214 in 2019, the lowest in history. But still it is way beyond the reach of 1/5th of the population of Pakistan. Also, the cost of mobile data and internet is also not that cheap. Language is also a major reason which augments digital divide. English language significantly leads other languages by % of internet content by language with English content being 55% of the total content available on the internet, German ranked second with 6% of the total content. English is not the primary language of many, leaving them at an inferior position to gain advantage from the internet. Throughout the world there is an urban bias towards infrastructure. A lot of area in Pakistan is still without internet or high-speed internet access. This makes it difficult for people living in those areas to reap the benefits of ICTs.

Maradung(2013) study, basing it on the Technology Acceptance Model, also highlights that gender, age and employment status actually determines the diffusion of digital innovations is more common in young, male and employed people as compared to old aged, females and unemployed population.

Seigmann(2009) in her paper discussed another aspect of the digital divide which focuses on the gender digital divide. She finds that in either Pakistan the ownership of ICTs is a major concern in the rural areas of Pakistan, with majority of mobile sets being owned by the women's husband, father or brother whose permission is required to use it. Also, in some villages, women who used to mobile phones were considered bad or immoral and frowned upon, which was another factor in why so few women owned or had access to mobile phones. So many socio culture factors also determine whether female users can access information communication technology.

Although older people might be able to afford and own information communication technology, but the nature of their use is minimal. People over the age of 65 would own mobile phones, but their only act is to attend calls. Very few old age people utilize and take the full benefits of information communication technology as younger people do. Many lack the digital skills to use effectively use the internet. Almost all the research and statistics point to the fact the individuals over the age of 65 use the internet least as compared to other age groups with Zickhur and Madden (2012) finding just over 53% of the total old age users to have used internet. This figure is to decline in developing countries.

Van Dijk and Van Deursen (2011) found in their study in Netherlands that the level of education plays a key role in the level of digital literacy or internet skills an individual has. This then determines the ability the use information communication technology, which is another key component of digital divide. The higher the educated individal is, more difitally adept that person is.

W.Martin (2007) argues in his paper that people who are not using the internet in this day and age are deprived of such priveleged development. And the non-users of internet in a society are usually the already deprived, bottom of the pyramid disadvantaged and most vulnerable section of the population who should be the first priority of the government. W.Martin explores the link between digital exlusion and social exclusion and finds out the consequaences of 'digital viciuos cycle.' His findings emphasized that internet offers citizens notable benefits which will help the citizens curb their disadvantages of social dispersions and in case of rural citizens, distance also.

Helbig, N., Gil-García, J. R., & Ferro, E. (2009) find in their paper that any e-governance project should be demanded by the citiznes. And digital divide has a direct significant impact on the demand of the e-governance project. The government introducing an e-governance project without incorporating a demand perspective would likely face many challenges in its implementation and success of the project.

DiMaggio, P., Hargittai, E., Celeste, C., & Shafer, S. (2004) conclude in their research paper that with the growing influence of internet, public services and government information are also diffusing to the internet. The public policy makers should keep this in mind while formulating any policy which will disadvantage the already 'have nots' who don't either have access to the internet or the ability/skills to use the internet. Any public policy which is inclined towards only benefitting the internet users is likely to further inrease the social inequality in a country.

Donnermeyer and Hollifield (2003) in their research paper dicuss dimensions of digital divide. The researchers study the digital divide between people within living at the same place and having networks e.g coworkers, friends , family members, neighbors, etc, which

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influences knowledge, awareness and the eventual adoption of information and communication technologies.

Scheerder, A., van Deursen, A., & van Dijk, J. (2017) researched on the relatively new dimension of digital divide, moving past the sociodemogharic and socioeconomic determinats of the digital divide. The researchers focus their study now that the tangible outcomes on the use of internet should be focused on, which they term as the 'third level digital divide.' The first two levels being the internet access and the ability to use/skills to use the internet in consistent with earlier studies on the topic. The third level of digital divide is still not explored according to the researchers. E-governance services, which directly effect the citizens and offer something tangible is likely to be a part of this.

2.8: Perception

Esichaikul, Rehhman and Kamal (2012) in their study found that the most significant factor, which the citizens of Pakistan took in availing e-governance services, was perceived usefulness. Trust in government was related to perception in their study. Perceived usefulness means the degree of which the citizens thinks the work can be done, how quickly can it be done and does it increase productivity and effectiveness. The role of perceived usefulness in adopting e-governance services is further highlighted in the studies of Phang and Sutanto (2005). Agarwal, Shah and Wadhwa (2007) found in their study that perceived usefulness and perceived convenience were critical factors in adoption of any e-governance initiative. According to a survey conducted in 22 countries Accenture (2005), the findings showed that citizens preferred to communicate with the government face to face rather than online communication with the government. Alissa and Kelly (2008) in their paper that percieved usefulness for e-governance services was determined by the user personalization experience, user friendliness and the ability to communicate. Another interesting finding of the same

study was that the existing users of the e-governance initiatives were more positive about e-

governance as a whole rather than the people who have not used any e-governance service of any type.

2.9: Awareness

Awoleye, M., Oluwaranti, A., Siyanbola, W., & Adagunodo, R. (2008) found in their study that Awareness plays a key role in adopting e-governance services as individuals who are aware of a particular service tend to use it. Awareness is determined by marketing the service and benefits of the services to the relevant stakeholders as highlighted by Belwal and Al-Zoubi (2008). R.K. Bagga and A. Iqbal (2010) in their paper discusses that enhancing citizens awareness is imperative in successful implementation of any e-governance initiative. Not only the awareness relating to the e-governance initiative should be increased amongst the citizens, but the awareness of the potential of the initiative amongst the citizens should also be increased. This would also help in curbing the extending digital divide in any area too when the citizens would be made aware of the e-governance initiatives and the potential positive impact of the use of information and communication technology. A. A. Rahim and Al Athamy (2013) found in their study that awareness was a major issue in the success of egovernance initiatives. In their study, the authors emphasized that lack of government advertising; proper marketing and the mediums used for marketing were not effective in raising awareness of the initiative started by the government. In addition, the government should aware and highlight the benefits the initiative would bring to the citizens. Nissar, P., & Yakoob, C. (2014) also found in their study that awareness of e-governance services directly had an effect on the usage of e-governance services. Sharma, Gajendra, Xi Bao, and Li Peng (2014) in their study about public participation in Nepal found that for increased participation of the public in e-governance to increase the awareness and knowledge on egovernance services it is essential for mass awareness campaigns in the general public.

2.10: Trust

Trust is also key in adoption of e-governance initiatives. R.K. Bagga and A. Iqbal (2010) in their paper state that when trust is talked about scholars relating to e-governance, the scholars talk about mainly two levels of trust. The first level of trust is that the users trust the egovernance platform (portal, mobile application, website etc.), are confident in using the tool or technology, which they will be transacting/interacting with. The users are confident that there would be no data breaches, no cyber hacks and invasion of privacy and there are no security concerns. The second aspect of trust pertains to the users' level of trust in the government, that how effectively the government initiates the project and follows through with it. Tolbert and Mossberger (2006) in their study suggested that trust among the recipients of e-governance services could be increased by improving the interactions between the citizens and perception of responsiveness. They strengthened their findings by showing empirical evidence that the least corrupt countries show a high correlation between that of trust in government and the level of e-governance services. Studied that online trust is also affected by the offline trust citizens have in the government. The authors stressed in their study that in order for the government to retain users for their online public service delivery, the government agencies needed to work on the trust building mechanisms.

2.11: User Satisfaction

User satisfaction is another important factor that affects the adoption rate of any customer/public oriented mobile application. The study of A.A. AL Athmy, K. Fantazy, & V. Kumar (2016) highlighted the relationship among user satisfaction and the intention of using e-governance services in United Arab Emirates(UAE). Their study highlights a positive effect of user satisfaction with the intention to use e-governance services in the future. A wide range of factors determines the user satisfaction, which are specific to the particular its features and most important service delivery.

2.12: Perceived Usefulness

Researchers like, Aloud & Ibrahim, 2018, in their research study from Kingdom of Saudi Arabia found that perceived usefulness had a direct effect on the citizens intention to use any e-government service. Ismailova, R., Muhametjanova, G., & Kurambayev, B. (2018) also conducted a similar study in Kyrgyzstan in 2018and found the same results that perceived usefulness of the e-government service in the country, heavily influenced the decision of the respondents to use the service. Sang, S., Lee, J. D., & Lee, J. (2009) used the Technology acceptance model to find about the user adoption of e-governance initiatives. The researchers conducted the study in Cambodia and found that, both the government officials and the users of the e-governance initiative were willing to adjust their behavior and adopt e-governance if they perceived it to be useful. And the perceived usefulness was influenced by the output quality.

2.13: Public Servants and E-governance

Even with e-governance heavily reliant on Information and Communication Technology (ICTs), public servants/public administration cannot be bypassed it from it. Public servants remain an integral part of e-governance as the government officials are the one still operating the information and communication technology and interacting with the citizens through it. Haque, M. S. (2002) while assessing the effects of E-governance on public servants found that in order for a successful transition to e-governance administrative institutions need to be restructured and public servants capacity is to be built so that they are well immersed in the tools and languages of information and communication technologies

2.14: Ease of Use

Susanto, T. D., & Aljoza, M. (2015) in their study conducted from the users of E-governance services in Indonesia found that perceived usefulness and also ease of use was the reason why many of the individuals preferred to adopt technology as compared to using the traditional

ways. And the citizens attitude towards interacting with the government was the same as in other fields. Likewise, a study conducted in Jordan by Al-Smady, A. A. (2017) found that like citizens using a service, the public officials were also deemed to adopt a new technology only if they found it easy to use.

2.15: Conclusion

Among many factors responsible for difference in the adoption rates of e-governance services over different areas, factors related to citizens characteristics, background and perceptions are the most studied and emphasized upon. Although a significant number of studies had been conducted on various developing countries particularly Asian countries but very few exist for Pakistan. This gap in literature makes it difficult for the policy makers to understand the low adoption of the Citizen Portal App in Pakistan. Since, the Pakistan Citizen Portal App has been identified as a tool for better public service delivery in Pakistan by the current government, it is vital to understand the underlying factors related to citizens' background and perceptions affecting its adoption.

Chapter 3: Data and Methodology

3.1: Research Design

Exploratory research design has been adopted for the purpose of this study. As the Pakistan Citizen Portal App was launched on October 28, 2018, not much scientific research has been done on the App, regarding its adoption rate, user experience. Exploratory research methodology is suitable to study the issue since the app is recently launched, which is referred as grounded theory approach or interpretive research where it answers questions like what, why and how? The qualitative research is primarily exploratory research, which is used for such kind of topics, which have not been explored much. It helps in gaining an understanding of underlined reasons motivations and opinions to help develop ideas or construct hypothesis for potential quantitively research. Reference on WhatsApp. Exploratory research could be both primary and secondary however primary research using interview method are used for this research. The very idea behind this research methodology is to investigate a problem yet not clearly defined. This research will provide a better understanding of the Pakistan Citizen Portal App and the factors affecting the adoption rate of the app. Exploratory research design is employed for the purpose of this study because this research will aim to gain an understanding of underlying areas, reasons and opinions regarding the app. Not only users opinions and views were taken into account in this study, but also the government official views will be taken regarding their experience with the app and how it has changed their nature of job and how it has changed their behavior and how it is being used for effective public service delivery. All these components will be taken into account in this study.

3.2: Research Strategy

Qualitative research strategy is used for the research. Qualitative aspect reflects the details, views, opinions, motivations, and experience of users regarding the Pakistan Citizen Portal

App. What are the reasons why people are adopting or not adopting this app and the experience with the App?. The results indicate that how much effective and users are using this App designed for the total population. Qualitative research strategy is used so App users can detail the issues faced, positives, negatives about the App , perceptions, trust, recommendations and whatever they deem necessary information about the App which will enhance our learning regarding the issue.

3.3: Data

Detailed analytics about the Citizen Portal App has been provided by the Prime Minister Delivery Unit which will tell us about the overall number of people registered of the app and automated user feedback generated in the app. Also, the breakdown of the analytics is provided by the Prime Minister Delivery Unit. Primary data has been collected from the citizens of Islamabad about the user experience, awareness about the Pakistan Citizen Portal App. However, due to COVID-19, and keeping in view of all the standard operating procedures of COVID-19 and the ensuing lockdown approach is used, and social media was used to find respondents for the interview. A key informant interview, to get information from the government officials was also held in the District Commissioner Office Islamabad with the focal person appointed at the DC office dealing with the Pakistan Citizen Portal App.

3.3.1: Labels

- To identify the factors which contributes to the usage of the App?
- To identify the reasons of the positive or negative user feedback on the complaints.
- Citizens' perception and experience about E-governance, through Pakistan Citizen Portal App.
- The achievements of ICT administration on receipt of complaints via Pakistan Citizen Portal App.

Factors affecting the adoption of Pakistan Citizen Portal app are numerous. Digital divide has been identified along a number of dimensions by researchers. For some groups or individuals,

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they may be interconnected and present multiple barriers to the effective use of information and communication technology. Also, digital divide is not the only factor in determining the adoption rate of the citizen portal app; trust in the government services and the perception about the app, trust in both the government and the app, awareness of the app and most importantly user satisfaction also decides citizens' adoption rate.

Education level: Van Dijk and Van Deursen(2011) in their study find that education level has a significant impact on the ability of a person to use ICTs. Esichaikul, Rehhman and Kamal (2012) also are of the same view that education levels determine the use of e-governance services.

Income: The cost of owning information and communication technologies is expensive. The cost relates to not only owning a smart phone, but also affording internet. It is an additional burden on their income which most people in developing countries spend a significant chunk on basic essentials. This reason was one of the main reasons highlighted in Zaidi's (2012) study. According to Affordability drivers index Pakistan ranked 8th of the developing countries 2015-6. Furthermore the national perspective on bridging the digital divide suggests that only 31% of the total mobile phone users are smartphone users, which suggests that majority of the population cannot afford smartphone.

Gender: The number of male internet users all over the world, especially in developing countries outnumbers female users. Not only this, but according to a study by Siegman (2009), females in developing countries face many social barriers when it comes to in the access of Information and Communication Technologies.

Disability: It is reported that people with disabilities have limited usage and access to information communication technologies. The main reason is often because designers of ICTs fail to recognize the access requirements of individual with disabilities and the high

costs associated with designing both hardware and software for disabled personals. Arif (2008) study also highlights how people with disabilities are excluded from the use of ICTs.

Language: Majority people prefer to both view and use ICTs in their native language. Zaidi (2012) also discusses how language plays an important role in usings ICTs. If the ICTs aren't in the native language, people might find it difficult to use.

Age: Young people are more inclined towards using Information communication technologies, as compared to old people because they are more open to adopting and learning new about new ICTs as compared to old people. Maradung (2013) used Technology Acceptance Model to show how age plays a significant role in the adoption of new technology. Besides, having one of the largest shares of mobile cellular subscribers that is 73 out 100 people in 2008 in Pakistan, Pakistan is ranked on the bottom when it comes to integration of digital economy in 2018. This is in line with the sustainable and regional integration index escape digital published in 2019.

Trust in government: Many recent studies like Esichaikul, Rehman and Kamal (2012) have shown that citizens have demanded e-governance services from their respective governments, because of the numerous benefits e-governance brings, but the adoption rate of those e-governance services are also determined by the trust in government by its citizens.

Perceived usefulness: According to Vankatesh et al., 2003 if an innovation is perceived useful only then it is going to be adopted. The behavior of users towards that technology is determined by the perceived usefulness of the said innovation.

Perception: Agarwal, Shah and Wadhwa (2007) found in their study that perceived usefulness and perceived convenience were critical factors in adoption of any e-governance initiative.

Awareness: Creating awareness of the advantages of e-governance and persuading people to become users of the system are big challenges as indicated by Kroukamp (2005). R.K. Bagga and A. Iqbal (2010) in their paper discusses that enhancing citizens awareness is imperative in successful implementation of any e-governance initiative. Not only the awareness relating to the e-governance initiative should be increased amongst the citizens, but the awareness of the potential of the initiative amongst the citizens should also be increased.

3.4: Units of Data Collection

Data was collected from UDC1. Citizens of Islamabad. Citizens were interviewed to know the reasons of the adoption rate of the Pakistan Citizen Portal App as the app is designed for the citizens to use and the citizens are the target audience of the app. The citizens provided the best details as to what are the reasons influencing their decision to use the App. Due to the outbreak of Covid-19, social media platforms were also used to find respondents willing to get interviewed regarding their experience with the App.

UDC2. Prime Minister Delivery Unit. The Prime Minister Delivery Unit is the authority which keeps the record of the users, analytics and all the details of the app as PMDU is the body which has launched the app and dealing with all matters regarding it.

UDC3. Focal Person of Citizen Portal App at Deputy Commissioner Office Islamabad. The focal person of citizen portal app at DC office Islamabad was interviewed to know the perspective of the supply side of the App, the problems government is facing.

3.5: Method of Data Collection

Interview was conducted from the focal person of the Pakistan Citizen Portal App of the DC Office Islamabad. Interview with the focal person helped understand the achievements, problems in implementing and overall complete analysis of what the government officials think of the App after including it in the governance setup. Two data sets were made. One

data set, A1 contained 47 respondents who were not using the Pakistan Citizen Portal Application. And the second data set B1 contained 39 users who had used the Pakistan Citizen Portal App.

Semi structured interviews were used as an instrument for data collection from B1 to as to provide an in-depth knowledge and make sure all perspective and reasons are covered which affect citizens choice in using the governance app, their experience and factors affecting the satisfaction of the users. Brief interviews were conducted with A1 as to why they weren't using the application.

The analytics are from the PMDU to know how effective the app has been, and the number of users registered and using the app.

3.6: Sampling

Convenience sampling is used to interview from the citizens and judgmental/purposive sampling technique was used to interview the government officials, supply side, of the app. Purposive sampling was used to interview the supply side, being the DC.

Sample:

Generally, 5 common errors in a research process which are really critical. Population specification, sampling and sampling frame errors selection of respondents, non-responsiveness and measurement are the most common errors in the qualitative research. In this research, these errors were cautiously handled by taking a population who should be actually surveyed. In order to reduce the sampling error and non-responsiveness, only those respondents were gaged in studying e-governance app who consented to be a part of this study. However, the sampling frame could not be claimed as representative of the entire population using the app, since not everyone might've received my tweet, or have access to twitter. This unfortunate sampling error is unavoidable where only a predicted/probable

sample could be used by seeking their consent. Since the respondents in the study choose to self-participate in this research, selection error was controlled. However, they already maybe an inherent bias since only twitter users had opinion to participate in my study. Measurement error was avoided by understanding the perimeters of the research design and by interviewing each and every participant by the researcher.

Age Group	Male	Education	Female	Education
18-25	11	Graduate	5	Graduate
26-40	13	Graduate	2	Graduate
41-60	4	Graduate	1	Graduate
60 & above	3	Graduate	0	
Total	31		8	39

3.7: Locale

Pakistan Citizen Portal App covers entire Pakistan but for this study, we are only going to take into account Islamabad and its suburbs. The Islamabad capital territory has 33 departments, which the complaints can be addressed to through the Pakistan Citizen Portal App. Islamabad, is the 9th largest city of Pakistan according to the 2017 population census by the government of Pakistan. However, after the COVID-19 situation, internet was used to find the users of the Citizen Portal App. As such no location boundaries were set then as the people belonged to different parts of Pakistan and some even resided outside of Pakistan.

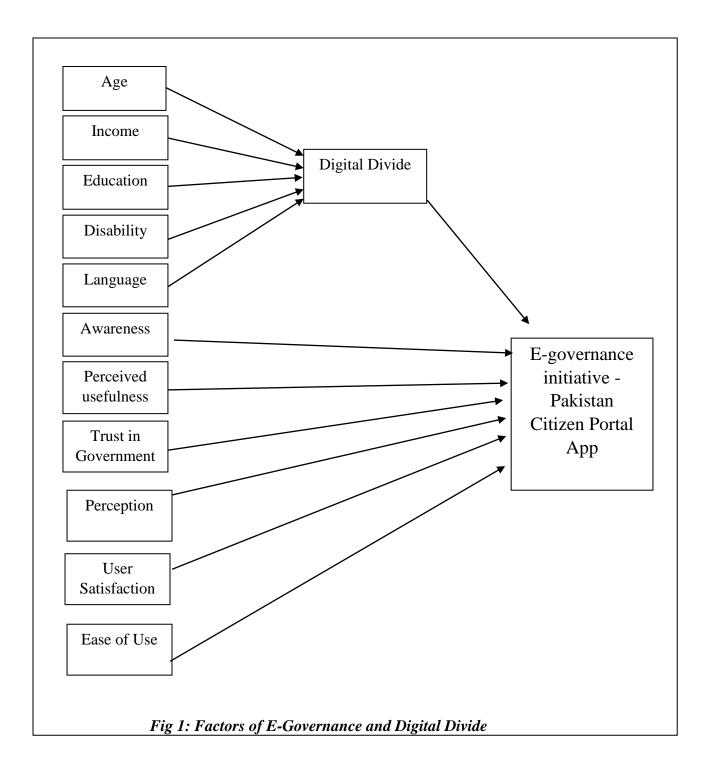
3.8: Limitations in Data Collection

Initially we conducted surveys and took interviews at public spots in Islamabad. The initial response had not been very encouraging, and a major chunk of the interviewee did not know much about the app. Secondly, after some initial data collection the public spots in Islamabad

were declared inbound to prevent the spread of COVID-19. To continue the further data collection, we conducted online interviews by hunting people on social media networks. Consequently COVID-19 was a limitation in random sampling for data collection. The solved complainants' user's data was not shared by the Prime Minister Delivery Unit due to security concerns , and it was very difficult and a time taking process to find users who had used the application and willing to share their experience. Also, the number of interviews conducted could have been increased to get more peoples experience incorporated.

The coronavirus caused a disruption and physical interviews could not be conducted and also number of interviews with people who don't use the application and the reasons why were also less.

Since the study was exploratory in nature, the visualized format was changed as per the findings of the research study. It helped in identifying the goals and objectives of the study which provides a comprehensive understanding of e-governance and digital divide.



Chapter 4: Results and Conclusion

In all the discussion above, it is clear that the good governance is needed to solve the problems of public and good governance is considered to be good when it includes the opinion of the public. In the current scenario, good governance can be achievable through e-governance. E-governance allows the public to take part in the government affairs and allows them to raise voice without any fear.

Pakistan Citizen Portal App is one of the initiatives launched to do just that, to facilitate the citizens interaction with the government from the ease of their homes. The Prime Minister of Pakistan on the applications launch said, "*Every Pakistani now has a voice*." The Prime Minister added, "*The system that we've developed is a means to change the prevailing mindset. For the first time, government offices and ministries will be accountable. The portal will make it easy for me to get details of where in Pakistan the complaints are coming from, about which ministries."* These were big statements on part of the Prime Minister of Pakistan and concluding from the research, it raised high expectations amongst the users of the Citizen Portal App. This app has been launched to bring the quantum change in the system of solving the issues of the public. through this citizens have a say in the government affairs by lodging complaints and suggestion on portal by hiding their identity. We discussed the user experience of the people below that how much helpful was citizen portal app to them.

4.1: User Experience of the Pakistan Citizen Portal App.

In depth, semi-structured interviews were conducted over mobile phone, WhatsApp and Skype with users who had used the Pakistan Citizen Portal App. The users, 39, mostly resided in Pakistan apart from three, who were overseas Pakistanis. The findings of the interviews are divided in themes, which emerged from the conversation. All of the users had complained more than once on the application and a vast majority had complained to more than one department. The themes are as follows:

<u>Application Awareness</u>

The users were asked how they were made aware of the Pakistan Citizen Portal App and when was the first time the users had heard about it. Majority of the respondents had answered that they had either watched the inauguration ceremony of the Pakistan Citizen Portal App live on television or had saw the clippings of the inauguration event on the news channels. Few respondents also replied that they came to know about the app through social media posts on Facebook and Twitter, with people talking about the new governance mobile application. Very few answered that they were made aware of the application by word of mouth of either one of their family members or friends.

One user, B5, said," My brother had used the application. He told us he had complained about a national bus service which he uses frequently travelling between different cities, of playing Indian content and he got a positive response. He said that the government through the application had sent him a scanned copy of the fine imposed on the bus service and they made sure to do regular checkups on the bus service to ensure that this does not happen again in the future. After hearing this, I too downloaded the application as I thought it will be handy and seems very useful."

Another respondent, B33, shared," I remember watching the inauguration ceremony live on the television of this application. Prime Minister Imran Khan launched it in his first few weeks in office after being elected as the Prime Minister. And if I remember correctly he said that his own office (Prime Minister Delivery Unit) would be supervising this and it would be under his direct supervision. So, I downloaded the application after watching the ceremony although it was many months later that I actually used the application." Another interviewee, B21, told," *I downloaded the application after seeing a Facebook post about it. I saw a post praising the application and what a great step this app was taken by the government. After reading that post I searched about it a bit and then decided to download it and see for myself what the hype was about.*"

• Expectations About the App

Most of the users had high expectations of the Citizen Portal App. These high perception and expectations were mainly due to two reasons. Firstly, it was due to the trust in the newly elected government of Pakistan Tehreek Insaaf. One respondent, B11, shared, "*I had high expectations from this application*. *I saw the Prime Minister Imran Khan, himself inaugurating the application and saying that they are looking for out of the box solutions to problems and his office will itself see the progress of the app and the situation of the complaints; are they been addressed or not. I saw ownership of this application directly from the Prime Minister, and he spoke highly of it and how they wanted to improve public service delivery. That's why I thought yes, this initiative could be very successful, and I had high expectations from it, and I downloaded it."*

Echoing a similar opinion, many respondents said that they were impressed with the inauguration ceremony and the claims made by the Prime Minister, that made them think very highly of the app. Furthermore, respondents elaborated that, as it was a new government, who had not been in power before and did not seem 'traditional' in its approach, it raised high expectations among the citizens of not only this initiative, but all other initiatives the government started in its initial few weeks.

Other respondents who had high expectations from the application said their expectations were high because they had listened glowing and positive feedback from their family and friends who had recommended them the application. Also, some said they expected highly from the application due to the several positive social media comments, Facebook posts and tweets of people sharing their positive experience with the app increased their expectations and perceived usefulness of the app.

The rest of the users when asked about their expectations and perception said that remained cautious and were a bit skeptical about the app. They did not have high expectations from the application. When probed further from the respondents, it was found that the major reason why they did not have high expectations was not that their trust in the government was low, but that had lost faith in the governance setup. One respondent, B2, said," *It seems too good to be true. You really think that you just download an application, register yourself and lodge a complaint and it gets solved just like that? Our problems don't get solved even if we go to the relevant department , approach high up officials for the solution and here they are saying that it can be solved just by downloading an app. However, I still used the app just to try it and it was easy, did not require any time and effort. So, I thought, let's give it a shot."*

• Application Interface

There was a unanimous opinion amongst the users that the application was easy to use and very user friendly. No one faced any problems finding, downloading and registering on the application. The application was easily available on the Google Play Store and App Store. Users were impressed with how user friendly, convenient the interface was. There was a wide range of options, different categories and government departments listed where the complainants can choose from. The application language was both English and Urdu. Very few users experienced minor problems in logging again into the app after having forgotten their passwords, but overall majority of the users were satisfied with the user interface. The application also had a user guide option, both in English and in Urdu for the users to better understand how to use the application. The users were also asked that if a person who is not

very educated and not well immersed in digital technology would be able to lodge a complaint, would it be easier for a first time user to lodge a complaint, to which a vast majority replied yes, the application is easy to use. One respondent, B17, explained, "*I was surprised how user friendly the application was. I thought it would be difficult to search then departments where to complaint, but the application design seemed perfect to me. It takes you maximum 2 to 3 minutes to complaint after signing up. It gives you many options to compliment your complaints. Meaning you can add attachments, images, location to your complaint which helps. If I really have to be critical and if you really have to push me to find a flaw in the interface, then maybe I would say that they can increase their word/character limit. But, personally even that was not a problem for me, maybe it will be for others."*

Another respondent,B2, when asked if a not so educated, old people and not well versed in digital literacy was to use it the first time was to lodge a complaint, would he/she find any difficulty in lodging the complaint. To which B2 answered," *No, I don't think so. You see people who don't know much about internet and digital stuff, they are on Facebook*, *WhatsApp, YouTube and other social media apps. In my opinion, if any person can use those apps, they can use this. Plus, it has a user manual/guide given too. Urdu is also a language option, so even if you don't know English you can still use. My only suggestions would be that if possible they can add other local languages (Punjabi, Pashto, Sindhi etc.) to be even more inclusive so that even those people who don't know Urdu can use. Also, if the font size can be increased, that might help the visuals too."*

Some of the users reported that there were minor technical glitches in the application, and few bugs, but it was nothing major. A respondent, B14, shared," *Yes there were a few problems, sometimes the application used to get closed down suddenly when you are in the middle of lodging a complaint. And usually it happens after new updates are rolled out. However, it is nothing major and this happens with some of the biggest apps too like*

Instagram, PubG, Facebook etc. So, it sometimes does get frustrating when you have written a lot and are just about to register and all of a sudden it gets closed down, however it does not happen much, and it is not a deal breaker."

• <u>Complaint Response Mechanism</u>

The respondents interviewed said that the one feature that really stands out of this mobile phone application is that the respondent can track their complaint and see right now where their complaint was, which department and to which government official. The application provides the details of the comments passed by one government official or department to the other. Users said this was very helpful as if they had to then physically even pursue the complaint or the issue, they know exactly which department or official to go to. In addition, the respondents said they liked the aspect that the department or the government officials can ask the user for more details and clarity regarding their complaint so they can better understand it and address it. However, the respondents said that there should be no time barrier on when to provide the information back to the government because if they don't provide the information gives you a time of 72 hours to respond back to their query. I think so it should be increased, because sometimes a person has gone out of town or to a place where there is no internet connection, or he may have just forgot to check in application."

Furthermore, few users were very impressed and said that they even received phone calls from the concerned departments asking to further explain their issue and sometimes after the resolution of the complaint that were they satisfied with it or not. However, most users said that sometimes while lodging a complaint, the departments mistake it, take it as a feedback, and respond to it by saying: Thank you for your suggestion. So, the user has to change the wordings of the complaint and do it again and again till the department takes it up as a complaint and not a suggestion. When respondents were asked if they sent any suggestions to the government, did the government do any follow up or interacted further with the user, then all of them replied no.

• User's Feedback

Two themes emerged while interviewing the respondents were asked were they satisfied with the solution provided by the government to their complaints. It emerged that the users who had complaints regarding municipality, waste management, street lightning etc. they were satisfied with the redressal of their complaints and they gave a positive feedback to the government through the mobile application. They were also satisfied with the timings of the complaint being solved, usually within one week. Few respondents complained were solved within two days. One respondent, B19, shared his experience, "I had complained about the garbage man not coming to our street for three days to pick up the garbage. We were facing trouble disposing off the garbage. I had complained about this on the Pakistan Citizen Portal App and the very next day not only the garbage man was there, but an officer of the department had come along with the garbage man. He carried along with him a paper which had details about my complaint asked for my signature that the complaint was solved after the garbage was picked. He even gave me his number that if I faced any further problem in the future, I should directly call him, and he will get the matter resolved the same day. I was very satisfied that I had complained through the mobile application and the matter got resolved quickly."

Another respondent, B20, voiced a similar experience." For some time, the streetlights in our street did not use to be turned on at night. Many of the families used to walk at night, and we faced problems at nighttime. One streetlight was also damaged in a thunderstorm and many

weeks had passed by and was not fixed, Despite many members of the neighborhood going and complaining in the local inquiry, no one came to fix and turn on the lights at nighttime. I had complained about this on the Pakistan Citizen Portal App and the matter got resolved within 10 days. The matter could've been resolved a lot sooner, but I was happy it got resolved and we had waited many weeks for it. I also got a notification along with picture evidence of the matter being solved. The streetlights are working fine now."

Respondents who had similar complaints like these, even building of footpaths and fencing of small street parks shared that they were happy that the government responded and solved their complaints. The average time did not take more than 22 days for the complaint to get resolved since it got initiated and the users gave positive feedback to the government and were happy with the solution. One respondent, B12, said that his complaint was not solved but he was satisfied with the justification given to him. He said he wanted a proper drainage system being built in his neighborhood as after rainfall, standing water was a common feature in the area which caused the locals many problems. He complained about this including providing location and images as attachments. He said the concerned department came back to him that after conducting a study of the area, they said that the problem did exist but in order to build a new drainage, they would require a budget which was not feasible in the current circumstances However, the department had forwarded it to the district administration and had asked for budget to be allocated next round and it be included in the priority list. The respondent added," The officials acted upon my complaint and surveyed the area and passed on their recommendations and shared a picture of that with me. I understand that they might not have the budget for this, but I'm hopeful that they will now allocate money for it and it gets resolved."

Another, B7, shared," I posted the complaint as anonymous and did not even post any attachment, but I was surprised they took action on my complaint and I see it that it is being

delegated to different government officers. I thought they might drop it because of no attachments, no evidence and me posting as anonymous but I am glad they are working on it."

Apart from the complaints responding to this nature, respondents, including the same ones who had a positive experience mentioned above were not satisfied when they addressed their complaints to other departments. One B9, shared, "I had complained to FIA about content on the internet. I had complained about the issue in January and it is June right now. Almost 6 months and still no response. The complaint has been directed towards the DG FIA and he has not done any action on it nor has he delegated to anyone. I open my application and it has been coming under as 'Open Complaints' for the past 6 months. I cannot even provide my negative feedback on it as they haven't passed any statement on it."

Another respondent, B23, interviewed shared that he was both not satisfied with the timing and the redressal of his complaints. He added, "*No, for me, all my complaints were responded late, and delayed for many days; most of them were not fully solved and only partially solved. Half done is like nothing done. Moreover, I gave negative feedbacks but no further communication on the complaints and no one asked me about negative feedback.*"

B36, who had complained regarding his pension said," There has been no progress. According to the government, my complaint was 'partially resolved-partial relief granted.' I did not get my pension and they had written partial relief granted. I did not even get partial of pension when the application said that. I had given negative feedback on that complaint. I had lodged the same complaint again, but still to no avail. It is initiated but has not been delegated from the first person. It was of no use for me in this regard."

Many respondents answered on similar lines. They said sometimes after lodging the complaint, and after back and forth with the government through the application with the

government, the government solves the problem from their end and says that either partial or full relief has been granted. However, as per the user who lodged the complaint, no relief had, be it partial or full was granted to the beneficiaries.

A vast majority of the users demanded and suggested that there should be an active follow up mechanism on the complaints and the department or the officials who were not performing well should be dealt with seriously. One user, B32, explained," Once the department solves complaint on their end, they don't care what the user feedback is, whether positive or negative. They are just happy that the complaint is solved, and they have to do nothing now. It should not be like this. A higher up from that department or a supervisory department should keep a check on the departments which are performing well, and which are not. And, this application has made the job easier for the supervisors or department heads. It easier to keep a check and balance. All the supervisors need to do is that they just have to check the complaint dashboard and see how many pending complaints are left per officials/department. Also, how much the time duration is been taken by the officials/department to solve a complaint and then most importantly the feedback of the citizen. Is it positive or negative and also read the comments passed by the users? The departments/officials with the highest backlog and most negative feedback should be suspended or sacked. It is as simple as that."

Many users suggested that there should be a rigorous and vigilant follow up mechanism, monitored by a higher body, ideally the Prime Minister Delivery Unit (PMDU). The PMDU should keep a daily check on the dashboard of all the departments and regularly randomly calls the users complaints who have been deemed resolved and closed by different departments and check in reality whether the issue has been resolved or not and how satisfied are the users with the resolution. Many users suggested as with the introduction of the digital technology, the process can be monitored efficiently, and it would be hard to cheat with. With the introduction of the Pakistan Citizen Portal App, the government has laid down the digital infrastructure necessary and they should utilize it and take advantage of it. A formal follow up mechanism should be developed by the government, which should ensure service quality. This will also keep the departments, and the government officials responsible of handling the complaints more accountable as they would know that a higher body is keeping a watch over them, that are they performing their duty correctly or not.

Likewise, the dissatisfied users suggested that in their opinion a major hurdle in citizens not receiving quality service and government not fully utilizing this initiative is because of the traditional setup, and because of the ways of the government officials' responsible dealing with their work. Users suggested that the Pakistan Citizen Portal App is a great initiative as it provides a medium, which is easier for the citizens to use, and the government officials. But, it is just a medium/platform. At the end of the day, the public officials have to solve the complaints. Moreover, as per the dissatisfied users, the main stumbling block of this application being a huge hit and success, are the public servants. One user, B25, said," This app could really have revolutionized how government and people interact in Pakistan, and increase the perception of good governance. But the public officials are the ones who need to be reformed, their attitudes changed or if that can't happen, then new better, trained and younger people should be hired. You can do whatsoever innovation, place the latest technology in, but as long as the existing core of government servants are there, there would be no change. This is the sector, human resource, which needs the most reform, not the technology aspect of it. Right now, the government officials are very carefree, as they know no matter what they do, they won't be fired. They should be held accountable. That's the main thing. There is no accountability and no fear of losing jobs or perks. As long as there is no fear, this flawed, inefficient system is going to continue. Just like the private, or any other sector, the government officials should be more accountable, and this tenure system has to be

stop. The system of promotions, job security, hiring, and firing should be purely based on merit and performance. When this system will get in place, then you'll see that the quality of the service improves, the backlog of pending complaints reduced and users would also start giving positive feedback and comments too, as their complaints would be genuinely addressed."

Another citizen, B29, also responded that he had complained about Police one relating to human rights and the other relating Police. The respondent had earlier gone to the police station and the police had refused to cut a FIR. To which the respondent decided to use the Pakistan Citizen Portal App and lodge a complaint. He shared that it was a comical experience for him as, according to him no one took his complaint seriously and even doubts if they read it. "I tried to register a First Investigation Report (FIR) but the police officer had refused to register it. After complaining on the Pakistan Citizen Portal App, with attachments and location, my complaint at the end of the day was forwarded to the same person who had refused to register my First Investigation Report. And the same person then dropped my complaint from the App saying, 'No Relief can be granted'. I wanted action to be taken against him and all the higher ups, or the people dealing with this App in their offices just sent it to the same police station, asking the person to investigate against himself. This proves that they just don't read, they according to the attachments and location sent to them, forward it to the local department. Instead of a higher up reading and calling an investigation, they kept on 'passing the buck' and at the end it was of no use. I did not know whether to laugh or cry at this."

Few respondents also were dissatisfied with the timings of the redressal. One respondent, b11, said, "*The timing of redressal should be improved. When we lodge a complaint, we are told that complaint would be solved within 21-40 days. I have had a few complaints, which have been solved within a week, but the majority are not even solved and are still pending*

after the 40 days. First of all, this should be reduced, because I don't think any complaint, or a vast majority of complaints are not that time consuming they can be resolved within 10 days. When by default everyone gets the message, that the complaint will be resolved from 21-40 days, even the government officials would get relaxed. They would know that they have plenty of time to work on it and won't pay any importance to it. And by the looks of it, (his pending complaints) they then seem to forget. I have a complaint which was initiated last year, it is still pending 7 months into this year. I would've preferred that they would've said initially that this complain cannot be solved, no relief can be granted. I would've been happy. But it has not yet been initiated. I have registered more than 200 complaints, and majority of the solved have been after 40 days. It took a month just to correct my name on a tax return certificate which they had misspelled. How does it take a month to do that? The redressal timings leave a lot to be desired."

Likewise, many respondents complained that they also had the same issues. There was a unanimous opinion that for small tasks, the application was perfect, and it works fine, apart from a few minor issues regarding redressal timing. However, when it comes to major tasks, a lot needs to be desired from the application and the concerned departments. The respondents also pointed fingers at the public officials that were, in their opinion, a major hinderance in the poor quality of service delivery and late solution to the problems.

Comparison Between Virtual and In-Person Complaints:

The interviewees were asked two further questions. One was about what mode of interaction and complaints they preferred, be it physical or through the application and the second was if they had physically followed through with the complaint, would there be any difference in the quality of service delivered, timing of the resolution.

All the interviewees were in unison and said that they preferred to use the mobile phone application rather than physically going complaining/pursuing their complaint at any government department. The users cited perceived ease of use, saving of time, energy and resources as the major reason why they did not want to physically go to the department and complaint. One user, B16, said, "Definitely using the application to complaint. If we have to physically complaint, we have to take time of our office, spend some energy, make effort to go and get the work done. And you know, with my experience, most of the government offices I have visited in the past, sometimes the officer is not there, sometimes the person who has to sign something, or record the complaint is not there. One or the other is always not present. Furthermore, if they are in no mood to work, they might say to come back later as they have an important meeting coming up. So, it has always, always been a waste of time and resources going to a government office. In addition, we usually take half a day or full day leave from our office, and still our work never gets done. So, no point in bothering wasting our holiday on this issue which never seems to get solved."

Another respondent, B13, shared, " *App for complaining, 100%. Everyone is busy now days, no one has time to take out and go out and physically pursue. Especially when an alternative like this is available. It is easier and cheaper. No, traffic hustle, no need to get up, wait for officials to come or wait your turn in long ques. It's time saving.*"

One user, b22, said," *The government has launched this very application for this very reason, so that it of convenience to the citizens. It would be beside the point if we now have to go and complaint.*"

Furthermore, he added, "I think given this coronavirus where doctors are saying not to meet much people, avoid public places, this application would be the best solution to it for interacting with the government. We can interact with the government through this while we keep safe at a distance. This would not only be good for us, but also for the public officials and there'd be no health risks as government departments open for public dealing are usually very crowded. This can be a very useful in the current situation."

One user pointed out that sometimes due to the nature of the complaint, especially if it is regarding corruption and malpractices of a government official and if he is a in a position of power, then physically going would be of no use and no one in the government department would pay heed to. Instead, it might be a danger for the complainant that they might want to take revenge or some retribution action, especially if it concerning with the departments of Police, Federal Board of Revenue etc. They might charge you with fake cases. However, through the application, it gives the user of an option to complaint anonymously. The user, B20, further added, "The anonymous feature of the complaint is very useful and well thought out by the government. A person can complaint anonymously if he chooses to risking fear of any action if he physically goes. And to put weightage to his claims, he can add attachments, or any other evidence to make sure that his complaints are dealt seriously with."

A university student, B4, also said that he liked the feature. He added, "In universities we often face discrimination and are threatened with disciplinary actions if we raise a voice about anything. Even if we don't face disciplinary actions, our grades suffer from the things which we say or complaint about. So, this app, the Pakistan Citizen Portal App, is actually a nice way of complaining and we can use the anonymous feature to complaint. However, in my case, when I complained and used the anonymous feature, the university still asked me to tell my roll number and registration number to look further in the matter, which was beside the point of being anonymous."

When asked about whether the quality of service, solution time would have changed then also a vast majority of the interviewees responded that, they did not expect a significant difference in both either way of physically pursuing or lodging a complaint through the application. Many repeated that physically it might have taken longer, due to the non-availability of the officers, or any other issues being cited by the public servants.

One respondent, B28, told," I think with the application, the complaint gets lodged there and then. But with physical follow up, God knows when the complaint gets registered. The redressal time would start of the registration."

Few respondents cited that, the quality of the service and solution time is dependent on the public servants as they are the ones who decide when to act upon it. One user, B31, said," *I* don't think so it makes much of a difference when at the end of the day, it is the public servants who are the ones dealing with the complaint, both physically or if we have complained through the application. Their pace of work has been set and in my opinion, they won't be bothered to hasten it even if you are physically present. The quality of the service and time of redressal being improved is not dependent on physically pursuing or registering the complaint through the application, however it is with that if you know a high up official in the relevant department, have links and references. In Pakistan overall and especially in the government sector, only this matters and this can influence the quality of the service delivery. Nothing else."

Many users stated that one advantage of using the application over the physical pursue of the complaint was that you are getting updated through the application on the status of the complaint and where the complaint is at, at which department at which officer. Also, if some additional information and further clarity is required by the public department, the information is usually requested through the Pakistan Citizen Portal App, by the government department. One interviewee, B39, further explained, "*The thing which I liked is that you can track where your complaint is. Instead of physically going and asking and going from one*

department office to the other, we can just view it from the application. We can follow up directly from the person and see where the lag is. That would be much easier."

• <u>Recommendations by Users</u>

The users had a mixed view about it. The main factor influencing their expectation and perception was the quality of the resolution of the complaint. The quality of the service being provided by the government. Many stated, especially the ones who had downloaded the application from watching the news clippings or the live event of the inauguration ceremony of the Pakistan Citizen Portal App were disappointed after using the application. One such user, B6, shared, "I saw the Prime Minister Imran Khan, and making such high claims that this application is going to is going to give voice to every Pakistani, how it has given a new identity and new rights to the citizens at the comforts of their home. Also, he said, that he and his office would personally keep a check and balance monitor the progress of the application and see that it is providing relief to the people. He made these high complaints, and people voted for change and that's why he came to power. Not only this, the Prime Minister said that this application was just one of the steps being taken to improve governance, and his government will be making decisions which will be making tough decisions which will be improving governance and the governance structure. Radical reforms were being made in the government sector. Naturally, after hearing these claims and the Prime Ministers speech, I had high expectations from the application. However, at the end of the day, those expectations were significantly lowered and is it failed to provide me relief. I have launched more than 30 complaints and have given negative feedback to more than 20 of those. These numbers do not make a good reading."

B19, recommended, "Complaints should not close from one side, a mutual agreement is to reach through app for closure of complaints. No complaint should be closed on partial relief/solution. On getting negative feedback, some higher authorities should intervene, and all complaints must close after complete relief/solution."

Like many, another interviewee also had his expectations lowered. The respondent, B30, said, "I had downloaded the application after reading social media posts, both on Facebook and Twitter praising the application. And not just a few, many social media posts and there was one of the top trends on Pakistani Twitter back in the day which had all the social media users praising the government for launching this application. The social media users were highlighting the achievements so far specific to the Pakistan Citizen Portal App. Naturally, I had high expectations after reading all this, but after using the application, I am convinced that that had nothing to do with reality. The users most likely belonged to the social media team of the government or were paid for this promotional task."

One Respondent, B15, shared his views that his expectations did not alter after using the application. As his experience was mixed regarding the application. The user added that he had complained a fair few times on the application and that some of his complaints were solved and the solution was deemed satisfactory by the user. And some of the complaints were solved by the government , but he gave a negative feedback. But he said, "*I will continue to use the application and even recommend to others. I will not be too critical of the application. Where the application did not solve many of my complaints, it did solve many too. I think it depends on the day and in my opinion, there is a good intention on part of the government and all the relevant stakeholders. I would also like to add one thing that, with the introduction of this application, our interaction with the government has increased too. We would not as frequently be using this application. If it was a traditional setup, we would be complaining a lot less often. Now sometimes we complaint twice a week, and we expect everything to be perfect and the solution to be as per our liking. I think they are doing a good job. And my expectations after using the application didn't get dented or after using the*

application, I would say that the results exceeded my expectations. One has to be realistic, but overall, I'd say that I am a satisfied user."

Few users even suggested that the results exceeded their expectations. The main reason was not because they had low expectations from the application, but they compared it with their previous dealing with the government. A user, B23, added, "I had once talked to a traffic police officer and complained about a vehicle violating the traffic laws. He dismissed the issue and said now he's gone, what can we do. However, I had recently used the application and lodged a complaint uploading a picture of a vehicle with tinted vehicles and number plate in the view. After a week or so, I was sent a scanned copy of a challan to the owner of the vehicle. That was impressive, and I certainly did not expect that."

• Views of Female users

Out of the 39 users interviewed, 8 were female users of the application. In addition to the structured questions asked to them, they were asked to give views why the number of women registered users were so low, and their overall views about it considering a gender aspect. To which all the women replied that previously women were omitted with their interactions from the government. Even if they had some concerns or matters that had to be taken up with the government departments, they would usually ask their brother, father or a male family member to do it on their behalf, as they avoided going to the government departments for one reason or the other. In this way they become dependent on others to do their work. However, after the launch of the Pakistan Citizen Portal App, the female users said that this made it easier for them. Instead of physically going to the departments, which the women already face barriers going to, they can use the application to register their concerns. The female users lauded the government for this initiative as now more female population can become independent in this regard and use the application and address their concerns. When asked to

comment about the such low registration percentage, only 7% of the total users being women of the total users, to which the female interviewees replied it could be mainly due to two reasons. Firstly, traditionally any matter relating to governmental departments were dealt with the male members of the family and they did not have to bother about it. Secondly, the female users said that a high probability was that some of the female users had registered either by the names of their fathers/husbands/brothers due to privacy issues. That's why the overall number might not reflect the true number of female register users on the Pakistan Citizen Portal App.

• Experiences of Overseas Pakistanis

Three overseas Pakistanis were also interviewed and asked to comment on the overseas Pakistani aspect in addition to the semi structured question. The three replied, that this initiative was very facilitating for the overseas Pakistanis as they can still interact with the government even if they are not present in the country. However, one recommended that in countries where the overseas Pakistani population is really high, like United States of America, Kingdom of Saudi Arabia and the United Kingdom, one focal person should also be made in the embassies/high commissions of the respected countries to deal with complaints on the Pakistan Citizen Portal App which deal with overseas issues of the Pakistani community.

All of the respondents interviewed did not have any major data privacy concerns and deemed their data safe. Respondents all said that only the computerized national identity card numbers were uploaded along with email account address, and few other websites had even had their credit card numbers, so this was comparatively less risky and they had the trust in government that there won't be any data security breaches.

4.2: Analytics from Prime Minister Delivery Unit

Prime Minister Delivery Unit was emailed to provide the data analytics and they provided a detailed analytics also user guide/brochure about the Pakistan Citizen Portal App. However, the Prime Minister Office released data on 12 August 2020, which is quoted below which is more updated to the data which was released by the Prime Minister Office. According to the Prime Minister Office, the number of registered citizens belonging to different provinces, sectors and professions, including the armed forces, on the Pakistan Citizen Portal (PCP) has reached 2.8 million. The data released by the PM's Performance Delivery Unit (PMDU) gives a glimpse of the problems being faced by the citizens, including overseas Pakistanis, in sectors ranging from municipal services to universities and from government offices to private businesses. The data, however, doesn't say anything about the judiciary – an area that involves thousands of people across Pakistan every day. According to the PMDU, roughly 1.5 million citizens expressed their views on the PCP. The overall feedback section reveals that a total of 1,491,899 people gave their feedback and of them, 574,671 (38.52%) expressed satisfaction.

As per the data till August 12, the PM Office said that the number of registered complaints reached 2.3 million while the number of resolved complaints stood at 2.2 million. The PMDU stated that of the 875,026 complaints of the federation, 781,094 complaints were addressed.

Of the total 1,038,351 complaints from Punjab, 976,482 were resolved while a total of 266,276 of 281,966 complaints in Khyber-Pakhtunkhwa, 149,898 of 187,014 in Sindh and 20,031 of 22,782 in Baluchistan were addressed.

In AJK and Gilgit-Baltistan, a total of 8,613 of 9,632 and 3,025 of 2,409 complaints were, respectively, resolved.

The statement along with the data said that of a total of 161,681 overseas Pakistanis registered with the PCP lodged 124,268 complaints; out of which, 107,555 were timely resolved. It said that the highest number of delayed complaints – 10,000 – was from Sindh.

According to the review of provincial performance on complaints on the portal app, Khyber-Pakhtunkhwa topped with 45% users, followed by Punjab with 38% and Baluchistan with 35% expressing satisfaction over the resolution of their grievances.

Profession-wise data shows that 165,447 students, 85,508 private businesses, 65,407 engineers, 44,621 social workers, 44,802 people from civil services, 41,432 teachers, 25,083 people from corporate sector, 17,667 from armed forces, 13,485 doctors, 9,780 lawyers, 8,973 political workers, 7,018 NGO workers, 6,346 senior citizens/retired and 4,743 people from journalism have so far registered with the portal.

Gender-wise registration revealed that 93.1% male, 6.7% female and 0.2% others have used the portal in a month.

Category-wise complaints status showed that the highest number of complaints -- 469,942 – was registered for municipal service. The energy and power sector received 455,700 complaints, followed by education sector with 267,596 complaints.

The data of other categories showed that people registered 192,774 human rights complaints. The law and order section received 152,647 complaints, health 142,271, communication 108,313, development projects 88,824, transport sector 78,088, land and revenue 77,852 and media and cybercrime 70,580 complaints.

4.3: Application management in Islamabad Capital Territory

In the above discussion, we have discussed the experiences of the users so far that how they feel about this initiative by the government whether their issues were addressed or not. But below we discussed the issues or hurdles that are being faced by the authorities in launching

and managing the complaints of the citizens through this app. We have interviewed the focal person to collect the data of the supply side and also added their experiences in the end.

In order to understand the supply side of the Citizen Portal App, interviews were conducted with the focal person of the app in Islamabad. In this regard, District Commissioner Islamabad, Hamza Shafqat, was met earlier this year in person and was asked about the Pakistan Citizen Portal App. The District Commissioner replied that the majority of the complaints in Islamabad were directed towards the departments under the Deputy Commissioner Office and they have an entire department dedicated towards handling, monitoring and dealing with the complaints received through the application. The Deputy Commissioner further told that he monthly reviews the updates of the complaints received and also listens to his staff who are monitoring the complaints. In addition, to raise awareness, the District Commissioner stated that regularly tweets and Facebook posts from the District Commissioner official social media account are posted to the public. That if the general public had any suggestions or any complaints, they were advised to use the Pakistan Citizen Portal App to register them, as it comes under the system and it is easier to track and follow up. For further details and in-depth interview, the District Commissioner introduced Mr. Nauman, who was the focal person for the Pakistan Citizen Portal App at both the Chief Commissioner and Deputy Commissioner office. An in-depth interview, unstructured interview was conducted with Mr. Nauman to extract information about the supply end of the Pakistan Citizen Portal App and the government officials dealing with it. Mr. Nauman said, "I have both the ids of the chief commissioner and deputy commissioner office. I have a staff of 4 people to support me, which is enough here, we don't feel overburdened by the work. But I know in other districts and departments, there is only 1 dedicated person appointed to this, he might be supported by someone been given an additional charge/responsibility, but usually there is only one or two. That might be less for some offices. We from this id and this

office can see the dashboards of all the departments that come under our jurisdiction. Every department has 1 appointed person who is supposed to look after the complaints and forward, follow up with. I can also see their caseload, their dashboard, and feedback from this Deputy Commissioner and Chief Commissioner id. Like, I can see their work and dashboard, and see the progress done by each department; the officials sitting in the Prime Minister Delivery Unit are monitoring our progress. They have access to our dashboards and are constantly monitoring us."

He further added, "Before launching this system, and before any additional feature is added or updated in the system, the Prime Minister Delivery Unit organizes extensive training where all the focal persons in every office are invited and trained. Then we further give trainings in our office to the staff here. We have also a specific design user manual for our use. And if we face any problem, we can directly call the Prime Minister Delivery Unit any time. We sometimes face issue in the logging in of the server, and a few system errors, but after conveying to the Prime Minister Delivery Unit, they get fixed quickly."

• Processing of Complaints

Regarding the handling of the complaints, Mr. Nauman added, "When we receive a complaint, we try and forward it to the relevant department as soon as possible. After forwarding it, we have this dashboard, which gives us many options and lists the complaints according to time. We have a folder in the dashboard which tells us if no action of the complaint is done for more than 3 weeks after being registered, we follow up with that. We have a server maintained for coordination and all the staff is well immersed in the latest technology and ways of communication. We actively follow up the complaints on behalf of the citizens. We have even called randomly to the solved complaints and asked if they were satisfied with service delivery. We initiate the complaints again if they are not satisfied. Plus,

if one department gets a lot of negative feedback or has many pending complaints directed towards them, we actively follow up with it and call meetings and try to push them to improve their service and the timings, and deal with complaints faster."

When asked about why there was so many negative feedback, the focal person also talked about that one major reason of delaying in the redressal timing of the complaints is that usually they are appointed to or addressed to the wrong person or the wrong department. To rectify it, and to send the complaint to the right department, it takes some time and then the process is initiated again. This timing also affects the final feedback that the user provides. In addition, the focal person added that while most of the complaints are genuine, which are registered but many complaints do not merit all the time and effort and that's why they often get dropped. He said, "Some of the complaints we receive are just comical. And we receive daily like that. On the lighter side, we laugh and have a good time about it, but the citizens should also show a sense of responsibility and only use the application when they have genuine complaints. And sometimes the users who we have solved the complaint also doesn't give us a positive review because it was not up to their mark. We try our best to give the best possible solution, but we also have some constraints, the citizens need to be mindful of that."

• Views of the Focal Person

Mr. Nauman further added that initiative is both a great initiative for the government officials and the citizens. According to him, the citizens get their problems solved at the comforts of their home, and for the government officials as it provides a systematic way of following up and dealing with the complaints. Mr. Nauman said that after the introduction of the Pakistan Citizen Portal, the government officials discouraged the physical entry to register complaints of citizens as it was both time consuming for the citizens and the officials. Also, a proper system is in place which needs to be followed. However, citizens who don't have access to the Pakistan Citizen Portal App, or could not use, the officials have a special id from which they enter their complaints in the system and after taking down their mobile phone numbers from which they can contact the persons with. Mr. Nauman also allayed fears of Data Security breaches concerns and get stolen. He explained that the application had a strong cloud system which was difficult to hack and regular improvements were made to improve the security of the data. And the public officials who are dealing with the dashboard and can have the access to personal information of the users, sign an affidavit that they are responsible for any data privacy breaches and strong action will be taken against them if found guilty of it.

• Achievements of ICT Administration

Lastly, Mr. Nauman highlighted success stories of Islamabad Capital Territory administration on receipts of complaints via Pakistan Citizen Portal App. He added, since the launch of 'Pakistan Citizen Portal', different departments of ICT Administration have taken following key steps on receipt of citizen complaints which provided relief to hundreds/thousands of citizens of Islamabad:

• Number of complaints regarding non-implementation of government-notified rates were received and accordingly 'DC Rates Counter' at different Cash & Carry Centers and D.Watson have been established to ensure availability of items in accordance with the prices fixed by the government. Furthermore, more counters were also being established to provide relief to the citizens.

• Commuters/Travelers of Daewoo Bus Terminal complained about higher rates of items at tuck shops located at Daewoo Bus Terminal. Accordingly, Assistant Commissioner conducted an inquiry leading to fixation of prices of items at the tuck

shops located at Daewoo Bus Terminal benefiting hundreds of travelers on daily basis.

• Residents of Pakistan PWD and adjacent housing societies complained about the deteriorating conditions of PWD Road. Accordingly, Repair/carpeting of PWD road was carried out and un-necessary U-turns have also been eliminated. This resulted in providing convenience to hundreds of residents/travelers of PWD Road.

• Commuters/Travelers of Islamabad Expressway complained about traffic congestion during office starting/closing hours especially due to Heavy Transport Vehicles. Accordingly, ban on entry of Heavy Transport Vehicles via Islamabad Expressway during office starting / closing hours has been imposed benefiting hundreds of travelers on daily basis.

• A citizen complained that Online Vehicle Verification System of Excise Department, ICT, is not functional since many months. Accordingly, the matter was taken up with higher authorities and the same has been made functional enabling citizens to check their vehicle's record online.

• A citizen complained that he visited Excise Department, ICT, number of times for collecting his vehicle's smart card but the same was not printed. Accordingly, SMS alerts for Smart Cards of vehicles were being generated and now citizens are only required to visit the Excise Office only when their card is ready to be delivered.

• A citizen complained that the family members of out-city patients admitted at PIMS and Polyclinic Hospitals are facing difficulties as they have no place to stay. Accordingly, a Shelter Home at Peshawar More was established in order to accommodate the needy and poor persons. The complaint number of the complaint was 1095886.

• Number of complaints regarding non-payment of salary/dues by the different establishments were received. Accordingly, Labor Department, ICT, ensured payment of salary and pending dues to the employees of those establishments. Some of the complaint numbers in which relief has been granted include 1360348, 1837300, 1806489, 1569237 and 1512723.

• A citizen complained that his vehicle was transferred on fake signatures by Excise Department, ICT. Accordingly, Excise Department, ICT, made Biometric verification of the fingerprints of owner and seller at the time of registration / transfer of vehicle mandatory. NADRA has also been taken on board so that owners/sellers can carry out biometric verification from NADRA's e-Shaula centers located all across the country.

• A citizen complained that the existing Citizen Facilitation Center at G-11/4 is unable to provide quality services to the visitors due to workload. Accordingly, 02 new facilitation centers were established at Tarlai and Bhara Kahu. Moreover, 02 more facilitation centers are being established and will be functional soon. Some of the services offered at Citizen Facilitation Centers include Domicile Certificate, International Driving Permit, Issuance/Computerization of Arms License and Fard issuance.

• Other actions taken by ICT Administration on receipt of complaints via 'Pakistan Citizen Portal' include checking of quality and prices of fruits and vegetables and poultry products beside inspections of petrol pumps and regular cleanliness of Sabzi Mandi.

• On receipt of a complaint regarding forced conversion and abduction of a married Christian woman, Assistant Commissioner conducted an inquiry into

the matter and relief were granted to the woman. Moreover, as per findings of the inquiry report, Investigation Officer of the case, SHO of Police Station and DSP of concerned police circle were proceeded against and accused was booked under relevant sections of law.

4.4: Conclusion

In conclusion, we have discussed the views of the both sides that what users have experienced and what are the hurdles being faced by the concerned authorities in managing the system. Although, both sides have significant views but there are some issues that needs to be addressed by the government to make this app more user friendly and have to spread the word about this initiative at the grass root level. According to the PMDU report, 38.52% users have given the positive feedback to their complaints while some didn't respond, and rest gave the negative feedback. Our results also somewhat consistent with the stats of PMDU. The results of this research suggest that a large portion of the population is unaware of this service because of the reason that they do not have access to the internet or even don't have smart phones. Therefore, there is need to improve the system for involving the public in the government affairs and to solve the problems and issues of the citizens.

The initiative can be best described as a turning point or a shift towards a digital society. However, it is extremely important for it to turn out to be a level up in the governance system/process of complaints, instead of taking the system to a lower level, as it has both the potentials. So, for the optimum utilization of this initiative and eminent outcomes, it is imperative that it is backed by stronger and even more accountable governance, only then it can be called a success. The citizens interviewed overall appreciated the initiative and the 'out of the box' thinking on part of the government to facilitate the citizens and keeping the matters as convenient, easy, time, energy and cost saving as possible. This aspect of the initiative was well received, praised and lauded by the citizens. The trust in the government had increased. However, as many citizens appreciated it and said the initiative was a step in the right direction, a lot still had to be desired regarding the redressal of the complaints posted on the Citizen Portal App. It was found, that through the application, the level of interaction between the citizens and the government increased. Both the number of people, who were previously not interacting with the government increased and the frequency of which the citizens interacted with the government increased. Naturally, the government departments and officials had an increase in the caseload and burden, and initially the quality of the service is expected to not be of that high a level as the traditional government setup was still adapting to the innovation and the rapidly increased caseload. Some government offices might lack the manpower, human resources to cope with the increased number of caseload. . Also, the government officials directed the citizens to be more responsible in complaints, as there were many which were junk, hoaxes, contained threats and abuse. This wastes the government officials time on silly complaints and other genuine complaints suffer as a result. This in term will affect both the quality and the timing of the service delivery, which influences the user satisfaction and feedback decision the most. The users interviewed agreed that the Citizen Portal App was very useful dealing with small municipal matters, however large matters relating labor rights, human rights, police, revenue and access to information rarely get addressed. Users also complained about the attitude and lack of accountability of the government servants, which in their opinion prolonged the service delivery time and the quality of the service delivered. The users asked for the default timing of the which the app states '21 to 40 days' to reduce to between 7 to 25 days.

Overall, if we look at the analytics, then 2.8 million users are registered. Pakistan is a population of more than 210 million people. One major reason found in the study that not more people have registered the application and are not interacting with the government is lack of awareness. When people came to know about the application and the easy process of

lodging the complaint, the citizens said they will definitely be using the application in the future. And one interesting factor was that the smaller number of people registered with the application was not because of digital divide, but the lack of awareness. Even citizens with low level of income and less education, the two main factors of the digital divide, owned smartphones and were frequent users of the internet on it. Also, even without high level of education, they had some digital literacy acquired from their frequent use of social media websites such as Facebook and YouTube, they had the know how to download applications and use the applications.

Female users are only 7% of the users registered on the Pakistan Citizen Portal App. This is an alarming statistic as this application was to facilitate the females as to start their interaction with the government, lodge their problems and get their issues solved. A vast segment of the society would be able to get benefit from this. However, upon probing further, it was concluded from the interviews that once again awareness was a major reason why female users not registering with the application with high numbers. Also, some of the women who were registered on the Citizen Portal App, would be under the names of one of their male family members. In addition, women seemed governmental affairs matters were dealt mainly by the male members of the family and the need never seemed to arise to interact with the government. Furthermore, Pakistan with one of the youngest populations in the world, average age being just 23 years and with the growing trend of 'all things digital', there is a huge demand and potential for e-governance initiatives in Pakistan

Chapter 5: Recommendations

Based on the study and data collected, the following policy recommendations have been drafted which will improve the overall app experience and improve governance.

- Massive awareness campaigns on all media platforms, print, electronic and social media needs to be run as to people become aware of the application and start using the application to get their problems solved. The government of Pakistan could also send text messages to the citizens awaringthem of the benefits of the application.
- In villages, easy paisa like centres should set up where the people who can't afford smartphones or lack the digital skills to complaint, go and tell the problem and someone complaints on their behalf. These private or public vendors be given special ids to facilitate them, and a mechanism developed so these people can also complaint easily and with convenience.
- The default timings of the complaint redressal be reduced as the current '21 to 40 days' is too much. The timing to be reduced between 1 to 3 weeks, so there's a sense of urgency and active follow up.
- The government offices that lack staff and are over burden with complaints be provided additional trained manpower.
- Staff shouldn't be given additional responsibility to cope with the complainants, but specific , well trained people be appointed to deal with the problems addressed to the government departments.
- The departments and government officials who have dropped many complaints, or their user feedback is negative, be made accountable. Reforms needed in the governance set up as whole which will also as a result effect this governance set up.
- Problems identified shouldn't be resolved for just one complainant but be removed from the governance set up for all.

- An update should be made which puts a filter on all junk, abusive complaints and they get dropped by the system by default and also the ids of those complainants be blocked permanently
- A vigorous follow up mechanism be developed where an independent unit be made who calls the citizens and ask if there solved complaints were genuinely solved and were they satisfied, not just solved at the end of the government department.

References:

Accenture (2005), E- government Leadership: Leadership in Customer Service: New Expectations, New Experiences, The Government Executive Series

Arif, T. T. (2008). E-Government and the Digital Divide. *Journal of Baghdad College* of Economic sciences University, (18), 302-318.

Awoleye, M., Oluwaranti, A., Siyanbola, W., &Adagunodo, R. (2008, December). Assessment of e-governance resource use in south-western Nigeria. In *Proceedings of the* 2nd international conference on Theory and practice of electronic governance (pp. 154-159).

Belwal, R., & Al- Zoubi, K. (2008). Public centric e- governance in Jordan. *Journal* of Information, Communication and Ethics in Society.

Glass, L. M., &Newig, J. (2019). Governance for achieving the Sustainable Development Goals: How important are participation, policy coherence, reflexivity, adaptation and democratic institutions? *Earth System Governance*, 100031.

Heeks, R. (2001). *Understanding e-governance for development*. Manchester: Institute for Development Policy and Management.

Kalsi, N. S., &Kiran, R. (2015). A strategic framework for good governance through e-governance optimization: a case study of Punjab in India. *Program*, *49*(2), 170-204.

Kolsaker, A., & Lee-Kelley, L. (2008). Citizens' attitudes towards e-government and e-governance: a UK study. *International Journal of Public Sector Management*, *21*(7), 723-738.

Kularski, C.; Moller, S. The digital divide as a continuation of traditional systems of inequality. Sociology, 2012, 5151, 1-23.

Lockwood, M. (2010). Good governance for terrestrial protected areas: A framework, principles and performance outcomes. *Journal of environmental management*, *91*(3), 754-766.

Madon, S. (2004). Evaluating the developmental impact of e- governance initiatives: An exploratory framework. *The Electronic Journal of Information Systems in Developing Countries*, 20(1), 1-13.

Maradung, P. (2013). Factors affecting the adoption of mobile money services in the banking and financial industries of Botswana (Doctoral dissertation).

Nissar, P., &Yakoob, C. (2014). A study on awareness of e-governance services provided through Akshayacentres in Kerala with special reference to Malappuram district. *Abhinav-National Monthly Refereed Journal Of Research In Commerce & Management*, 3(8), 1-7.

Okot-Uma, R. W. O., & London, C. S. (2000). Electronic governance: re-inventing good governance. *Commonwealth Secretariat, London, 5*.

Oye, N. D. (2013). Reducing corruption in African developing countries: the relevance of E-Governance. *Greener Journal of Social Sciences*, *3*(1), 6-13.

Pathak, R. D., Belwal, R., Naz, R., Smith, R. F., & Al-Zoubi, K. (2010). Citizens' Perceptions of Corruption and E-Governance in Jordan, Ethiopia, and Fiji—the Need for a Marketing Approach.

Phang, C. W., Li, Y., Sutanto, J., &Kankanhalli, A. (2005, January). Senior citizens' adoption of e-government: In quest of the antecedents of perceived usefulness. In *Proceedings of the 38th annual Hawaii international conference on system sciences* (pp. 130a-130a). IEEE. Pradhan, R. P. (2011). Good governance and human development: evidence form Indian states. *Journal of Social and Development Sciences*, *1*(1), 1-8.

Rehman, M., Esichaikul, V., & Kamal, M. (2012). Factors influencing e- government adoption in Pakistan. *Transforming Government: People, Process and Policy*.

Sebudubudu, D. (2010). The impact of good governance on development and poverty in Africa: Botswana-A relatively successful African initiative. *African Journal of Political Science and International Relations*, 4(7), 249.

Siegmann, K. A. (2009). Gender digital divide in rural Pakistan: how wide is it and how to bridge it?.

Uddin, M. J., &Joya, L. A. (2007). Development through good governance: Lessons for developing countries. *Asian Affairs*, 29(3), 1-28.

UNDP. (1997). Governance for sustainable human development. UNDP.

Van Deursen, A., & Van Dijk, J. (2011). Internet skills and the digital divide. New media & society, 13(6), 893-911.

West, D. M. (2015). Digital divide: Improving Internet access in the developing world through affordable services and diverse content. *Brookings Institution*.

Zickuhr, K., & Madden, M. (2012). Older adults and internet use. *Pew Internet & American Life Project*, 6.

Athmay, A. A. A. A., Fantazy, K., & Kumar, V. (2016). E-government adoption and user's satisfaction: an empirical investigation. *Euro Med Journal of Business*.

Agrawal, A., Shah, P., & Wadhwa, V. (2007). EGOSQ-users' assessment of egovernance online-services: A quality measurement instrumentation. In *International Conference on E-governance* (pp. 231-244).

Iqbal, A., & Bagga, R. K. (2010). E-Governance: Issues in implementation. In *Proc.* of the Int. Conference on e-Governance, Bangalore.

Al Athmay, Alaa-Aldin Abdul Rahim A., E-Governance in Arab Countries: Status and Challenges (2013). Global Journal of Business Research, v. 7 (5) p. 79-98.

Nissar, P., & Yakoob, C. (2014). A study on awareness of e-governance services provided through Akshaya centres in Kerala with special reference to Malappuram district. *Abhinav-National Monthly Refereed Journal Of Research In Commerce & Management*, 3(8), 1-7.

Sharma, Gajendra, Xi Bao, and Li Peng. "Public participation and ethical issues on egovernance: A study perspective in Nepal." *Electronic Journal of e-government* 12, no. 1 (2014): 82.

Tolbert, C.J.; Mossberger, K. The effects of e-government on trust and confidence in government. *Public Adm. Rev.* **2006**, *66*, 354–369

Billon, M.; Lera-Lopez, F.; Marco, R. Differences in digitalization levels: A multivariate analysis studying the global digital divide. *Rev. World Econ.* **2010**, *146*, 39–73.

Martyn, W. The digital vicious cycle: Links between social disadvantage and digital exclusion in rural areas. *Telecommun. Pol.* **2007**, *31*, 374–388.

Donnermeyer, J.F.; Hollifield, C.A. Digital divide evidence in four rural towns. *IT* Soc. 2003, 1, 107–117.

Scheerder, A., van Deursen, A., & van Dijk, J. (2017). Determinants of Internet skills uses and outcomes. A systematic review of the second-and third-level digital divide. *Telematics and informatics*, *34*(8), 1607-1624.

DiMaggio, P., Hargittai, E., Celeste, C., & Shafer, S. (2004). From unequal access to differentiated use: A literature review and agenda for research on digital inequality. *Social inequality*, *1*, 355-400.

Helbig, N., Gil-García, J. R., & Ferro, E. (2009). Understanding the complexity of electronic government: Implications from the digital divide literature. *Government information quarterly*, 26(1), 89-97.

Bedi, K., Singh, P. J., & Srivastava, S. (2001). *Government@ net: New governance opportunities for India*. SAGE Publications Pvt. Limited

Okot-Uma, R. W. O., & London, C. S. (2000). Electronic governance: re-inventing good governance. *London: Commonwealth Secretariat*.

Okot-Uma, R. W. (2001). Electronic governance: (leading to good government). *Electronic governance and electronic democracy: living and working in the connected world*.

Bhatnagar, S. (2009). Unlocking e-government potential: Concepts, cases and practical insights. SAGE Publications India

Bhatnagar, S. (2001). Philippine Customs Reform. World Bank, Washington DC.

Roy, J. (2003). The relational dynamics of e-governance: A case study of the city of Ottawa. *Public Performance & Management Review*, *26*(4), 391-403.

McGill, R. (1997). Civil service reform in developing countries: a strategic perspective from an institutional development base. *International Journal of Public Sector Management*, *10*(4), 254-267.

Sozen, S., & Shaw, I. (2002). The international applicability of "new" public management: lessons from Turkey. *International Journal of Public Sector Management*, *15*(6), 475-486.

Yeasmin, S. (2020). E-Governance Initiative and the Concept of Digital Bangladesh: A Critical Analysis. *International Journal of Science and Business*, *4*(5), 83-90.

Van Campenhout, B., Bizimungu, E., Smart, J., & Kabunga, N. (2018). Impact pathways of a participatory local governance initiative in Uganda: a qualitative exploration. *Development in Practice*, 28(8), 1046-1056.

Thomas, P. (2009). Bhoomi, Gyan Ganga, e-governance and the right to information: ICTs and development in India. *Telematics and Informatics*, *26*(1), 20-31.

Bussell, J. (2012). E-Governance and Corruption in the States: Can Technology Serve the" AamAadmi?". *Economic and Political Weekly*, 77-85.

Dawes, S. S. (2008). The evolution and continuing challenges of egovernance. *Public Administration Review*, 68, S86-S102.

Ukwandu, D. C., & Jarbandhan, V. (2016). Exploring the relationship between good governance and development in sub-Saharan Africa: Lessons from South America.

Barthwal, C. P. (2003). E-governance for good governance. *The Indian Journal of Political Science*, 285-308.

Sang, S., Lee, J. D., & Lee, J. (2009). E- government adoption in ASEAN: the case of Cambodia. *Internet Research*.

Mensah, I. K. (2019). Exploring the moderating effect of perceived usefulness on the adoption of e-government services. *International Journal of Electronic Government Research* (*IJEGR*), *15*(1), 17-35.

ALOUD, H., & IBRAHIM, Y. (2018). FACTORS INFLUENCING THE CITIZEN TRUST TO ADOPT E-GOVERNMENT SERVICES IN SAUDI ARABIA. *Journal of Theoretical & Applied Information Technology*, 96(15).

Ismailova, R., Muhametjanova, G., & Kurambayev, B. (2018). A Central Asian View of E-Government Services Adoption: Citizens' Trust and Intention to Use E-Services. In *Innovative Perspectives on Public Administration in the Digital Age* (pp. 212-226). IGI Global.

Haque, M. S. (2002). E-governance in India: Its impacts on relations amongcitizens, politicians and public servants. *International Review of Administrative Sciences*, 68(2), 231-250.

Susanto, T. D., & Aljoza, M. (2015). Individual acceptance of e-Government services in a developing country: Dimensions of perceived usefulness and perceived ease of use and the importance of trust and social influence. *Procedia Computer Science*, 72, 622-629.

Al-Smady, A. A. (2017). Governance Improvement Post E-government Adoption: A Case of Jordanian Public Entities. *International Review of Management and Marketing*, 7(2), 35-42.