

E-governance in Pakistan: Opportunities and Challenges

Outline

① Introduction

② What is E-governance?

③ Pakistan E-governance history

④ E-governance Opportunities for Pakistan

a) E-governance will enhance public-participation in decision-making and policies formulation through online feedback mechanism.

b) E-governance will improve service delivery by simplifying access to government services through online websites, apps and platforms

c) It will increase transparency in government actions by providing access to citizens to informations and policies.

d) It will improve working efficiency of the government departments by reducing paper based working and moving everything online.

e) E-governance will enhance accountability and reduce corruption through electronic monitoring of government performance and electronic grievances systems for citizens.

⑤ Challenges for E-governance in Pakistan

a) Lack of digital infrastructure and low internet speed and penetration make it challenging for people to use e-governance services

b) Lack of digital knowledge and skills to use digital devices hinders e-governance progress in Pakistan

c) Data privacy and security are significant challenges for e-governance in Pakistan as personal information are kept online

d) Culture and language barriers are

also a challenge for e-governance in Pakistan.

e) Poverty and economic crisis hinder e-government promotion in Pakistan.

⑥ Steps needed to be Taken To Make E-governance flourish in Pakistan

a) Improving digital infrastructure and internet penetration and speed so that maximum citizens can use e-governance services

b) Enhancing digital literacy by introducing training programs and integrating digital knowledge in educational curriculum

c) Strengthening cybersecurity by implementing strong cybersecurity policies to protect against cyber threats and to build people trust in using e-governance

⑦ CONCLUSION

The journey of electronic communication, initiated by Alexander Graham Bell's invention of the telephone in 1876, has evolved into an indispensable aspect of our personal, social and official lives. The applications of internet have permeated various dimensions, shaping personal interactions, social dynamics, and the very fabric of government activities. Embracing Information and Communication Technology (ICT), governments worldwide aim to leverage its potential for enhanced governance, a phenomenon called e-governance. E-governance is the utilization of Information and Communication Technology for delivering government information and services to the citizens. Various technologies and applications are used at different level of governance for its betterment that brings prosperity and happiness in citizen's lives. Pakistan is also shifting towards e-governance which will bring many opportunities. It will enhance public participation in decision making through online feedback. Similarly, it will increase transparency in government policies by providing access to information and policies. Likewise, e-governance will result in enhanced service delivery by simplifying access to government services.

In the same way, e-governance will enhance accountability thereby reducing corruption through electronic monitoring of government performance. However, there are certain challenges which hinder Pakistan's shifting to e-governance. There is lack of digital infrastructure that make it challenging for people to use e-governance services. Similarly, people have no knowledge and skill of how to administer e-governance technology. Moreover, data privacy and security are significant challenges for e-governance in Pakistan as personal information are gathered and kept online. Furthermore, language and culture barriers also hinder Pakistan's shifting to e-governance. Improving digital infrastructure, enhancing digital literacy, and strengthening cybersecurity are some measures that Pakistan needs to adopt to tackle these challenges. E-governance in Pakistan can bring numerous opportunities but there are certain challenges in its way which need to be tackled by taking certain steps.

The utilization of Information and Communication Technology in the governance system to improve efficiency is called e-governance. It involves the incorporation of ICTs both in terms of devices and methods, into the operation

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of government departments. The main goal of introducing e-governance is reducing corruption through reduced human involvement, increasing productivity, and providing citizens with efficient, fair and transparent access to services and goods. For e-governance to work, it requires digital infrastructure, digital skills, technologies and internet facility. Various countries have considered e-governance in different forms like government online portals for citizens, digital documentations and electronic records in different government departments, and online services such as E-payments, e-filing, and e-justice. This results in enhanced efficiency, transparency and accountability in government services and policies.

The concept of e-governance in Pakistan can be traced back to the early 2000s when the government recognized the need to adopt modern technologies to enhance the efficiency and transparency of its public services. In 2002, the government of Pakistan launched its first e-government directorate aimed at providing a platform to the citizens to communicate their complaints and suggestions to government officials. In 2003, the National Database and Registration Authority (NADRA) introduced an electronic ID card system that enabled citizens to obtain

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secure and computerized national identity cards. Similarly, in 2005, the government launched the 'e-police' project in Islamabad to digitize police records and improve the efficiency of law enforcement agencies. Also, in 2005, the Punjab Information Technology Board (PITB) was established to promote and implement e-governance initiatives in the province. In 2010, the Sindh government launched the "Sindh Online" project to provide online services to citizens. Likewise, in 2012, KPK government launched "e-Khidmat" project to provide citizens online services like passport application, driving license and property registration.

In recent years, people demand of e-services from government of Pakistan increased with increase in internet users. In 2018, the federal government launched "Ehsaas" program for providing financial assistance to the poor and vulnerable segments of society through a digital payment system. The Citizen Portal launched by the government of Pakistan in 2018 is an important initiative that has transformed the way citizens interact with the government. It is an online platform that enables citizens to lodge complaints and provide feedback on government services, which can be addressed by relevant. Various other initiatives have been taken by Pakistan to improve governance including e-justice, e-Office system, e-taxation and digital Pakistan initiative 2017.

To begin with, e-governance will enhance public participation in decision-making and policies formulation through online feedback mechanism. This will enable common citizens to take part in government decision making process that will result in inclusive policies. Policies formed will be according to the need of the people. This will increase trust of the people of Pakistan in its government that will strengthen democracy in the country. Public can participate in policies formulation through online feedback mechanism, where they can show their reaction towards a policy making it inclusive and equally beneficial to all. For this, various Government websites and portals, social media and other mobile apps and online forums can be used where people will share their views about a policy. Pakistan has already introduced several online platforms and apps for enhancing citizens participation such as Pakistan Citizen Portal. This provides citizens an opportunity to communicate with government and shape policies according to their choice making policies more effective. Thus, e-governance will enhance public participation in decision-making process of Pakistan. Similarly, e-governance will

enhance service delivery by simplifying access to government services. In manual service delivery system, a lot of time is consumed in processing and paper work. In e-governance, efficiency of service delivery is enhanced due to streamlined processes

which reduces time taken. E-governance offers various online apps, websites and portals where citizens have easy access to government services that makes service delivery cost-effective and efficient. People do not need to go to various government departments and offices, wasting time and energy, to get their work done. They just need a smartphone and internet connection to avail

government services. Initiatives taken by Pakistan for this purpose include e-education, e-health, Punjab government's e-services offering online services like birth certificate^{and} licenses, Tax Aasaan application and various other apps for e-transactions. All this will improve service delivery in Pakistan because of easy accessibility. Therefore, e-governance in Pakistan will enhance service delivery by simplifying its accessibility.

In addition to this, e-governance in Pakistan will bring transparency in government actions as information regarding these actions will be freely available to those affected by these actions. Transparency means that

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decisions taken and their performance follow rules and regulations. In e-governance information regarding government actions and policies like budgetary allocation, information about major projects, and recruitment and interview results are freely available to the citizens on different government official websites. This builds trust and confidence of the people in government. Transparency attracts foreign direct investment that boosts economic growth. For instance, Federal Public Service Commission announces online advertisement for recruitment to government jobs and then public the result of the exam or interview by uploading it on its online website. This increases transparency and reduces corruption as rules and regulations regarding the recruitment process are available to every participants, and also the result of the test or interview is available to everyone. Thus, in Pakistan e-governance will enhance transparency in government actions by making information available to everyone.

Moreover, e-governance will improve the working efficiency of the government department by reducing paper work and moving everything online. Paper based system is time consuming, while online system takes little time for a task to be completed. Also, in e-governance one has not

have to visit the government office or department for some work which is done online from home. This leads to no fuss in offices making the officers and other workers free to work on computer system with speed and accuracy thereby increasing efficiency. This saves time and money of the citizens with their issues solved in a short time span. In e-governance, governmental processes are streamlined and there is continuous performance measurement and evaluation which increase efficiency.

Estonia is a prime example of a country with high efficiency due to its extensive e-governance initiatives. Pakistan has also taken various steps to improve efficiency of governance like E-office system for automated workflows, online passport renewal, E-visa system etc. Thus, e-governance in Pakistan can improve the efficiency of the government by reducing paper work.

Lastly, e-governance in Pakistan will increase accountability and reduce corruption through electronic monitoring of government performance, introducing digital dashboard for key performance indicators, and electronic grievance system for the citizens. Accountability is the responsibility of government officials, institutions and agencies to answer

to answer for their actions, decisions and policies to the public. In e-governance, there is monitoring and tracking of government activities and performances through digital devices, various apps and other technologies. Also, citizens have free access to governmental information related to performances and policies which citizens can analyse and raise objections through online grievance system. Similarly, financial transactions, resource allocation and project progress can all be tracked, creating an audit trail that can be reviewed at any time ensuring that public funds and resources are used properly. This reduces corruption. Citizens can report corruption cases directly through online platforms which increases accountability of public officials and reduces corruption. Likewise, automated processes like tax filing, licensing, and permits applications minimized face-to-face interactions which also reduces corruption. Countries with strong e-governance have lowest corruption. For instance, Denmark has strong e-governance system therefore it tops the 2023 corruption perceptions index that declares it the least corrupt country. Thus, e-governance will increase accountability and decrease corruption in Pakistan.

However, lack of digital infrastructure and low internet penetration make it challenging for people to enjoy e-governance in Pakistan. For

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e-governance to work, there is need of extensive digital infrastructure and fast internet. However, in Pakistan digital infrastructure is not much developed and speed of internet is also slow, which is a major obstacle in the adoption of e-governance. In main cities, this is not a big issue; however, in rural areas there is very poor digital infrastructure and speed of internet is very slow. In these areas, people go to nearby cities where internet is fast for online apply or availing other online government services. Also, there is the issue of loadshedding where electricity is available only for few hours in a day which is required for the machinery to run in mobile towers and charging of digital devices. According to a report, internet speed in Pakistan is 15mbps, while that of Bangladesh is 48mbps. With such a low internet speed, e-governance has difficulties in smooth operation. Therefore lack of infrastructure and slow internet speed are some challenges for e-governance in Pakistan.

Similarly, in Pakistan, there is lack of digital knowledge and skills which hampers e-governance progress. E-governance is using technology for governance purposes. This technology use requires skills and knowledge which is not upto the mark in

Pakistan Majority of the citizens have no knowledge of using governmental apps and portals meant for e-governance due to lack of digital knowledge. This makes e-governance progress slow. Main reasons are poverty and no IT education in school curricula for this lack of digital knowledge in Pakistan. According to Pakistan Bureau of Statistics, less than 8% of Pakistani students in secondary education have digital skills. UNESCO reports that digital literacy rates are below 20% in rural areas of Pakistan. Thus, lack of digital knowledge and skills hamper e-governance progress in Pakistan.

Moreover, data privacy and security are significant challenges for e-governance in Pakistan. In e-governance personal informations are shared online or put on website or app for services. These informations are stored there and kept online having high chances of being leaked because there is no strict cyber security system in Pakistan. Due to this reason, many citizens do not want to get benefited from government e-services, posing a challenge to e-governance.

Also, the country lacks comprehensive data protection law, putting at risk citizen's personal information. Pakistan has taken initiatives in this regard like implementation of National

Cyber security Policy and establishment of National Center for Cyber Security. Denmark effective e-governance is attributed to its strong cybersecurity as indicated by its strong position in 2022 Global Cybersecurity Index. Thus, data privacy and security are significant hurdles for e-governance in Pakistan.

Furthermore, e-governance in Pakistan is not flourishing due to culture and language barriers. As e-governance depends on technological devices and platforms which use English for their operation. Many people in Pakistan do not understand English, therefore it becomes difficult for them to use e-governance services. Also, in rural areas of the country, females are not allowed to use smartphones which also hinders e-governance progress in Pakistan. Some do not want to shift to online form of governance due to trust issues as they are contended with the old governance based on manual work. According to the GSMA's Mobile Gender Gap Report 2022 women in Pakistan are 33% less likely than men to own a mobile phone and 38% less likely to use mobile internet. Thus, culture and language barrier hinder e-governance promotion in Pakistan.

Lastly, poverty and economic

crisis are not letting e-governance flourish in Pakistan. Due to economic crisis, government cannot invest in e-governance projects to manage digital devices and internet services necessary for e-governance to function properly. Poor economic growth of the country is leading to poverty which makes citizens unable to buy digital devices or other requirements of e-governance. They cannot get education to gain digital knowledge and skills which are required for proper use of e-governance services. Poverty is so rampant that people are striving for basic necessities of life. In Pakistan, about 40% of people live below poverty line. Due to this they cannot enjoy e-governance facilities. Therefore, poverty and economic crisis are hurdles in the way of e-governance in Pakistan.

In order to cope with these challenges to promote e-governance, Pakistan should improve its digital infrastructure and internet speed and penetration so that maximum citizens can use e-governance services. Without proper infrastructure, e-governance cannot work. Therefore, Pakistan should improve its digital infrastructure by investing heavily in it. Also, private stakeholders should be encouraged to invest in this field. Government should provide

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subsidies in carrying out projects regarding digital infrastructure. It should reduce tax on importing technology and devices used in e-governance. Pakistan should increase its internet speed and penetration through establishing more data centers, deploying more optical fiber cables nationwide, expanding 4G coverage and reducing regulatory hurdles for ISPs, and new telecom companies entering the market. This will improve internet speed and infrastructure enabling people to easily use e-governance services. Therefore, Pakistan should improve digital infrastructure and internet speed for promoting e-governance.

Similarly, Pakistan should enhance digital literacy by introducing training programs and updating educational curriculum so that people know the use of digital devices and platforms used in e-governance. Digital knowledge and skills are a pre-requisite for e-governance. Pakistan has low digital literacy rate therefore cannot progress in e-governance. Pakistan should establish more digital training institutions where free digital education and skills be provided to the citizens. Although, different government institutions like NUST, private institutions like PIDE Lahore and online platforms including Coursera and edX Pakistan, have been established, however

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there is need for more such institutions and platforms to give people digital knowledge and skills. Also, digital education should be integrated into the educational curriculum so that kids have the basic knowledge required for using digital devices and platforms. This will let people use e-governance services and other e-governance facilities. Thus, to shift to e-governance, Pakistan should enhance digital literacy so that citizens could get full advantage of e-governance services.

Lastly, Pakistan should strengthen cyber security by implementing strong cybersecurity policies to promote e-governance. In e-governance, there are cyber threats because personal data is stored and kept online. This makes people hesitant to use e-governance services. Therefore, Pakistan should strengthen cybersecurity to protect against cyber threats which will build confidence and trust in people to use e-governance services fearlessly. Already, Pakistan has formed Cybercrime Act 2016 in this regard. However, it is not enacted in true sense. Therefore Pakistan should enact Cybercrime Act 2016 in true letter and spirit and also promulgate other such acts to enhance cybersecurity. Also, the 2023 Personal Data Protection Bill should be made into law which will regulate the collection,

processes, storage and protection of personal data. Provincial investigation agencies should be established on the pattern of Federal Investigation Agency (FIA) for handling cybercrime cases. All this will strengthen cybersecurity and build people trust in using e-governance services. Therefore, Pakistan should strengthen its cybersecurity for successful transition to e-governance.

To conclude, it can be said that e-governance in Pakistan has many prospects, however, there are some challenges in its way which need to be addressed.

E-governance in Pakistan will enhance public participation in decision-making which will result in effective policies. Similarly, it will increase transparency in government actions by giving easy access to informations regarding government actions and policies.

Moreover, e-governance will enhance working efficiency of government department by reducing paper based work. Furthermore, it will increase accountability of government and reduce corruption through continuous monitoring mechanism. However, e-governance in Pakistan cannot flourish due to lack of digital infrastructure and slow internet which are like backbone for e-governance.

In addition to this, lack of digital knowledge and skills in Pakistan pose a challenge in the way of e-governance. Likewise, culture and language barriers are also hindering e-governance progress in Pakistan. Lastly, poverty and economic crisis are other obstacles which slows Pakistan's

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transition to e-governance. Improving digital infrastructure and internet speed can be proved helpful in this regard. Similarly, enhancing digital literacy could help Pakistan in its transition to e-governance.

Pakistan can take full advantage of e-governance by addressing the challenges in its way if these steps are taken in true letter and spirits.