

The Role of Technology in redefining Global Governance.

Outline

1. Introduction:

Technological advancements are reshaping the landscape of global governance, enhancing how government functions and engage with citizens.

The integration of cutting edge technologies such as artificial intelligence and social media into public administration offers significant benefits such as improved service delivery and increased transparency. Nonetheless, this transformation also brings about critical challenges related to data privacy and cybersecurity.

2. The Role of Technology in Redefining Global Governance:

2.1 Technology increase the transparency and accountability of government institutions.

2.2 Technology is also being used to increase the security of government operations.

- 2.3 Technology increase the efficiency and effectiveness of government operations
- 2.4 Technology is used to improve citizen engagement
- 2.5 Technology play an important role in transforming communication
- 2.6 Technology revolutionize the transport system

3. Challenges Posed by Technology in re-defining Global Governance:

- 3.1 Bridging the Digital Gap: provide access to all
- 3.2 Promoting Digital Competence: fostering digital literacy is crucial
- 3.3 Cybersecurity threats: cyber attacks and data breaches
- 3.4 Privacy Dilemma: increased data collection by government
- 3.5 Put in place the Regulatory Framework.

4. Way forward to overcome the challenges posed by technology in re-defining global governance:

4.1 Invest in digital infrastructure and capacity building

4.2 Develop and implement robust cyber security measures

4.3 Establish clear data protection and privacy regulations

4.4 Foster international cooperation and knowledge sharing

4.5 Enhance digital literacy and citizen engagement

5. Conclusion:

Technology is redefining the global governance by improving transparency and service delivery. In the same way, technology is posing challenges of digital gap. After taking measures in the right direction, challenges can be overcome.

Technology, apart from the past, is redefining the global governance. It is being used by every government institutions. This brings the transparency and accountability in that institutions. Furthermore, technology is also playing its role in the security improvement of the government operations. By applying it in the improvement of governance, then it will surely enhance the efficiency and effectiveness of the government institutions. The most important role of technology in democratic governance is the engagement of citizens. This role is confronted with some challenges. Among them there is inequality in access of technology, is most benefited. Ahead of this, technology is posing threats to cybersecurity and breaching the privacy. However, certain policy measures are needed to overcome these challenges. Like investing in digital infrastructure, implementing cyber security measures, establishing data privacy centers and enhancing digital

literacy and citizen engagement are important milestones in improving the challenges.

Technology is playing its role in enhancing the transparency and accountability of government institutions. Through developing websites, the information about the initiatives taken by government is easily available to the public. Public can easily access these information as their right is protected by the constitution.

The citizen information act provides right to every citizen to easily reachout to every government initiatives. This information is being made available to public by the use of technology thus increasing the transparency. In addition to this technology is also enhancing the accountability in every sector. Take an example of health sector. E-vaccin has been introduced which regulate the attendance of police workers. In this way the workers can be made accountable in case of any absence. Moreover, in educa-

tion sector tablets are being provided to the staff to regularise the attendance of students. Therefore, technology is being used to enhance transparency and accountability.

Technology is also being used to increase the security of government operations. In almost every sector the exchange of information is being done with the use of technology. In place of traditional type writers, now mobile phones and computers are being used for the exchange of information. Like in the police, different coordination devices like pagers in laptops are being used to secure the flow of information. Furthermore, large chunks of data is being stored safely and can be transferred to others without any interruption. In this regard, Digital India initiative taken by Indian government is important. Its aim is to make and digitalize the whole government sector of India. Therefore, in

the ease of transfer of information and safety of data storage government operations are secured. This is made possible with the use of technology.

Technology also increases the efficiency and effectiveness of the government operations. With the use of technology, the tasks of government are being done in less time and less cost. This is evident in the use of electronic voting machines during the general elections in USA. This has reduced the cost of ballot papers and the deployment cost of staff to 60%. according to statistics, in this way government is increasing its efficiency through the technology. In addition to this, the effectiveness of every government task has enhanced like during climate induced floods in Pakistan, the needy people whose belongings were destroyed, are compensated through Benazir Income Support Programme BISP. through this

programme, the deserving people have been identified and the compensated amount has been transferred directly to their accounts. Thus, technology increases the efficiency and effectiveness of government operations.

Technology has also redefined and improved the citizen engagement in the decision-making by the government. Various platforms are being used to assess and involve the people in the decision-making. A former twitter account has been made by every institution of government to make queries and to engage the citizens through this platform. Different non-governmental organisations like World Bank use its World Economic Outlook report by collecting data after using the technology. Furthermore, in the island the legislation is done by engaging the public through online media platforms. Therefore, every citizen access easily in the decision-making by using technology.

Technology also revolutionize the transport system by introducing the online ticket purchase system and introducing magnet trains. Most of the countries including Pakistan have devised the app, with the name of Pakistan - Railway Ticket Purchase app. By using this app, citizens pay fare online and get ticket. Thus in this way corruption has been reduced. In addition to this, bullet trains which are being operated by the magnetic force, reduces the travel time and burning of fuel. Furthermore, the trace and track system have been installed in several cities. The purpose of this system is maintain a check on the buses to maintain the service delivery. A type of this system has been introduced in the metro trains in Pakistan. Moreover, alert systems like fire alert system has been installed to prevent loss of life and property. Therefore, the transport system has been made efficient and more luxurious by the use of technology.

The installation and wide-spread use of technology in the improvement of governance are facing challenges. Technology is not equally available to all the citizens. This is evident in the availability of mobile phone. According to an assessment only 60% population uses mobile phones. Remaining 40% are devoid of this technology. In addition to availability of mobile phones, there is also unequal spread of 4G technology in Pakistan. Most of the southern areas i.e. Balochistan lack the availability of internet services. This condition is a challenge to the effective use of technology in redefining the governance. Furthermore, this gap also widened in the government offices in the far flung areas. Thus depriving these offices to bring them in the net of governance. Therefore the bridging the digital gap is a challenge to the role of technology in governance.

Promoting digital competence

is another challenge confronting role of technology in global governance. Most of the people around the world are unaware about how to use the technology. This is manifested in the number of people who have opened their bank accounts. India stands at the lowest fourth number. People are not using the technology because of unawareness. Furthermore, the digital illiteracy among women in Pakistan is higher than man. Thus, keeping women out of the use of the technology for the sake of effective governance. Therefore, promoting digital literacy is a challenge in front of use of technology in global governance.

Technology face challenge in the protection of data against the cyber-attacks. There are many instances in which the cyber-attacks have decreased the institutional working of the Pakistan. Among cyber attacks the hacking of the website of the

Federal public service commission and unassisting the thousands of candidates to apply online. This step has not only eroded trust in the commission but also made data vulnerable to the attackers. Furthermore, NASA has also recently, extended its invitation to a hacker who has successfully hacked the system of NASA. Therefore, the protection of data against the cyber-attacker is a challenge to counter effectively in order to ensure governance.

Privacy dilemma is another challenge facing by technology in redefining of global governance. Due to technology, a large chunk of data is centralized in the government hands. Thus government can use this data to spread propaganda and to shape the public opinion in its favour. The prominent example is NADRA. Many of the favoured politicians are using this data to maintain a say in the

public and shape public opinion. In addition to this, government can now access to the private chats of users. The installation of firewalls are the biggest example in this regard. Therefore to protect privacy is a challenge confronting the technology in re-defining global governance.

The regulatory frameworks installed by the governments is a challenge in re-defining global governance. In 1996, China firstly installed the firewalls in order to contain illicit information. Furthermore, North Korea has not allowed the global access of internet to its citizens. This step has reduced the effective role of North Korea in re-defining global governance. In addition to this Russia has banned the western media and USA is posing sanctions to TikTok. All these above sanctions are the regulatory frameworks installed by governments.

To overcome the challenges, investing in digital infrastructure and capacity building is a crucial step. First and foremost, upgrade the existing infrastructure of hardware, software and net. Work. For example Estonia's investment in the digital infrastructure resulted in the 99% of public service being online. In addition to this, train the government officials and citizens in the digital skills. Frequent workshops will prove effective in this regard. Furthermore, enhance the digital literacy by creating IT-hubs in the country. Therefore, investing in digital infrastructure is one step forward to overcome challenge.

Develop and implement the robust cyber-security measures. Protect the citizens against the cyber threats and data breaches. To carry this different multilateral companies have hired hackers to protect their data. NASA is one of

them. Furthermore, implement encryption and firewalls. These devices screen the data from harmful to beneficial. China has successfully installed firewalls and Pakistan is now installing to prevent from data breaches. In addition to this, establish incident response plans to react suddenly in case of cyber-attacks.

Establishing clear data protection and privacy regulations is a way forward to overcome challenges. In this regard, defining data handling and storage guidelines is a crucial step. This initiative taken by the legislature of European Union in order to regulate the artificial intelligence is handling the data. Furthermore, ensure transparency and accountability at every institutional level is helpful in privacy regulations. Moreover, protect the data of citizens and in case of any non-compliance with should be punished and fined.

Foster international cooperation and knowledge sharing among countries world wide. For this, collaborate with other countries in digital governance. Recently, in BRICS summit, there are talks to promote digital currency model in place of western SWIFT model. Furthermore, share best practices and expertise like China is sharing the firewall model to Pakistan. Lastly, develop global standards in every country to overcome this challenge.

Enhance digital literacy and citizen engagement. Develop digital education programmes like in Pakistan IT hub is being created in Punjab to learn the IT skills to the students. Furthermore, encourage citizen participation through multichannel platforms like Facebook and etc. Moreover, improve the accessibility of technology to every citizen and also make it a fundamental right. Therefore, enhancement of digital literacy and citizen engagement is a way forward to do this.

To conclude, technological advancements are re-defining the global governance. In this regard, technology increase the transparency and accountability and increase the security of government operations. Also the efficiency and effectiveness of government also enhance. This role is being limited because of certain challenges like in many countries, there exists a digital gap and digital literacy. Cyber security threats and privacy dilemma are the other side of the same coin. These challenges can be mitigated by implementing certain strategies. Investment in digital infrastructure, development and implementation of cyber-security laws and citizen engagement are most important. By implementing the above discussed strategies, one can easily curb the challenges and technological role in global governance can be enhanced.