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The Role of Technology in Redefining Global Governance

Outline

1. Introduction:

Technological advancements are reshaping the landscape of global governance, enhancing how governments function 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 and efficiency. 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 efficiency of government operations

- 2.3 Technology increase the efficiency and effectiveness of government operations
- 2.4 Technology is used to improve citizens 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 gaps. Proper policy measures in the right direction, challenges can be overcome.

Technology, apart from the past, is redefining the global governance. It is being used in every government institutions. Thus bringing 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 the significant. Ahead of this, technology is posing threats to cybersecurity and degrading 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

Transparency and citizens engagement are important initiatives in improving the challenges.

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

The citizens information act provides right to every citizen to readily reach out to every government initiative. 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 accessibility in every sector. Take an example of health sector. E-vaccines have been introduced which require the attendance of public workers. In this way the workers can be held accountable in case of any adverse outcomes in education.

from sector tablets are being provided to the staff to regulate 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, mobile phones and computers are being used for the exchange of information. Like in the police, different coordination devices like pagers in labour are being used to receive 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. The 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 done in less time and less cost. This is evident in the use of electronic voting machines during the general elections in USA. It has reduced the cost of ballot papers and the deployment cost of staff to go according to the office. 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

programmes, 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 famous twitter account has been made by every institution of government to create awareness and to engage the citizens through this platform. Different non-governmental organisations like World Bank use its World Economic Outlook report by collecting data from various technologies. Furthermore, in the island the legislation is done by engaging the public through online media platforms. Therefore, every citizen is easily able to be in the decision-making by using technology.

Technology also revolutionizes the transport system by introducing the online ticket purchase system and introducing metro trains that of the countries including India has devised the app, with the name of Prabhat - 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 metro rail, 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 train in Pakistan. There are also 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 digitalisation and wider 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 10% population use mobile phones. Remaining 90% are devoid of this technology. In addition to availability of mobile phone, there is also unequal spread of ICT technology in Pakistan. Most of the southern areas of Balochistan lack the availability of internet services. This condition is a challenge to the effective use of technology in reforming the governance. Furthermore, this gap also evident in the government offices in the far flung areas. This depriving these offices to bring them in the net of governance. Therefore the widening the digital gap is a challenge to the role of technology in governance.

Promoting digital competence

is another challenge confronting
 use of technology in global go-
 vernance. Most of the people
 around the world are unaware
 about how to use the technolo-
 gy. This is interpreted as the
 number of people who have open-
 ed their bank accounts. In the
 year of the lowest growth in
 world. People are not using the
 technology because of unavailability
 everywhere. The digital literacy
 among women in Pakistan is
 higher than men. Thus, keeping
 women out of the use of the
 technology for the sake of effe-
 ctive governance. Therefore, pro-
 moting digital literacy is a
 challenge in front of use of
 technology in global governance.

Technology face challenge
 in the protection of data as
 well as the cyber-attacks. There
 are many incidents in which the
 cyber-attacks have developed the
 substantial violation of the confi-
 dence among cyber-attacks the
 backing of the users of the

Federal Public Service Commission and violating the mandates of candidates to apply online. This step has not only created trust in the commission but also raised data vulnerability to the attackers. Furthermore, NASA has also recently extended its computer to a hacker who have success fully hacked the system of NASA. Therefore, the protection of data against the cyber-attacks 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 bank of data is centralized on the government hands. Thus government can use that data to spread propaganda and to shape the public opinion in its favour. The prominent example is NADRA claim if the favored politicians are using this data to maintain a bias in the

public and shape public opinion. In addition to this, governments can have access to the private state 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 finally 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 used as posing sanctions to tolerate all these above, countries 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 networks. For example, Estonia's investment in the digital infrastructure resulted in the growth of public services 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 a step forward to overcome challenges.

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

them. Furthermore, implement encryption and firewalls. These devices secure the data from transfer to beneficial. Also we successfully installed firewalls and protection is now installing to prevent from data breaches. In addition to this, establish incident response plan to react suddenly in case of cyber attack.

Establishing clear data protection and privacy regulations is a way forward to welcome challenge. In this regard, defining data handling and storage guidelines is a crucial step. The initiative taken by the legislature of complex laws in order to regulate the artificial intelligence is handling the data. Furthermore, create transparency and accountability at every institutional level is helpful in privacy regulations. Moreover, protect the data of users and in case of any non-compliance with should be punished and fined.

Foster international cooperation and knowledge sharing among countries and work for this collaborate with other countries in digital governance. Recently in BRICS summit, there are talks to promote digital literacy model in place of western digital model. Furthermore, share best practices and expertise like China is sharing the green model to facilitate digital, develop global standards in every country to overcome this challenge.

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

In conclusion, technological advancements are redefining the global governance. In this regard, the technology is used to increase the transparency and accountability and enhance the security of government operations. Also the efficiency and effectiveness of government are enhanced. This role is being hindered because of certain challenges like in many countries, there exists a digital gap and digital literacy. Cyber security threats and privacy concerns 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 also important. By implementing the above discussed strategies, we can easily curb the challenges and technological role in global governance can be enhanced.