

Topic: Is Pakistan ready for digital revolution

Outline:

1. Introduction

Thesis Statement: Pakistan like many developing nation, stands at the cusp of a digital revolution. With advancement in technology, Pakistan is on the track of digitalization. Despite many hurdles, Pakistan's government is taking keen interest to ensure improved digital services all over the country.

2. Whether Pakistan is ready for digital revolution

3. Pakistan is making progress towards digitalization (Thesis)

- a) High youth population has readily adopted digital revolution
- b) Affordable smartphones are providing good platform for digital services
- c) Digitalization improved business and e-commerce management
- d) Digital media providing wide range of educational information and resources
- e) Digital networks creating good online job opportunities

4. Pakistan is facing critical hurdles to fully adopt the digital revolution (Anti-Thesis)

- a) Due to digital illiteracy, many people have trouble using technology
- b) Unreliable and slow speed internet connectivity hinder the adaptation of digital services
- c) Cybercriminals increasingly targeting online transactions
- d) Digital sector spreading online harm, misinformation and hate speech.
- e) Online workers encountering competition from highly skilled professionals

5. Pakistan's recent achievements and government initiatives demonstrate its readiness for digitalization (Synthesis)

- a) Digital Educational Program has been launched to offer basic computer skills

- b) The fibre optic network used to delivers high speed
- c) Government has enacted a comprehensive framework to address the challenges of cyberspace.
- d) Social media platforms follow PTA guidelines to prohibit dangerous content.
- e) Pakistan has ranked 4th in online professionals due to rapid growth of digitalization

6. Conclusion

Essay

"Modern problems need modern solutions" this is what, adopted by our beloved Prophet (P.B.U.H) for the prisoners of Badar. He said them each to teach 10 children of muslims, the art of reading and writing. Once the child had been proficient enough, the instructor would be set free. The Prophet (P.B.U.H) had recognized that the need of the hour is education not money. In the same way, for Pakistan's better future, digital technology is the absolute necessity of the current time. Pakistan like many developing nations, stands at the cusp of a digital revolution. With advancement in technology Pakistan is on the track of digitalization. Despite many hurdles Pakistan's government is taking keen interest to ensure improved digital services all over the country. Pakistan has initiated revolutionary steps for the infusion of technology into different aspects of life. Its youth has the good potential to adopt this technology, which is helping in several aspects including business, marketing, educations as well as employment opportunities. Conversely, Pakistan has to deal with various policy and regulatory issues that may hamper its digital development such as low literacy and slow internet speed to fully adopt the digital services. Pakistan is also particularly vulnerable to cyber threats and in recent years, hate speech and

fake news on social media platforms are major issues that affect both the platforms themselves and the communities. In spite of barriers Pakistan's government has reoriented its focus on digital fundamentals in its early stages of this journey. For instance, Digital educational programs have introduced for the learning of various computer skills. The use of fibre optic has ensured better internet speed. Furthermore, government has provided a comprehensive framework for security and cyber issues. As a result, Pakistan ranked fourth for having online professionals. As a final observation, Pakistan has taken good initiatives for its better development through digital revolution.

Digital revolution refers to the rapid advancement and integration of digital technologies including the internet, mobile services, big data and artificial intelligence. Pakistan has recognized the significance of digital information and has undertaken several initiatives to promote it. For example, Pakistan started its journey towards high speed mobile broadband services in 2014 and as per speed test Global Index April 2022, Pakistan's average mobile speed levels 17.2 Mbps is above the speed levels in the other regional countries. Despite the potential benefits, Pakistan's digital transformation is hindered due to inadequate infrastructure and high illiteracy rate specially in rural communities. In the inclusive Internet Index 2022, Pakistan ranked at 76th out of 100 countries with only 35 percent of population having access to the internet.

However, Pakistan is one of those countries that has high population of youth, which has readily adopted the digital revolution. For the improvement of a country, it is believed that the youth play a major role. In

Pakistan, responsibility for the development and sustainability of the country lies on the shoulders of our huge young population, which constitute upto 60 percent of its population. According to UNDP report, Pakistan currently has the largest generation of young people ever in its history with about two-third of the total population (UNDP, Pakistan National Human Development report, 2017). Thus, in the field of digitalization, the youth of the Pakistan is the future of the country.

In addition, our country is providing affordable smartphones which can be use as a good platform for the utilization of digital services. Smartphones have transformed into powerful digitalization tools facilitating multi-functional opportunities in digital economy. The smartphone penetration has almost doubled in past five years due to their cheaper cost, are being used in all over the country for digital working. As specified by National-rural report of ASER, 77 percent household across rural district have mobile phones and 62 percent have smart phones (ASER-Pakistan Report, 2021). Hence the mobile industry plays a crucial role in driving digital transformation and is well placed to support the realisation of digital Pakistan.

Furthermore, digitalization has also improved the process of business and e-commerce managements. E-commerce in Pakistan represents immense potential for profitability which has been made possible with a growing internet-savvy digitalization. The country is the 36th largest market for e-commerce and its global e-commerce sales are expected to increase over the next years. Based on data published by State Bank, the number of registered e-commerce merchants in Pakistan increased from 1,707 in

2019-20 to 3,003 in 2020-21, a 76 percent increase. Hence, the e-commerce sector in Pakistan has achieved significant growth over the past few years due to increase of digital penetration.

As well as, digital media is providing wide range of information, latest news and educational resources. Digital technology has increased access to educational resources and students can access a vast range of information, that were unavailable in traditional classrooms. The Higher Education Commission has taken several initiatives to promote digital education in the country. One of the most notable initiatives, is the establishment of the National Digital Library of Pakistan (NDLP), launched in 2004, which offers free access to the e-books, journals, and research papers to students across the country. Therefore, Pakistan is taking advantages from digital innovations to enhance the educational facilities for students.

In addition, digital networks are creating numerous opportunities to get online jobs. Pakistan has experienced substantial growth in its information technology and software development industries providing numerous opportunities for skilled professionals in field such as software engineering, data analysis and artificial intelligence. According to a recent World Economic Forum estimation, Pakistan will have one of the world's fastest growing technology marketplaces in next five years. A study of OICCI has claimed that digital economy can tap the abundant potential to boost the GDP's value upto ambitious level of \$50 billion per annum (OICCI, Annual report, 2016). Thus, digital trade is creating new prospects for Pakistan in terms of employment and business promotions.

In contrast, some studies also revealed that Pakistan is caught by complex and multifaced problems and

therefore is not ready to benefit from digitalization. On the top of that, the digital illiteracy in Pakistan has created troubles in using digital technology for many people. Pakistan belongs to those nations who have the world's worst literacy rate, which is the main obstacle to fully adopt the digital revolution. The literacy rate is below the global average, with a significant gender disparity as the male literacy rate stands at 70%, the female literacy rate lags behind at just 49%. According to the Ministry of Federal Education Professional training, the current literacy rate is 62.3, which means that a projected population of 40 million is illiterate. So, Pakistan is lagging behind in the era of digitalization due to low literacy rate.

Moreover, unreliable and slow speed internet also hinder the connectivity leading to less adoption of digital phenomena. Despite increased internet penetration, around 15% of population has no access to internet while the rest suffers through slow speed. As Ookla's speed test saw Pakistan ranked 124th out of 141 countries in terms of internet speed (Ookla, Pakistan median Country Speed, January 2024). The major role in digital framework ^{is played by} High speed and reliable connection. Due to inadequacies in providing good speed, Pakistan is lagging far behind, and its impacts are obvious not only in rural areas but also in advanced cities.

Furthermore, online transactions and digital systems are being targeted by cyber criminals. This is why the use of online transactions is not fully adopted by many people due to increased cyber threats. The lack of digital transparency taking people towards cyber issues, which is going to be increase in

next years due to weak infrastructure and political instability. According to stats, financial frauds, fake profiles, harassment, hacking and defamation are the fastest increasing cyber crimes in the country. An increasing number of Pakistanis have experienced cyber crime through social media as in 2018-2021, financial fraud through social media increased by 83 percent (AAG, cyber crime in Asia: Pakistan, 2024). Hence cyber crime has become an increasingly severe problem in Pakistan in recent years which hampers digitalization.

In the same way, online harm, misinformation, and hate speech has fostered due to digital penetration. Disinformation is now a significant threat to public discourse and democratic values in Pakistan. Online disinformation has created or amplified challenges regarding access to credible information, manipulation of speed media conservation and hate speech, as from 2015 to 2022, internet subscribers have increased by five times also resulted in an increase in social media usage. According to Internet world stats, internet penetration reached 49.8 percent in Pakistan and percent usage of Facebook is highest which is used most often to spread misinformation (Global stats, social media stats in Pakistan, 2023). So, misinformation and online hate pose a significant threat to Pakistan's social harmony.

In addition to these, one more challenge for Pakistan is, online workers are encountering competition from highly skilled professionals in market place. Country is facing tough competition in the digital world as it tries to keep up with the rapidly ending technology landscape. Absence

of an effective framework to boost e-commerce is hurting the I-T industry of Pakistan the existence of great potential. As GSMA data claimed that Pakistan has 1.05 million licensed cellular IT connection by 2022, their percentage is only 0.6% which lower than other nations. Thus, Pakistan is falling behind in the digital sector.

On the other hand, regardless of challenges, Pakistan's government continues to facilitate the digital industry through numerous sustainable development and accelerated digitalization projects. It strives to improve its citizens' quality of life and economic well-being by ensuring availability of high quality digital services. As government has launched digital educational program (DEP) to offer the basic computer skills. Currently Pakistan's literacy rate has increased, which is 59% by hardwork of government to improve education. For this Pakistan has launched National eLearning Initiative (NELI), to provide educational opportunities, through which 2400 schools, 3100 community colleges and over 500 institutes are linked. In this way, digital education in Pakistan is on the rise.

One of the most notable initiatives by government is that the fibre optic network is being expanded to deliver high speed internet access. The construction of a fibre optic network project is expected to boost connectivity in the country. A \$44 million 820 km fibre optic cable being laid between Pakistan and China, is the 6th high speed connection (South Asia Investor Review, Pakistan's Fibre Connection Growth, 2015). Hence, government took a very useful initiative for Pakistan's progress in digitalization.

Beside this, government has enacted a comprehensive framework to address the challenges of cyberspace. The Federation has passed many law that deal with cyber issues, in order to enhance the security environment in the digital industry of Pakistan. The National Response Centre for Cyber Crime (NR3C) is the latest introduction to mandate of the FIA, primarily to deal with technology based crimes in Pakistan. It was told by FIA director general a total of 1202 cases were registered under Prevention of Electronic Crime Act and over 1300 suspects were arrested. Consequently, Pakistan is dealing with cyber issues effectively to enhance the growth of digital sector.

Similarly, the Pakistan Telecommunication Authority has implemented regulations to ensure security and to prohibit dangerous and harmful content. The PTA is the telecommunication regulator of Pakistan, responsible for the establishment, operation and the provision of telecommunication services in Pakistan. Consumers safety remained a top priority for PTA and implemented several measures to promote responsible internet and social media usage and tackled issues related to illegal financial applications. According to its 2023 report, PTA received 180,602 complaints during 2022-23 as opposed to 218,630 in the previous year. An impressive 98.6 percent of these complaints were successfully disposed of. In the light of above facts, Pakistan is no doubt leading towards better future.

In the result, Pakistan has ranked fourth in the global freelancing hierarchy. It is big achievement for Pakistan, that its freelancers are highly sought

after by the clients from around the world for their skills and expertise. Pakistan's youth works in various fields such as software development, graphic designing, content writing, and image layout by the help of e-Rozgaar Program. The country has generated a staggering \$0.5 billion in revenue solely from freelancing. In his report, Payoneer wrote that the country's free lancers increased from 4% in Q3 2018 to 42% in Q2 2019, attributing the growth to government's efforts and youth's increased participation in the economy. As a result, the growth has been mainly fueled by Pakistan youth, by the government investment in enhancing their digital skills.

Summarising all of the above, Pakistan has huge potential to benefit from the digital transformation and to become leading player in the global digital economy. Despite these proficiencies, Pakistan is far behind others in digital industry. The reasons are poor infrastructure, security issues and illiteracy. Even so, the government is truly embracing digitalisation to improve people's access to digital services and proving the Pakistan as multitalented country of South Asia.