

# Topic: Information Technology as a national priority is the need of the hour for Pakistan:

## Outline:

### 1- Introduction:

The use of Information Technology is inevitable for the improvement in the educational and health care sector, and overall economic situation of a developing country like Pakistan.

2- Evolution in the ways of doing work : the past few decades:  
From traditional to tech-centric.

3- The use of Information Technology as a national priority because:

(a) It offers easy access to education, and learning material

- i) Uninterrupted access to education during pandemic like, Covid-19.
- ii) Information Technology ensures Teachers and students avail other national and International educational content
- iii) It Enhanced productivity through online learning.
- iv) No class discrimination, everyone gets the same quality of education
- v) Decreased Gender Gap Index in Educational attainment.

(b) It ensures effectiveness ~~and~~ of the health care sector of Pakistan. Including:

- i) Keeping records in the digital format, saves time.
- ii) Consultation through Telemedicine
- iii) Robotic Surgery

(c) It can improve the economy of Pakistan by

- i) Exporting <sup>of</sup> the outsourced ~~to~~ IT services.

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- ii) Creating job opportunities
- iii) Bringing in Foreign Direct Investment
- iv) ensuring Good Governance through E-Governance

4) Pakistani Government can further improve its IT sector by taking the following initiatives;

- i) Promoting the benefits of Information Technology
  - among the public
- ii) Encouraging the researchers by giving them scholarships
- iii) Funding R and D in this field
- iv) Ease of investment in the IT sector

5) Summary

6) Conclusion

From the past few decades, Information Technology has become part of our lives; starting from the management of the multinational business to communication with the loved ones, IT is used. Undoubtedly, there is always room for improvement, but it is an undeniable fact that the use of Information Technology is inevitable for the improvement in the educational and health care sector, and overall economic situation of a developing country like Pakistan.

Gone are the days when people would have to wait for weeks, and even months to receive parcel from some far off area. Other times, they would have to travel for few days to a distant healthcare facility ~~for~~ <sup>to</sup> cure illness and other diseases. Now, within seconds they communicate and get the information. This has become possible with the advancement in Information Technology. Information Technology came into existence when Charles Babbage invent computer in the early 19th century. The basic purpose <sup>of IT</sup> in the beginning was to do calculation on the computer, and then its usage slowly and gradually expanded to other parts of human lives.

The term IT is a broad concept, it is not just limited to the communication, but management of the business and business operations is effectively done through the use of Information Technology. In the developed world, and some of the developing nations like India and China almost everything is automated. Cloud computing, Big Data, ~~and~~ its storing, and retrieving, & online data analysis, and cars without drivers are some of the most new advancement in the field of Information Technology. in the developed part of the world.

The importance of Information Technology ~~is~~ for it is the era of science and technology, and those who use it effectively stay ahead than the rests in

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every sphere of their lives. Pakistan and ~~the~~ the performance of its different sectors have not been that satisfactory since independence. India gets independence in the same year as that of Pakistan, and China after one year after ~~+~~ of Pakistan's independence. Unfortunately, today, China is the second largest economy, ~~of the~~ and India the fifth largest economy of the world! <sup>as compared to Pakistan</sup> let alone other factors, one of the major factor is that they have further the use of Information Technology in their business, education, ~~and~~ security surveillance and health care system. Therefore, It is the need of the hour that Pakistan recognize and calculate the benefits of Information Technology.

Firstly, Information Technology has been proven important in educational sector of Pakistan. The pandemic of Covid-19 ~~has shown~~ was a warning to the whole world that ~~of~~ traditional way of doing things might stuck <sup>the activities</sup> when a situation like Covid-19 comes around. However, in this regard, the availability of <sup>electronic</sup> devices and Internet ensures the uninterrupted ~~...~~ teaching and learning without going to the physical classrooms. ~~...~~ Furthermore, online learning enhances the productivity of students as they can study anytime according to their availability.

This personalized learning ~~is possible~~ has become possible through the use of Information Technology.

Moreover, Information Technology is also a helping hand to teachers and students alike. For example, Teachers can come up with better examples and teaching methods by doing online courses and certifications. Similarly, students don't have to rely on one teacher, they can learn from Youtube, where dozens of other ~~national~~ and foreign instructors ~~or~~ have uploaded complete lectures ~~regarding~~ ~~the~~ with ample examples. This flexibility and

wide options of learning <sup>have been</sup> possible through the use of Information Technology.

In addition to that, Information Technology makes education cost effective as well. After pandemic, most of the institutions especially in the developed world are offering online courses. Similarly, in the developing country like Pakistan if someone can't make it to the institution they can go of opt online mode of learning. This will not <sup>only</sup> save them their time, which <sup>they</sup> would <sup>waste</sup> in making it to the classroom from a distant place, but it also saves them their money which they would have to spend while travelling in the public transport. Also, students if can't afford hard format books, they can have such books in the soft format as well. This cost effective education keeps the education uninterrupted, and resultantly play its role in increasing the literacy rate of a developing country like Pakistan.

The importance of Information Technology can also be observed from the fact that it ~~does~~ has broken the limitations. Moreover, Pakistan is one of those countries where two different classes get different quality of education. The Elite ~~po~~ class owing to their wealth have the opportunity to study from qualified teachers. On the other hand, the middle and lower middle classes gets the nominal education; ~~due to~~ since they can't pay for quality education due to their financial constraints. This class distinction has led to a situation where elite class rule, <sup>and</sup> a competent middle class works under the elites. Fortunately, if Pakistani government can't ~~make~~ ensure equal education, they can avail the benefits of Information technology. The easy availability of Internet, and computer or mobile device can ensure that every child of the Pakistan gets the equal quality of education, while learning from foreign

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authors.

Unfortunately, Pakistan ranks 135 out of 146 score in Gender Gap Index in educational attainment. It is also true that due to conserved Pakistani society, only a small percentage <sup>of girls</sup> gets higher education as compared to boys, who have ample opportunities of learning and getting higher education. However, ~~in~~ in the presence of Information Technology, particularly Internet, girls in their homes can attain education or learn any other skill leading to ~~work~~ work from home jobs. Freelancing, which is changing the way of traditional means of earning, can also help Pakistan in reducing the Gender Gap Index in the educational and learning context. Hence, Information Technology is paramount in ensuring that <sup>should</sup> girls like boys have equal opportunity <sup>to</sup> learning and getting education.

Apart from education, Informating Technology ensure correct records of patients in the digital format. <sup>→ inside the healthcare facility.</sup> In the past, hospital administration would have to fill dozens of pages <sup>regarding</sup> the basic information of the patient. Similarly, they would have to keep separate files of patients. However, keeping so many files together, and then ensuring that none of them get displaced <sup>was</sup> what a difficult job. As sometimes, the hospital administration would have to spend <sup>hours</sup> in fetching the required file from the dozens of shelves full of files. Fortunately, due to the presence of computers, hospital administration keeps a separate record of each individual patient, ~~and~~ and within ~~to~~ records they update the record of patients. Hence, Information Technology ~~is playing~~ can save the time of traditional Pakistani hospitals by using computers and printers. In the same way, due to Information Technology Pakistani healthcare facilities can reach to

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Covid-19

far off distant locations virtually. For example, during pandemic, according to a report by the Digital Pakistan Policy, over 8,000 telemedicine consultations were conducted in Pakistan. ~~First~~ Also, it is a fact that Pakistani rural areas have never had qualified doctors, <sup>and</sup> modern facilities let alone the availability of medicines. Such areas have high mortality rates. Hence, keeping in view the positive outcomes of telemedicine during Covid-19, hospitals can ensure them, <sup>reach</sup> in every corner of the Pakistan through this technology.

It is also noteworthy that in the Global South most of the operations are <sup>now</sup> carried through the use of modern devices and Robotics. In Pakistan too, according to a report by Daily Pakistan, which states that PKLI (Pakistan Kidney and Liver Institute) performed a successful robotic surgery of a patient. It is just a beginning, Pakistan can make the most out of the Information Technology in the healthcare system.

In a similar fashion the use of Information Technology plays its role in the exports of outsourced services. For example, ~~the~~ <sup>According to</sup> report by the ~~the~~ State Bank of Pakistan (SBP) 2020, the software developers earn the revenue of around \$700 million, and other freelancers which are <sup>not</sup> registered are exporting IT related services ~~of~~ worth around \$1.2 billion. Unfortunately, Pakistan always ~~has~~ <sup>have</sup> had current account deficits. In this regard the IT sector has become extremely important to not only increase the Pakistani exports, but also <sup>improve</sup> the dollar-starving economy of Pakistan.

Moreover, ~~the~~ Information Technology is also playing a critical role in offering employment. Pakistan is not an to the thousands of job seekers in Pakistan. ~~A~~ During

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pandemic dozens of traditional businesses get closed, which lead to hundreds of employed workers unemployed. However, those organizations which could operate and run the businesses from their homes have been the top profit making entities, during covid-19. According to a report, Pakistan was ranked 4th Globally for freelance development. Hence, Information Technology ensures uninterrupted business operations, and employment & security to the hundreds of workers.

In addition to that, the IT sector also plays its role in bringing Foreign Direct Investment to Pakistan. According to recent reports Alibaba has purchased EasyPaisa and Daraz.PK. This means that Information Technology has the potential to increase the business operations in Pakistan. This will lead to more jobs and improvement in the foreign reserves. Hence, the IT sector of Pakistan has the potential to improve the economic health of the Islamic Republic of Pakistan.

Lastly, the Islamic Republic of Pakistan can ensure the security and safety of the public through E-Governance.

Recently, in Punjab the Traffic authorities used Brifcam, which helped them in receiving 700 e-challan, and recovering eleven vehicles involved in criminal activities.

This means if this system is further increased, it can help the police authorities to help the victims of harassment and mobile snatchers. By using such apps and technologies the Pakistani government can give protection to its countrymen.

As it is evident from the above mentioned discussion that IT is the need of the hour and Pakistani government should take steps to expand the presence of IT in the daily business affairs. For Example, the government of Pakistan can make a strategic planning



to promote the use of Information Technology. It can also encourage the research in this field by giving scholarships to the researchers and funding the universities for the R and D projects. In addition to that Pakistani government need to improve the ease of doing business in the IT sector. Not only this will attract foreign investment in the IT sector, but also it will lead to the creation of employment opportunities.

In summary, the use of Information Technology is paramount in today's world. As the world is moving towards advancement, it is necessary that developing nations like Pakistan should make the most out of it. Pakistan, which has low literacy rate ~~and~~ can improve and enhance the quality of education by effectively utilizing the Information Technology. Not only this, apart from few hospitals in the large cities, rest of the Pakistani hospitals presents the sorry state. By keeping in view the other developing nations the Information Technology can make ~~the~~ productive the healthcare system of Pakistan.

The Information technology is also playing its role in increasing exports, and bringing in foreign direct investment from the past few years. This shows that IT sector has the ability to put the Pakistan's economy on the track of growth.

In conclusion, the use of Information Technology is present in every area of daily affairs. Starting from making education not only ~~to~~ accessible, ~~to~~ but also ensuring that students have the opportunity to learn from a variety of teachers has been possible through the use of Information Technology. Similarly, hospitals have increased their productivity and ~~to~~ reach to a distant places ~~a~~ by using the tools and equipment of IT. On the national level, the Pakistani government cannot deny its importance as IT has already become a major contributor in foreign reserves. Hence, this all shows that by efficiently and effectively utilizing the

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technology the government of Pakistan can ensure a happy and prosperous state of the economy. As the Microsoft co-founder Bill Gates says, "It will change the way people work, learn, travel, get health care, and communicate with each other," shows the use of Information Technology is the need of the hour.