CHAPTER 26

INFORMATION AND COMMUNICATION TECHNOLOGIES

The emerging structural shift in the human society is profoundly linked with the use of Information Technology and its application in all aspects of human life. The Vision 2025 lays a very strong emphasis on Knowledge Economy, creativity and innovation, thus provides the strategic direction regarding close alignment with this paradigm shift. The ICTs hold the promise for an accelerated economic growth based on creativity and innovation. It is now an established fact that pervasiveness of ICTs is a precondition for job creation, entrepreneurship and new business avenues.

The collaborative technologies such as video/ web conferencing, conference calls, interactive social media, etc., are setting the stage for the next stage of human development. These innovations primarily rely on ICTs to create knowledge for higher value economic activities. Around the world, a number of socio-economic issues, such as, poverty alleviation, quality education in remote locations to under-privileged, healthcare, access to knowledge, etc. are being addressed through innovation and entrepreneurship. Thus these strategic goals will invariably contribute towards growth of a vibrant Pakistani ICT industry.

> **Strategic focus of the National ICT Vision 2025**
>
> Provide the right digital and knowledge infrastructure for economy, security, governance and society through:
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> - Strategic investments in modern and high speed national broadband infrastructure;
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> - Creation of high impact automation initiatives in the public sector to enhance economic competitiveness;
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> - Improving governance and efficient service delivery to citizens.

Performance review 2014-15

Telecommunication sector in Pakistan has seen a phenomenal growth during the last decade and has reached tele-density of 75.1% as of March, 2015 (*Pakistan Telecommunication Authority*). The auctioning of 3G/4G/LTE licenses has enabled the telecom sector to enter into the next phase of its growth. The rapid increase of subscribers of mobile broadband has increased the overall broadband subscriber base to 15.6 million by March 2015 from 4.7 million in June, 2014. This increase is mainly attributed to mobile broadband after the newly introduced 3G/4G/LTE services by the telecom operators.

In the Information Technology, many PSDP-funded projects have been closed/ terminated during the current year due to non-performance over the last many years such as Federal Government Data Centre (FGDC). Furthermore, some other small projects are near completion by the end of this fiscal year. This has been done to utilize the available resources more efficiently.

Some of the major projects executed in the ICT sector for 2014-15 are:

- National ICT Scholarship Program for students of non-metropolitan areas to have access to quality IT/Computer Science education in the country.
- Machine Readable Passport/ Machine Readable Visa Project - Phase-II.
- Automation of Central Directorate of National Savings (CDNS) project

A strategic, long-term ownership at the highest level is a vital ingredient to make it a success. Introduction of public sector services are being made accessible online to facilitate the citizens, enhance efficiency and transparency in governance. The efforts have been initiated to move public e-services to the lowest tier of government for a real change towards good governance. Also, for successful implementation of e-government initiative, availability of IT professionals within the public sector further needs to be ensured.

E-government initiative which lost steam in the past was re-taken with a new strategic approach during the outgoing year. This new approach will enable the Government to introduce e-government solutions in its various departments on an accelerated pace. The Federal Government, during the year, established National Information Technology Board (NITB). This new organisation will enable better utilization of resources and effective coordination amongst the various organs of the Government for the implementation of e-government initiative.

Outlook 2015-16

Pakistan's IT industry is now on the verge of experiencing an exponential growth. However, to create a synergistic effect that translates into visible and significant economic growth, certain tangible measures have to be put in place.

One significant step already taken in this direction is introduction of 3G/4G/LTE. Equally important measures such as availability of high-speed national broadband backbone, creation of new technology centres in the country, policies that give impetus to localization of content and establishment of third-party payment gateways in the country will indeed help IT industry to develop rapidly in future. In this regard State Bank of Pakistan and Ministry of Information Technology is working on Rules/ Regulations for setting up e-commerce payment gateways. Furthermore, Cybercrime Bill 2015 is also under review in the Parliament. These steps will help in accelerating the growth of economy, increase in investments and help in improving domestic e-commerce activities by facilitating online payments.

For a continuous and sustained supply of high quality skilled workforce all forms of media have to be encouraged for imparting knowledge. Thus to remain competitive globally, innovation is the kingpin which can thrive only with entrepreneurship. ICT sector has the potential to attract young workforce in producing high value innovative products and services. We have to remain focused on provision of quality IT education that can meet both the domestic demand of IT industry as well as cater the international requirements.

The China-Pakistan Economic Corridor (CPEC) is the harbinger of change. Where other infrastructure initiatives will be undertaken within this umbrella, alternative international internet connectivity through China will provide further impetus to the IT industry in carrying out its offshore business more effectively. This link is strategically very important and would also serve as alternative route to the existing submarine cables, already landing in Karachi.

Programmes

The PSDP earmarked for 2015-16 is meant for ongoing projects and some new initiatives. The size of the ICT sector portfolio for 2015-16 is about Rs3,543 million. The emphasis will be on the development of human resource, IT industry, IT infrastructure and e-Government. Major thrust in IT for the 2015-16 will be on the following:

Improvement of IT infrastructure to attract more international IT companies to undertake business in Pakistan alongside the domestic IT companies. In this regard, some of the important projects included in PSDP 2015-16 are:

- Establishment of Software Technology Park in Islamabad with the assistance of Korea.

- IT Industry Support Program is a multi-million rupee initiative that will provide help to IT industry in further strengthening its capacity, improve its processes, expand outreach to international markets and strengthening academia-industry-government linkages by providing young professionals an opportunity to work as interns and further polish their skills.

- E-government projects will continue to be the centre-piece of public sector information technology initiative. The major e-government projects in 2015-16 include:

  – Innovation Fund Program will provide impetus for developing low cost, high impact applications and systems that would improve the working of the public sector, increase facilitation to citizens in access public services and enhance productivity and good governance in the public sector.

  – Machine Readable Passport/ Machine Readable Visa Project (MRP/MRV) Phase-III will provide deployment of the system in the remaining 75 districts of the country, thus providing full geographical coverage for citizens.

  – Automation of processes and offices of Central Directorate of National Savings (CDNS) will enable to facilitate the citizens for more investment into the government schemes.

- Construction of Cross-Border Optical Fibre Cable for Alternate International Connectivity.

- Design and Development of Remote Sensing Satellite.