



Policy Brief # PB-63-2020

July 13, 2020

The Role of ICT - Digital Inequality and Inclusive Growth

Shahid Najam
Vice Chairman, BIPP



The Role of ICT - Digital Inequality and Inclusive Growth

by

Shahid Najam, Vice Chairman

There has been a phenomenal increase in the digitalization of the world in recent years. It is estimated that by the end of 2020, almost 44 trillion gigabytes of data will be available in the world. A huge amount of this data i.e., around 90% has been created in just last two years owing to the rapid pace of data assimilation, plethora of demand for digital technologies generated by economic globalization and the surging need for cost effective and efficient service delivery.

Despite a pervasive technological growth and ready accessibility to innovative services and applications through the internet, the adoption of Information and Communication Technologies (ICT) is distributed unevenly in the world widening the technological gap. The mammoth digital divide is in the form of both access to and use of modern ICT between the developed and developing world and indeed within the developing countries between the privileged and the poor and the urban and the rural is widening. This digital divide foments digital inequality, i.e., the burgeoning socio-economic disparities within the digitalized population across the globe. It may be noted that the United States and China, between the two, account for 75% of all patents related to block-chain technologies, 50% of global spending on the “Internet of Things” (IoT), more than 75% of the cloud computing market, and as much as 90% per cent of the market capitalization value of the world’s 70 largest digital platform companies. The rest of the world, particularly many countries in South Asia, Africa and Latin America, are significantly behind and have failed to catch up. Consequently, the digital divide continues to find recurrent expression in a new set of widening inequities related to access to information, technology, learning, education, skills and opportunity (social, economic, & cultural). These are being further accentuated by the changing demographics—aging populations, bulging youth workforces and the mass movement of people both across borders and within the country rural-urban migration.

The Issues and Challenges

The rapid pace of development of digital technologies has unleashed new challenges especially worsening of the inequality between the digital ‘haves’ and the ‘have nots’. Approximately half of the world population, 3.5 billion does not have access of internet. This unequal access, the fundamental imperative for digitalization, is not a simple connectivity issue; it has many facets including lack of infrastructure, regional disparity, economic inequality and low digital literacy. The literature review reveals seven broad forms of digital inequality:

- Inequality with regard to technical means e.g., lack of access to powerful and usually expensive means to make use of the full range of Internet content;
- Inequality with regard to autonomy of use e.g., the geo-graphical area or the exact location e.g., the access time (e.g. public libraries), the content itself (e.g. work-places), the quality of the Internet connection (e.g. urban versus rural areas), etc.
- Inequality with regard to skills e.g., level of expertise, education, and technical skills.
- Inequality with regard to social support e.g., ICT conducive social milieu and culture;
- Inequality with regard to purpose of use: entertainment vs the complicated tasks;
- Inequality perpetuated by economic deprivation;
- Inequality engendered by lack of conducive government policy framework and funding for technology related Research and Development and incentive structure for the private sector to invest in the rural and remote areas.

In Pakistan, the incidence and intensity of these inequalities are widespread especially in the far-flung rural and impoverished regions of Baluchistan, Gilgit Baltistan, Khyber Pakhtunkhwa, Federally Administered Tribal Areas (FATA), South Punjab and interior Sindh. Only 35% population has access of internet with 78 million broadband and 76 million mobile internet (3/4G) connections¹. Pakistan ranks 76 out of 100 countries in the world and 24 out of 26 countries in Asia on the Inclusive Internet Index 2020 which speaks volumes of dearth of reliable network and infrastructure, high costs, lack of technical skills and low level of digital literacy. On top almost 4 million youth enter the working age population every year which needs to be equipped with skills-competence to enrich the labor market and actualize their full economic potential. The digital economy has the potential to drive high-quality jobs for the young, mobile Pakistanis entering the workforce. The economy must take advantage of their digital leapfrog potential to advance inclusive growth.

The Way Forward

While the United Nations Secretary-General in a “Strategy on New Technologies” ardently advocates integration of new technologies into the Sustainable Development Goals, with equality and equity as the guiding principles, it is for the national governments to develop Digital Strategy to comprehensively address the digital inequality in all its forms and manifestation. The key elements of this strategy should, inter alia, comprise:

¹ Pakistan’s Great Digital Divide by Shah Meer and Zafar Musyani, The Diplomat July 8, 2020

- establishment of a robust and functional national technology and innovation system with special focus on ensuring digital inclusivity and delivery and access of new technologies to “have nots”;
- creating opportunity zones as an innovative approach to develop new business models and their spatial spread through innovative financing, partnership, and delivery and to attract long term investment for ICT and digital economy in low-income urban and rural areas;
- incentivize the resources, initiative and ingenuity of the private sector to accelerate the use of data science for social impact and corporate social responsibility;
- use of digital technologies to communicate, engage, advocate and empower marginalized segments both for their integration in the mainstream development and for enhancing commercialization potential of the local endowment based production, trade, business and employment for income generation;
- induce through digital transformation power, the growth of micro and small businesses;
- equip local leaders with better data driven tool to spur inclusive economic development;
- promote new partnerships to scale solutions that help workers achieve greater financial security and navigate changing economy;

Succinctly, there is a huge potential to make use of ICTs and digital technologies to boost economic growth, expand opportunities for the people to gainfully exercise their choices and utilize their capabilities, better manage (both in terms of efficiency and cost-effectiveness) and improve service delivery and ensure responsive and accountable governance. Indeed, digitalization with concomitant access to information, knowledge and experience invariably leads to the social and economic empowerment and development of the people. The range and scale of processes including communication and exchange, education and learning, commerce and trade, entertainment and socio-cultural interaction, could shape and enrich almost all aspects of people's lives, their livelihoods, upward social mobility, economic growth and sustainable development.