

# Harnessing IT for India's growth



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**S**UCCESS can sometimes become an anaesthetic. There is no undermining India's success, nor our accomplishment over the past decade in taking the country's GDP to the trillion dollar mark. Some more cause for cautious celebration is the fact that we have proven sceptics wrong by clocking 5.8% GDP growth amid the global slump. There is, however, need for a closer examination. We need to ask ourselves whether this success is sustainable in an environment that will keep getting tougher. Is the growth equitable and accompanied by greater competitiveness? I believe we can do much better, if we leverage Information and Communication Technology (ICT).

The GDP per hour in India is still less than three-fourths of the average rate among economies under-invested in IT. It is even lower when compared with the technology-rich economies of the world. IT adoption has a direct impact on GDP: according to a 2005 NASSCOM report, ('Information Technology in the Economy of India'), for every rupee invested in IT, there is a 2.5%-3.5% multiplier on the growth of GDP.

We need to shift from looking at IT as an industry to viewing it as part of the essential infrastructure for economic development and job creation. There are three avenues through which the government could harness the power of information technology and transform the nation for good. The 2004 Common Minimum Programme had kept education as a high priority, committing as much as 6% of GDP towards it. The manifesto for the recent elections committed expanding education at the higher levels with a couple of new IITs, IIMs, Indian Institutes of Science Education and Research, central universities, Indian Institutes of Information Technology apart from other colleges.

But it must be noted that with the explicit focus being on outcome rather than enrolment, the current education system is labour intensive and is subject to vagaries of shortages of teaching staff, infrastructure and funds.

Leveraging ICT is the best way the government can work around this challenge and put its education budget to good use. Instead of only focusing on IT literacy, we must use IT to impart knowledge in other subjects such as maths, science, geography, etc.

For instance, we have today new online learning and blended learning approaches that preserve the high quality of learning at low-cost. Rich multimedia curriculum consisting of text, animation and videos from the best professors in country and interactive simulations, virtual labs and online quizzes can make a world of difference to aspiring students, especially those from rural areas. The government should make universal IT literacy mandatory for the six million school and college teachers by 2015. The mantra should be 'One laptop per teacher' with access to free content on a national teachers portal. Second, a time-bound programme must be designed for creating ICT-enabled class rooms in one million Indian schools by 2017.

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It is a hard fact that only a fraction of India's human capital is employable. If students are provided with the skills that help them attain jobs, the challenge of talent shortage can be solved. ICT skills and other vocational skills provided through ICT-based training could very well address this problem. Therefore, the acquisition of globally relevant ICT skills must be made mandatory for the 12 million higher secondary students in India through all secondary schools by 2012. A national digital literacy programme to make all students 'digitally' certified by 2015, and vocational training through ICT enablement should be introduced by 2012 in all IITs and secondary schools and colleges.

The Indian education system has the task of improving literacy and livelihood levels of millions of Indians as well as building a talent pool of diverse skills. An ICT

framework that improves teaching and learning, builds professional educator skills, improves the availability of content and learning resources, and builds job-related skills, can help Indian education build a stronger India.

Financial inclusion is another major challenge that needs to be addressed. More than 90% of employment is in the unorganised sector, which includes both rural and urban employment. Add to it the fact that 52% of Indians do not make use of banking facilities. The propensity to rely on non-institutional forms of banking such as local money-lenders will not help people benefit from the extensive financial options that are available in the organised sector. Also, the absence of standards and regulations in the unorganised sector renders the users vulnerable to scams and extortion. Once again, ICT could offer a number of solutions.

Payment gateways and an intermediary layer of service providers can replicate the success of mobile telephony through proliferation of stored value cards for savings and purchase of goods and services. Currently, efforts such as Oxicash, M-check offer these experimental models for small value transactions. Similarly, technology platforms can be aggressively used by banks through the banking correspondent model provided some fundamental policy reforms are carried out. Usage of IT platforms for individual MFI firms and SHG implementations needs to be expanded. All these efforts need to be suitably supported by an appropriate financial literacy campaign, at the scale of the national literacy campaign — Sarva Shiksha Abhiyan.

At present, ICT utilisation in India is woefully under-average. PC penetration at 30 per 1,000 people is about a quarter of China; our six million broadband connections pale compared to over 100 million in China; and the number of secure servers in India is lower than those in Bangladesh. India's rank in the global ICT indices is only in the 30-40 percentile range. These are not figures a would-be super power can be proud of. More importantly, in relegating IT to an industry, we ignore a powerful tool that could form the backbone of inclusive growth in the country. You address ICT, and you address unemployment, education, healthcare, economic growth and every other factor that defines a developed nation. For India, the stakes are high. If we are truly able to educate and impart skills to 500 million people by the year 2020, we will take our place in the league of developed nations.

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