

# Overcoming the Manpower Challenge Facing **India's Digital** Transformation Economy

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*Headquartered in Gurgaon, Haryana, NIIT Limited (NSE: NIITLTD), with a market cap of INR 1,590 crores, is a leading Skills and Talent Development Corporation that is building a manpower pool for global industry requirements. With a footprint across 40 nations, NIIT offers training and development solutions to Individuals, Enterprises and Institutions.*



The Digital Transformation (DT) wave is upon the world and 'go Digital' has become the chant for proactive organizations keen to survive and thrive in the emerging Digital age.

From the cup of tea that reaches thirsty lips to 'communicating refrigerators' that inform users about milk running out, to hospitals that remotely monitor the health of their patients—its Digital everywhere. Interestingly, this Digital Transformation is no longer confined to the horizon-watching IT sector, but has drawn into its fold organizations across all industry verticals. No matter where you are, whether in the icy landscape of Antarctica or the sizzling Sahara desert, you are unlikely to escape the impact of Digital Transformation.

DT, which is considered synonymous with state-of-the-art technologies such as Mobility, Cloud, Social, Analytics, Artificial Intelligence (AI), Internet of Things (IoT), Robotics, Automation, Big Data and what have you, has become an imperative for organizations the world over, including India. To exist and succeed in the global economy, DT simply has to be embraced and adopted.

Companies that ride the DT wave have the best chance to be market leaders and achieve sustainable success. In fact, according to industry analysts, Digitally Transformed organizations are 26 percent more profitable than their industry competitors!

What is even more important is the fact that global spending on Digital Transformation technologies is ex-



pected to cross USD 2.1 billion by 2019 and by 2020 almost 50 percent of IT budgets will be tied to Digital Transformation initiatives. All these factors indicate that Digital Transformation is going to drive the next phase of growth of both the IT and non-tech indus-

tries. The process has already begun in India and is rapidly accelerating, with large corporations and smaller companies scrambling to taking the path of DT and working to overcome the challenges they are facing as they move in this direction.

### **Grappling with the Skilled Manpower Challenge**

Probably the key problem that Indian firms are dealing with as they initiate Digital Transformation on their turfs is the acute shortage of relevant skills.

Most organizations are therefore working to nurture skilled people who can envision, design, manufacture, operate, service and support Digital Transformation. The ultimate competitive advantage that organizations can develop, and in fact, India can develop, will be determined by the speed at which both are able to create the right range, quality and quantity of skills in the workforce.

The skill development task however, is a mammoth, multi-layered, multi-dimensional and multi-generational one and will require a variety of professionals. The new DT industry's workforce will be made up of five layers:

- A digital innovator layer
- A digital developer layer
- A digital shaper layer
- A digital worker layer
- A digital citizen layer

**Digital Innovators (DI)** are the scientists and innovators who work in basic and applied R&D to create a continuous stream of new DT-based products and services. The skills they require will be a very high end set of mathematical as well as technological skills across various application domains, as well as product life cycle management skills. They will also need high-end



collaborative creative skills, as most path-breaking innovation will require an intense level of cross-disciplinary collaboration.

**Digital Developers (DD)** are the high skilled workforce who will support Digital Creators to help them build DT products and services; as well as to implement, maintain, modify, enhance and operate the same. The skills they require will be around product manufacturing and software development methodologies and technologies; as well as implementation, services and support of these core product or software components.

**Digital Shapers (DS)** are the leaders and managers in government, institutions and businesses, who will have to envision the potential future for their organizations and transform their organizations and business models through the leveraging of newer and more complex and sophisticated DT products and services. They would need training to develop the requisite ability to lead and chart a course of Digital Transformation for their organizations.

**Digital Workers (DW)** are the rest of the work force in the organizations and businesses in the DT economy. They would need relevant new basic

functional literacy skills to operate effectively in the new Digitally transformed organizations.

### **The Multi-Dimensional, Multi-Generational Focus**

The skills needed for workers in the new Digital world, will be multi-dimensional and cross-disciplinary, across subjects and disciplines. The future workforce (constituted by professionals from different generations), will need to be equipped with core technical skills, industry domain skills and people and interpersonal skills. To build these skills, India will require an innovative K-12 education agenda, a university and professional skills agenda that will also encompass a revamp of the educational models, curricula and teaching-learning methodologies at all levels.

In summary, India has the opportunity through a planned Digital Transformation strategy, to reach full development status as an economy and society, by ensuring it takes a leadership position in the emerging Digital economy. The most critical factor to ensure success is having the right nation-wide skill development strategy and executing it to perfection. 