

Education

MONDAY, NOVEMBER 13, 2017



World Economic Forum
@wef
How can workers stay
by AI? <http://wef.ch>

INDUSTRY-ACADEMIA COLLABORATION

Co-create content with corporates

Almost all major innovation-driven industry ecosystems across the world have had universities as primary catalysts for technology evolution



Ishan Gupta

INDUSTRY-ACADEMIA SKILLS gap has been a major cause of concern for a long time. The country is blessed with an impressive demographic dividend, where a majority of the population is between 18 and 34 years of age. Additionally, India is home to some of the best educational institutions. Still, leading conglomerates often talk about the inadequacy of our education system to produce industry-ready employable professionals.

The problem is that university education has not been able to keep pace with technological developments. Therefore, universities must co-create course materials with corporate counterparts and only then can the skills gap be bridged. In fact, as many as 48% of Indian employers report difficulties filling job vacancies due to talent shortages.

The country is faced with a paradoxical situation of sorts. On one hand, every year more and more men and women are entering the job market, and on the other hand, industries are complaining about dearth of necessary skilled workforce. For the economy to grow faster, inclusive growth and right skilling is paramount. Moreover, the workforce is essentially heterogeneous in nature and, therefore, to prepare a model that will benefit everyone—for example colleges, employers, training institutes, candidates and the government—is surely an uphill task. This is where industry-academia collaboration comes into the fore.

Problem areas

Many contend that though the Indian education system has the unflinching ability to provide the best-in-class theoretical education, yet, inadvertently, it has not been able to transform it into a viable catalyst for progress. The reason attributed to is the lack of adequate R&D ecosystem and innovation matrix that arises out of it.

In any economy, innovation is pivotal to job creation and is the primary driver in solving obstacles faced in day-to-day life. Many innovation-driven industry ecosystems in the world have had universities being the primary catalysts for technology evolution and innovation. Industries and organisations have advanced immensely from applied research taking place in universities in domains such as renewable energy, material science, medical technologies and Big Data.

According to the recent Google-KPMG report, as skill requirements change dynamically, employers are increasingly looking for viable solutions, both within and beyond. In fact, 36% of Indian employers are trying to develop and train their own people. The IT sector is reporting rampant talent shortage. Dearth of soft skills (36%) and seeking more remuneration than what is being offered (34%) are the major reasons why employers in India are not able to fill in vacancies.

How can industry-academia collaboration help

As global landscape changes, both emerging and advanced economies are faced with a dearth of employable industry-ready skilled talent base. It is high time that organisations proactively collaborate with educational and government institutions, and make sure that course materials are aligned with industry requirements and focus on skills that are most crucial for businesses today.



PORTRAIT: SHYAM

Infosys and IBM have their own academic training centres to train fresh graduates to bridge the skills gap. EMC and Cisco have forged alliances with engineering colleges, HCL Infosystems has DigiSchool. But if universities co-create content with industry, all can benefit

The statistics quantify this very point. Online education is one of the fastest growing segments in India. It is set to grow to \$1.96 billion and around 9.6 million users by 2021, from \$247 million and 1.6 million users in 2016. Re-skilling and online certifications is the largest category today, at \$93 million. Primary and secondary supplemental education will be the largest category by 2021, at \$773 million, growing at a CAGR of 60%. Test preparation is poised to be the fastest growing category in 2021, growing at a CAGR of 64%. A large number of working professionals, especially in the IT segment, see re-skilling as paramount for career progression and job role changes, creating consistent demand. An average user enrolls for two courses a year and five in a lifetime.

A paradigm shift in the outlook towards learning, and leveraging underutilised sources can open new doors for organisations to discover talent. Technological innovations such as m-commerce and e-commerce, virtual and augmented reality, machine learning, deep learning, artificial intelligence, Internet of Things, Learning Management Systems, MOOCs, Sharable Content Object Reference Model, mobile applications, cloud computing and social media has completely transformed the way businesses function, bringing technology to the forefront of daily operations.

As a corollary, the demand for skilled workforce abreast with new forms of technology has also risen manifold. As the pace of tech evolutions increases, so would increase in the demand for skilled workforce.

The current trend of dearth in skilled workforce, growing unemployment among less skilled workers, etc, will have severe implications for societies, governments and businesses around the globe. The ramifications

are many—gaps in per capita income between different sections of the society and productivity decline; and productivity is critical to organisational well-being.

It should be understood that universities update curriculum only once in a few years because of the sheer scale of the exercise. But, in hindsight, with the evolution of technology, the demand for newer skill-sets continually evolves and will become wider in scope and scale. Technology is dynamic. The stakeholders who use technology, i.e. industries, are the one who need to keep pace with it. It is, therefore, important for educational institutions to update content frequently, working closely with the corporates.

Companies constantly keep evolving based on business requirements and innovations. That gives them the best understanding of the evolution in technology.

Current scenario

Also, it must be understood that developing economies such as India and China cannot sustain their growth rates without a highly skilled labour force, hands-on with new technologies that are coming up. At Udacity, we are on a mission to change the future of education by bridging the gap between real-world skills, relevant education and employment. Therefore, the skills-based certifications at Udacity are built in partnership with education and industry experts like Google, AT&T and Facebook. This helps students acquire most in-demand skills and stay up-to-date with industry trends.

Corporates are partnering with academic institutions for collaborative innovation, as well as to recruit fresh talent with specific skills that they need. IT stalwarts like Infosys and IBM have their own academic training centres to train fresh college graduates to bridge this glaring skills gap. A few, like EMC and Cisco, have forged alliances with engineering colleges, for the same purpose, and HCL Infosystems has the DigiSchool to improve the way education is being imparted in schools, through technology.

The author is MD India, Udacity, the for-profit educational organisation that offers MOOCs. Views are personal