

Can academia bail out Industry from manpower shortage?

The spectre of a severe shortage of knowledge workers in the IT/ITES sectors by 2010, is hanging over the country like the sword of Damocles. While demographics clearly weigh in the country's favour, quality of the workforce does not. In this scenario, will Industry-Academia partnerships bridge the demand-supply gap, asks Sangeetha Chengappa.

Not only has India established itself as the leading offshore destination for IT and BPO services over the last decade, but it is also gearing up to grow its offshore IT and BPO industries at an annual rate greater than 25 per cent. And generate export revenues to the tune of \$60 billion by 2010.

But all is not well on the manpower front, which is the single most important determinant in India's dream run to achieve the targeted export revenues in a five-year time frame. Although, India contributes a significant 28 per cent to the total talent pool of knowledge workers globally, it will be besieged with a severe skill shortage of 5,00,000 knowledge workers by 2010.

The problem is more of suitability than of availability of labour, since India is at the right side of the demographic divide says the Nasscom-McKinsey Report, 2005. The industry is currently using a multi-pronged approach to address the shortage of skilled manpower. It is hiring specialist expatriate talent, recruiting freshers and training them and initiating close interaction with academia.

Partner, McKinsey & Company, Jayant Sinha articulates, "the problem of skill-set shortage can be combated by creating certain focussed knowledge zones, as it is more a problem of quality and not of numbers.

But India will need 10-12 integrated knowledge cities in the next five years to tackle problems of infrastructure in order to match targets."

Nasscom's IT Workforce Development programme initiated in early 2004, endeavours to bridge the gap in demand and supply of knowledge workers by encouraging Industry-Academia partnerships. It has already conducted several industry-specific training programmes across the length and breadth of the country.

Sangeeta Gupta, Vice President, Nasscom said, "Bannari Amman Institute of Technology (BAIT), which is 80 kms away from Coimbatore, invited faculty members of 40-50 engineering colleges in the region to its campus, to undergo faculty training programs conducted by Sun Microsystems on Java and Microsoft on .Net technologies. Close to 150 faculty members were trained in this program."

Nasscom has run 15 such programs across India, primarily in Tier II colleges, and has trained close to 500 faculty members to date.

Incomplete approach

"While Nasscom's approach in meeting the demand for skilled manpower is perfect, its Faculty Development Programme is incomplete," pointed out Anand Sudarshan, President, Adea International Pvt Ltd, global provider of business process and

technology consulting services. "The programme is restricted to theory only and does not make provision for the faculty to have a stint in an actual software development scenario," he added.

Speaking to the Deccan Herald, Kiran Karnik, President, Nasscom said: "The process of actively working with individual companies and the industry to ensure that current and prospective employees of the IT industry get the training it requires, has just been catalysed. We have not set targets on how many trained professionals we will churn out in the next five years."

Tier II focus

Nasscom is focussing on training students and faculty members of tier II colleges and universities as well as students from tier II cities like Lucknow, Guwahati and Bhubaneswar, who are currently a neglected lot, feels Karnik.

The IT/BPO Industries, in the meanwhile, have not been complacently resting on their laurels. Many companies in the two sectors are proactively tying up with academic institutions to cater to their burgeoning manpower shortage requirements.

Tie-up with academia

A case in point is Hewlett-Packard's (HP) alliance with Jadavpur University. They have collaborated to facilitate mutual exchange of knowledge in mobile computing, wherein, HP will share industry knowledge on relevant IT innovations and foster talent in the form of grants and fellowships. In addition, it will install leading server technologies and provide IT infrastructure support for the computing lab.

They will work together on WiFi systems, mobility solutions, distance education, cellular networks and satellite communications. Both students and faculty of the university will be encouraged to conduct research at the HP labs facility located in Bangalore.

Ajay Gupta, Director, HP Labs India, said, "a significant hallmark of this relationship is the innovation brought to bear by HP Labs. Jadavpur University, with its long tradition of working with industry, is an ideal partner to collaborate with." This relationship builds on the successful implementation of a digital library by HP jointly with Jadavpur University. HP is keen to try the same to other premier institutions across India.

Cisco, the networking major, is another example. It has set up more than 130 Networking Academies across 20 States and union territories in India, which have more than 6,000 active students. Banasthali Vidyapeeth, Anna University, IIT Hyderabad and Bangalore, Thiagaraj College of Engineering and Guru Gobind Singh Indraprastha University are some of the colleges they have tied up with.

The flagship course — CCNA (Cisco Certified Networking Associate) trains students, government employees and in-transition workers to design, build and maintain complex computer networks. It incorporates an E-Learning system that includes multimedia curricula, online testing, performance-based skills assessment and classroom management through a Web interface.

"This collaboration with academia gains further significance in case of networking, as

it is a niche and specific industry with very few academic institutions offering networking certification of their own," said Ranajoy Punja, VP, Marketing at Cisco Systems, India & SAARC.

TIBCO Software Inc and the International Institute of Information Technology, Pune, announced an academic partnership just a few weeks ago. TIBCO will provide the Institute with its business integration software at no charge, to ensure the necessary skills, training and knowledge transfer.

"Establishing strong partnerships with key academia will help infuse software integration and real-time business into education to ensure that skills match market demand to create innovative solutions for years to come," said Ram Menon, Senior VP, Worldwide Marketing, TIBCO Software. Added Prof Krishna Moorthy, Director of International Institute of Information Technology. "Being the first institute in India to offer EAI (Enterprise Application Integration) as a full fledged course, an alliance with the world leader in EAI to support our curriculum was much awaited."

Creative solutions

In addition to collaborating with academia, the IT/BPO sectors are also coming up with extremely creative strategies to grapple with the manpower shortage problem. "Two years from now, mid-sized companies like ours will find creative ways to overcome the shortage of talent by looking at hiring expatriate talent with minimal experience of one or two years. For instance, Vietnam has very bright programming talent, Sri Lanka and Philippines provide good options too," says Anand.

C Mahalingam, Senior Vice President, HR, Symphony Services India Pvt Ltd, suggests, "the mandatory part of an MBBS course is a one-year house surgeonship which gives the student hands-on experience, similarly the engineering course should be compressed to two or two and a half years and the rest should be spent working in industry verticals of the student's choice, like telecom, banking etc."

He said, the company has decided to approach close to 22 colleges — IITs, NITs and others this year. Offers will be made to third year students and the company will interact with them regularly till they finish their course.

Says Ganesh Natarajan, Managing Director of Pune based Zensar Technologies, "the biggest challenge to retain talent is faced by mid-sized companies. People leave because they are not taken care of sufficiently by the employer. We are addressing the WIIFM (What's in it for me?) factor and making sure that our assets (employees) who walk out of the office at 6pm will be back in office tomorrow for another exciting and challenging day at work."

The HR factor

While the Industry is going all out to train IT professionals and university graduates, there seems to be a dearth of Industry-specific HR talent to tackle the manpower needs of the sector. The HR professionals being churned out today are more geared to address the requirements of the brick and mortar companies and have very little understanding of what the IT and BPO sectors need.

To address precisely such an issue, Accenture and XLRI, one of the oldest management institutes in India, recently launched the Accenture & XLRI-HR

Academy, a training academy to cater to the needs of the growing IT and BPO industries.

Said Rahul Varma, India HR Director, Accenture, "According to a Nasscom estimate, there are a total of one million people in the IT/ITES sector today, which is expected to grow five times in the next 6-7 year time frame. Therefore, the requirement for a futuristic pool of HR professionals, relevant to the needs of the industry becomes more acute."

He said, "institutions like XLRI, Symbiosis, TISS etc, can hardly meet the demand for HR professionals. Moreover, the HR curriculum today is archaic and more geared to the brick and mortar companies, and not to the IT/BPO sector." Last year Accenture spent \$400 million on training staff, this year the expenditure on training could be much higher, added Rahul. The Academy offers a 24-month programme for 34 university graduates who have joined Accenture as trainees in the HR department. They will be employed with Accenture as they undergo the programme conducted jointly by Accenture and XLRI, with courses developed jointly by the two organisations. The programme comprises 15 learning modules covering a variety of HR-related topics, including training and development, career/performance management, rewards and compensation, organisational behaviour, as well as the financial and legal aspects of HR. On successful completion of the programme, trainees will receive the Accenture and XLRI Certification in Human Capital Management.

Jobs & more jobs

While matters look pretty bleak on the demand vs supply ratio of quality manpower, the picture gets rosier on the employment scenario. The Nasscom-McKinsey report envisages that the IT/BPO sector will create 1.6 million knowledge professionals and give indirect employment to another 6.5 million people by 2010. The IT services sector will require 1,50,000 employees while the BPO sector will require 3,50,000 trained personnel. Nasscom in association with Hewitt Associates is currently running the pilot of the National Assessment of Competence — an exam to qualify for entry level BPO jobs — in Delhi, Mumbai and Bangalore and will be ready to administer the first exam in March 2006, Mr Karnik said.

Need of the day

According to Natarajan, "90 per cent of the future manpower needs cannot be met. Of the total number of engineering graduates being churned out every year, less than seven per cent are employable in the IT Industry. What the industry requires is not programmers, but great solution architects, specialists with domain skills, designers and analysts."

He said, engineers have to unlearn all that they have learnt in their courses once they get into an IT company and learn how to do things the right way. Therefore, Zensar has forged an alliance with Symbiosis whereby it has straightaway hired 180 students. While Zensar is teaching them all the IT elements in the two year programme, Symbiosis focuses on teaching them the management part of the curriculum. "This saves us from wasting three months in training them once they join us," concluded Natarajan.

Bln dollar question

With corporates are going all out to address the manpower shortage alongwith Nasscom's IT Workforce Development initiative, action has certainly been precipitated in the right direction. While analysts are pessimistic about overcoming the serious manpower shortage which the industry is facing, there are many who believe that collaborating with Academia is the answer.

Although a large number of corporates have initiated the collaborative process with academic institutions, it is predominantly to deal with the shortage within the company itself. But whether such individualised efforts will gain enough momentum to deal with the IT sector's manpower woes in the next five years, only time will tell.

THE CHALLENGE AHEAD

*India's contribution to the global talent pool of knowledge workers - 28%

*India will face a shortage of 5,00,000 knowledge workers by 2010

*India requires 10-12 integrated knowledge centres by 2010

*IT/BPO sector to create 1.6 million jobs by 2010

*IT/BPO sector to provide indirect employment to 6.5 million people by 2010

*IT Services sector will require 1,50,000 employees by 2010

*BPO Services sector will require 3,50,000 employees by 2010

*Majority of 2,50,000 engineering degree/diploma holders enter IT sector

nTotal demand for IT professionals, (more than 1.1 mn) will exceed supply in 2007-08