This way up

Engineers don’t need to switch to management for career growth

SUDHANSHU PANDIT

We believe in nurturing our engineering talent by providing them with opportunities to follow their passion and to excel in their areas of expertise.

In order to encourage engineers to follow their passion for technology through a career in the technology field, an ecosystem needs to be established. An ecosystem that does not make moving to the IT management track a default option for engineers.

At Syntaite we run a program called TechTales that encourages engineers to pursue a career in the technology side. It is important to cultivate engineering talent and foster innovation, recognising which Syntaite invests approximately 15% of its global revenue into R&D and has over 1,000 patents.

Syntaite has over 2,000 employees in India with engineering centres in Pune, Bangalore and Chennai. We provide guidance and foster innovation through formalised brainstorming sessions, cross collaboration between Syntaite researchers and product engineers, our Research Substitution Programmes, and employee recognition programmes and events.

Some of the cutting-edge innovation programmes we conduct are Innogrowth and Cutting Edge. To ensure innovation stays at the forefront of their efforts and thinking, Syntaite developed the Cutting Edge conferences, a conference for engineering, by engineers. Cutting Edge is a series of regional and local Cutting Edge events happening around the world.

Innogrowth is a two-week programme that reflects the vibrant culture of innovation within the India product engineering team along with its affirmative and collaborative effort to harness strategic innovations that can bring greater value to software products.

We have forums, mechanisms and role models to demonstrate the career path on the technology side and its benefits. This career path on the technology side is rewarding, and has the advantage of allowing employees to do the work they love the most. That’s why we have very many top-performing “distinguished engineers” and “Geniuses”, apart from “senior technical directors”. These are people whose contributions to technology get to the company and are aimed at the highest benefit of addressing customer requirements through superior technical knowledge.

Lecturing engineering colleges play a major role in building passion for technology leaders of tomorrow. Given the dynamism in the IT industry, it is increasingly important for greater collaboration between academia and industry. Building talent needs to be provided with a realistic and holistic view of the industry and the relevance between theory and real-world. This relevance is an essential part of a successful and agile environment for technology among engineers. Some of the initiatives that could be undertaken are syllabuses developed in conjunction with industry and sponsored projects.

Most importantly, people need role models. It is the inherent human nature to emulate successful people and the potential they follow. Creating role models who are successful in their careers in the technology track is an ideal way to encourage engineers to follow or continue their passion for technology.

Innovation “is the value creation at Syntaite, along with ‘action’, ‘customer-driven’ and trust”. Syntaite believes in nurturing its engineering talent by providing them with opportunities to follow their passion and to excel in their areas of expertise through several programmes such as TechTales that enable our engineers to grow in a technical career path. A career at Syntaite is uniquely rewarding for an engineering professional, since we provide opportunities to explore technology domains from security to storage to information management.

In today’s interconnected and information-driven world, Syntaite’s vision and technologies are more relevant today than ever before.

The author is director HR, Syntaite
Education in the age of the iPad

Cutting Edge With innovative technology increasing it's presence in today's classrooms, Gurgaon takes the lead

Abhijit Patnaik and Shubhi Vijay
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The chalk and the blackboard, brothers-in-arms for many years, have reached the end of the road in many Gurgaon schools; it would seem. With 'smart' (electronic) boards in almost every class, teaching has been brought to life, sometimes quite literally.

With more than 100 schools in Gurgaon new unattended from last year, with well-known names such as The Shri Ram School, Arvind (TSRS) and Delhi Public School, Gurgaon rubbing shoulders with schools with innovative teaching styles, such as St. Gobind School and Heritage.

D.A.V. Public School, Sector 14, came out on top in the score for the 'academic rigor' parameter while The Shri Ram School got top honours in extra-curricular activities. The Heritage School did well according to the survey, bagging the highest score in the 'infrastructure' as well as 'individual attention to students' categories.

In today's schools, infrastructure, sports facilities, individual attention to students, 'life-skills' education etc are all considered equally important by parents who are pouring in money and time into their children's education. And Gurgaon schools are delivering.

With the government also recognising that effective usage of information and communication technologies (ICT) in the classroom is correlated to positive academic outcomes (including higher test scores), many schools have adopted innovative new teaching methods to meet such demands.

The medium of books is simply not enough in a city where each child is becoming tech-savvy. Many schools are even bringing Ipads, tablets, PCs to aid learning. Some even use computer-based adaptive self-learning programs in various subjects which allow students to learn at their own pace.

"In a changing world, if we teach children today the way we taught yesterday, we rob them of tomorrow. Ten years from now, when they graduate from school, they will need different skills than what we did," says Indu Rana, R&D head at Edumyp, an education company that uses ICT in its products.

"Increasing use of technology also means that teachers need regular training. Professional development of teachers to keep up quality standards is a must," she adds.

Una Divan, a social science teacher at Shri Ram Public School, has been in the profession for over 30 years. "When I joined Shri Ram five years ago, my teaching methodology underwent a sea change. Globalisation had already set in and teaching in a city like Gurgaon means meeting the expectations of all the stakeholders in education," she says.

Parents, however, are looking for all-round development of their child. Despite growth, negative things such as traffic and congestion have also increased. When I went to school years ago, the bags were lighter and homework was less. The system puts a lot of stress on the kids-in terms of marks, hindering the natural development of the child," says Vijay Mehta, whose daughter is a student at TSRS.

And it's not just the pressures of high cut-offs that worry students. With the huge increase in demand for quality education, the schools system is struggling to ensure availability for all. Sip high fees are the result.

"Despite our 'millenium' city tag, we lack basic infrastructure like parks where our children can play. Instead, we need to get sports-club memberships," said Shubhanshi Sinha, a resident of Gurgaon.

"The school infrastructure is excellent and activity-based approach is good, but I don't see much of a difference from what we learnt in our day except that the cost is a 1000 times greater," he said.
IIMK launches innovative course

Kozhikode, Sept. 18

The Indian Institute of Management, Kozhikode (IIMK) has launched what it termed an innovative ‘managerial perspective’ course. The week-long compulsory course for the institute’s post-graduate programme (PGP) participants is being led by 32 faculty members of the institute as also by invited dignitaries from corporations. According to Prof. Debashis Chatterjee, Director of IIMK, “this course, offered for the first time by any school in the world, will challenge our industrial age teaching and make learning more learner-centred than ever before. – Our Bureau
Maharashtra teachers shocked over Kakodkar panel report

At present, with amended Right to Education Bill, the pre-primary education has gone into private hands, pushing a large number of lower income groups outside the schooling system. Many fundamental subjects are closing down. Teachers are becoming surplus.

At present, with amended Right to Education Bill, many students are availing of fundamental subjects such as physics and chemistry in science, or in literature. They are attracted by the market-oriented subjects. Many fundamental subjects are closing down. Teachers are becoming surplus. Many educational institutions and departments are on the verge of closure," she added.

Ms Mukhopadhyay said the report was a replica of earlier two committee reports set up by the Centre - the Ambani-Birla Report and Knowledge Commission Report. The Ambani-Birla Report was never placed before Parliament. It was highly criticised by the academic community. The Knowledge Commission set up by the Prime Minister, Dr. Manmohan Singh, consisted of members under eminent technocrat, Mr. Sam Pitroda, she said.

"The Kakodkar Report directly reflects the recommendations of the Knowledge Commission. Recommendations of both these reports show the hidden intention of the government to be relieved from the burden of educational expenses, paving the way for private educational institutions," she said.

The panel also suggested that varsities be compared with Special Economic Zones and this indicates the promotion of private and foreign investment in education, she said.

Public opinion on inviting foreign varsities in India is sharply divided. The Private/Foreign University Bill has been passed in the Maharashtra Assembly, while the foreign University Bill is yet to be passed, Mukhopadhyay said.

"The Private/Foreign University Bill promotes elite education system, which only students from affluent families would be able to afford. Comparison with China has been mentioned in the report."
New biofuel? Orange peel turned into oil

Washington: Believe it or not, a scientist in UK has built a microwave which he claims can turn orange peel into oil.

James Clark at the University of York says the high-powered microwave could break down the molecules in fruit peel to release gases that could be collected and distilled into a liquid product. These valuable gases can then be used to produce oil, plastics, chemicals and fuels.

According to him, the microwave method could also be used on a variety of plant-based waste to make fuel or other products. They include straw, cashew nut shells, apple peel, coffee or rice husks, the Daily Express reported.

"Orange peel is an excellent example of a wasted resource. In Brazil, the world’s largest producer of orange juice, half the orange fruit is left as waste once the juice has been recovered. This corresponds to eight million tons a year of orange peel that can be used to produce chemicals, materials and fuels,” he said.

Clark built the 200,000 pounds microwave, which looks like one found in any kitchen, at his laboratory in the Green Chemistry Centre at the university.

It can only treat small amounts of food waste, but soon, a model that can process 30kg of waste an hour is due to be in operation. And Clark says much bigger models, costing one million pounds, could treat six tons of food waste an hour and could soon become a familiar sight at recycling centres across UK.

They could also be sited at shopping centres to treat waste food from cafes and restaurants. "The unique feature of our microwave is that we work at deliberately low temperatures. We never go above 200 degrees. You can take the limonene off or you can turn limonene into other chemicals. It works really well with waste paper. It can take a big range of bio-waste material," Clark said. PTI
A plant found in Brazil that sows its own seeds

Washington: Scientists have discovered a tiny plant which they say bows down and sows its own seeds. The dainty, inch-high plant with pink-and-white flowers was found growing in the backyard of a local plant collector in rural northeastern Bahia, Brazil, one of the world’s most biologically diverse areas.

A team of scientists from Rutgers University, the State University at Feira de Santana in Bahia, and Western Carolina University then collaborated to confirm that the plant was indeed a new species, LiveScience reported.

“It is very easy to think we have found and described most plant species of the world already, but this discovery shows there are so [many] left out there without name and recognition,” Lena Struwe, a Rutgers University specialist in plants of the Loganiaceae family, said.

When the plant’s fruits form, the plant slowly bends its small, fruiting branches down, depositing the seed capsules carefully onto the ground — and sometimes burying them in the soft cover of moss. Due to the plant’s dexterity, the team decided to name the new species Spigelia genuflexa.
GATE PREPARATION

Could you please tell me something about the GATE exam? Are MSc students eligible to write the exam? First, is the score valid? Where can one get the sample papers from?

Unmesh Rao

This time, IIT Delhi will coordinate and conduct GATE 2012. While the online exam is on January 29, 2012 (Sunday), the offline exam will be held on February 12, 2012 (Sunday). The application deadline (website closure) is on October 17 (October 24 for printed versions of online application).

GATE 2012 results will be announced on March 15, 2012 on the GATE websites of IITs and ISIC. The GATE score is valid for two years from the date of announcement of the GATE results.

GATE is a single 100 mark paper, which is held for three hours with 65 objective type Multiple Choice Questions for each of the 21 disciplines. Each paper has a general aptitude (GA) component of 15 marks. For details of the exam structure, log on to: http://gate.iitd.ernet.in/GATE2012pattern.php.

Admission to postgraduate programmes with MHRD and some other government scholarships/awards in engineering colleges/Institutes is open to those who qualify in GATE.

GATE qualification is also the minimum requirement to apply for various fellowships awarded by many government organisations. The eligibility to appear for GATE is restricted to those who are in the final year of their programmes.

MBA at IIT

I am a fourth year B.Tech (electrical) student. I am keen on applying for an MBA at the IITs. What is the eligibility criteria and how can I apply?

Neeja Guz

Several of the IITs have schools or departments of management studies that offer postgraduate programmes in business and management. These are very highly regarded by students and recruiters, and accordingly, the composition that can be quite stiff. The IITs that offer such programmes are IIT Bombay, IIT Delhi, IIT Kharagpur, IIT Madras and IIT Roorkee.

Last year (academic year 2010), the IITs (and ISIC, Bangalore) conducted a separate entrance exam known as the Common Admission Test Entrance Test or CAT.

The CAT now stands discontinued despite the IITs' efforts to uphold the CAT as one of all-India management entrance test. Finally, the reason for this was the declining number of takers for the JEE in recent years. For the academic year 2011, the IITs and ISIC will use the scores from the Common Admission Test (CAT) conducted by the IIMs to shortlist students for the group discussion and personal interview stage.

Eligibility: You will have to meet the separate eligibility requirements of both the CAT and the specific IIT/ISIC you wish to apply to.

Eligibility for CAT is graduation (any stream) with a minimum of 50% aggregate.

The requirements for the management programmes at the IITs is a Bachelors degree in engineering/technology/architecture, science/arts/management, with or without a degree in physics/chemistry/maths/statistics, plus an additional degree in communication science/management science.

Several candidates have completed their second year of graduation and have cleared the CAT exam. They are currently at the final year level and are preparing for the CAT 2012 exam.

Regarding the current US economic downturn, I also want to add a couple of things in mind. First, understand the impact the recession has on jobs and hiring outlook in your desired field. By and large with fewer openings available, it is a good time to get your training and work hard and do well both academically and in your internships to improve your chances of landing a job.

Secondly, during a recession most universities actually see an increase in applications from people wanting to ride out the tough times and improve their skills and thereby making themselves more employable. As a result, getting admissions into the better programs actually becomes harder.

Lastly, the recession has a definite impact on funding. Aid and scholarships are available, especially for international students. Most international students look at a combination of university scholarship and aid, and scholarships and grants from their home country to fund their education.

But don't let the prevailing economic scenarios stop you from applying in the first place. You're targeting the academic season of 2012 and will graduate in 2013 — that's a long way off and things should improve by then. Unsolved

Selected candidates will be called for intensive training for the final selection of candidates for the International Information Olympiad. Don't miss the application deadline: October 15.

The final team will be selected after a residential camp in June, where the shortlisted students will be trained under the guidance of professional scientists from leading academic institutions such as the IITs, ISIC, TIFR, CMIE and ISM.

The four finalists will be sent for the International Information Olympiad. Incidentally, India's track record at the previous IOIs has been excellent. All four participants hopped medals in the IOI-2010 at Waterloo, Canada and hopped two silvers at the IOI, 2011, Pattaya City, Thailand.
कैट से खुलेंगे बी स्कूलों के गेट

कार्यना पार्क और स्वयं उम्राजी

भारतीय प्राइमरी स्कूलों (आईआईएम) दिल्ली में ज्यादा मैनेजमेंट और ट्रेंड्स देखते हैं के निर्देश प्राप्त नियाम हैं। विश्वसनीय स्कूलों में प्रवेश के लिए आईआईएम और इंटरनेट ऑफ सीआईसी द्वारा आयोजित की जाने वाली करेंश का एक दक्ष परीक्षा आईआईएम (क्वालिफायर टेस्ट) का जाना केवल एमआईएम टेस्ट (कैट) लेना ही रहा है। कैट प्रॉफेशनल इंटरनेट ऑफ मैनेजमेंट (आईआईएमसी) द्वारा प्रविष्टित है।

आईआईएम कैट की बड़ी लोकप्रियता से पूर्वत्रहित है। जो किसी एक दौरे से भी ज्यादा मैनेजमेंट क्वालिफिकेशन परीक्षाओं में कैट हो केवल एकमात्र परीक्षाओं ही हैं, जिनमें हर साल लाखों लोग भाग लेते हैं।

कैट के 2011 के संयोजक जानकारों मुंजी ने कहा कि, आईआईएम क्वालिफिकेशन परीक्षाओं के कैट को क्वालिफिकेशन परीक्षा के रूप में स्वीकार करने से प्रोफेशनल मिलता है।

इससे कैट की भी विविधता बढ़ी है।

इसे चर्चा के नकाश कैट के लोकप्रियता बढ़ाने के परीक्षाओं को "लागू तह भी 25 फीसदी बढ़ती होगी।"

जेम्स के खबर होने के बावजूद ये भी हो सकता है कि कैट को सरकारें से "युवा अपने" भी था। ज्यादातर छात्र जो मीडिया में भाग लेते हैं, वे कैट में भी भाग लेते हैं। इसके अलावा 2010 में 30,000 छात्रों ने जीवन में परीक्षा कराया, जबकि 2009 में यह संख्या 40,000 थी। वर्ष 2010 में कैट के लिए 2,06,000 परीक्षाओं की हुईं।

हालांकि फिलहाल दो साल में कैट में भाग लेने वालों की संख्या 80,000 है, लेकिन आईआईएम का कहना है कि उन्हें इस साल बढ़ाती है। वानिक परीक्षा के केंद्रों आयोजित तीसरे स्तर पर आयोजित की गई कोंडो 25 कोई बढ़ते हैं। संख्या 2009 में 2,76,000 प्राइमरीरों के कैट में भाग लिया गया। यह संख्या 2009 में दोगुनी 2,40,000 है।

कैट के आयोजनों को संख्या में बढ़ावा देने की उम्मीद है कि 2009 में ऑललाइन टेस्ट को "हाल हराने" के बाद पिल्स के साल जेड में प्रशस्त बी स्कूलों के गेट से क्रमशः 'कैट जैसी प्रतिज्ञा' संयोजित करने के कारण पर चाहिए है, ऐसे में ज्यादा लोकप्रिय बन जाएगा यह प्रक्रिया।'

लोकप्रिय है कि इसके अलावा अगले परीक्षक एमआईएमसी की 200 राज्यों से कैट के बाहर सरकारें कर देंगी। इस पहल के अनुसार 28 सितंबर तक के अन्तर्गत होनेगी।

इस साल कैट का आयोजन नए रूप में होगा। इसमें तीन के बजाए दो ही खंड होंगे। पहला खंड पूर्वस्तित परीक्षा और डाटा मेकरिंग से समेकित होगा, जबकि दूसरा मीडिया योजना और लोकल रनिंग में जुड़ा होगा। इस दोनों खंडों को जटिल-अलग समय सीमा के साथ साथ होगा। परीक्षा 150 विषयों में होगी, जिनमें प्रायोजनों की प्रत्येक 60 में काफी होगी।

पूरी तरह से आयोजित किया जा रहा है कि आईआईएम की योजना इस परीक्षा को भविष्य में अत्यावश्यक स्तर के साथ लैस करने की है और ऐसा योजना चर्चा करने की है। अंडरवर्ल्ड परीक्षाओं का नतीजा उसमें आयोजन किया जा रहा है कि उन्हें यह कैट का आयोजन किया जाए।

आईआईएम की योजना अच्छा सारणिक बनाने के लिए आईआईएम को एक अलग संस्था बनाने से आईआईएम प्रभावित होगा ज्यादा स्वदेशी बनाने के लिए आईआईएम के अध्यक्ष का क्रिकेट कर सकेंगे। जबकि जैसे प्रत्येक परीक्षा की संभाल सकता है।'