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April - June 2017

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NIIT-led consortium bags ₹750-cr deal in Canada

PRESS TRUST OF INDIA
New Delhi, April 10

SKILLS AND TALENT development firm NIIT on Monday said a consortium led by its Canada unit has bagged a five-year deal from Real Estate Council of Ontario (RECO).

While the company declined to comment on the contract size, sources close to the deal said it is estimated to be about ₹150 crore annually or ₹750 crore over a period of five years.

"RECO has selected NIIT Learning Solutions in partnership with Humber College Institute of Technology and Advanced Learning, Canada as the exclusive designate for its real estate education programmes to design, develop, administer and deliver a new Registration Education Programme to be launched on July 1, 2019," NIIT CEO Designate Sapnesh Lalla told PTI.

The five-year agreement is extendable for a period of three years. "Canada is a very important market for us and this deal will help strengthen our position in the region. We started operations about 2 years ago and have ramped up presence gradually. We have about 20 people in Canada and we will expand this to 45-50 in the next couple of years," he said.

RECO is a not-for-profit corporation that is delegated the authority by Ontario government to regulate real estate profession, protecting the public interest through a fair, safe and informed marketplace. It oversees the day-to-day regulation of Ontario's over 76,000 real estate registrants. One of RECO's responsibilities is to establish education requirements to become a salesperson or broker in Ontario, or to maintain registration (continuing education). Any person who wants to become a registered real estate salesperson or broker in the province must complete RECO's Registration Education Program and obtain their registration.

The current programmes were delivered by an incumbent education provider. Data from the past five years shows that about 12,000 new students begin the programme each year with an annual individual course enrolment exceeding 55,000.

The new programme will aim to maximise experiential instruction opportunities for practical, real life skill application of the theory learned, accessible to students across Ontario.

"The last five years have seen a significant growth in the number of students enrolling in these programmes, as more and more individuals join the real state profession to cater to the rapid growth in the real estate market in Ontario," Lalla said.

Financial Express, New Delhi, *April 11, 2017*

Apr 10, 2017 03:45 PM IST | Source: CNBC-TV18

Mandate is to continue the growth phase in company: CEO-Designate of NIIT

"Around this time, we are entering our growth phase and that is going to be my agenda to get NIIT started on a growth plan something similar to what we have been able to achieve in the corporate group", Sapnesh Lalla, CEO Designate of NIIT and Business Head of NIIT Corporate Learning Group told CNBC-TV18.

NIIT Learning Solutions in partnership with Humber College has been selected as an exclusive provider of real estate education programs by the Real Estate Council of Ontario. Sapnesh Lalla, CEO Designate of NIIT and Business Head of NIIT Corporate Learning Group spoke about the latest happenings in his company and sector.

Business Standard

NIIT Q4 net profit jumps 70% to Rs 30 crore on new contracts

For full year, net profit slid 3% to Rs 65.1 crore due to forex losses amounting to Rs 7.5 crore

Press Trust of India | New Delhi May 17, 2017 Last Updated at 16:08 IST

NIIT Ltd on Wednesday posted a 70 per cent jump in consolidated net profit at Rs 30.2 crore for the fourth quarter ended March, riding on the back of new contracts.

Net revenue of the training and skills development company rose 51 per cent to Rs 361.5 crore in January-March of 2016-17 compared to the year-ago period.

For the full year, net profit slid three per cent to Rs 65.1 crore due to forex losses amounting to Rs 7.5 crore. Revenue grew 18 per cent year-on-year to Rs 1,187.7 crore in 2016-17.

NIIT Ltd CEO Rahul Patwardhan said that during the year, the company invested in renewal and growth phase of its transformation strategy.

"We delivered a strong operational performance for Q4 and FY17 in spite of significant turbulence due to demonetisation and forex loss," he said.

The company's revenue from corporate learning group grew 90 per cent to Rs 257.8 crore and saw an addition of two new managed training services or MTS customers.

"We added two new MTS clients this quarter, renewed one existing contract and received letter of intent for three more global clients," NIIT CEO-designate Sapnesh Lalla said in a statement.

http://www.business-standard.com/article/companies/niit-q4-net-profit-jumps-70-to-rs-30-crore-on-new-contracts-117051700537_1.html

BusinessLine THE HINDU

NIIT Q4 net profit jumps 70% to Rs. 30 cr on new contracts

PTI

NEW DELHI, MAY 17:

NIIT Ltd today posted a 70 per cent jump in consolidated net profit at Rs. 30.2 crore for the fourth quarter ended March, riding on the back of new contracts.

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http://www.thehindubusinessline.com/info-tech/niit-q4-net-profit-jumps-70-to-rs-30-cr-on-new-contracts/article9703706.ece

NIIT launches products to meet digital skill demand

UR BUREAU

Coimbatore, June 4

NIIT perceived "the tsunami of requirement for digital skills —for both freshers and re-skilling existing professionals — as early as 2015, and created a product 'StackRoute Immersive (SRI)' to address the issue, according to NIIT Chief Executive Officer Rahul Keshav Patwardhan.

Talking about the SRI programme, he said: "It is a full-time three-month immersive programme aimed at giving working experience rather than imparting training modules in classroom environment. To complete the programme, graduates will have to develop, test and release complex new systems that are cloud- and mobile-enabled, scalable with industry-standard performance levels."

SRI is aimed at the start-up sector's full-stack programmer needs.

By design, it is meant for small groups and not to meet the huge need for reskilling existing workforce, he said.

For fresh graduates

NIIT's digiNXT series of programme was created as an outcome of StackRoute to service the needs of fresh graduates. "We have enrolled over 4,000 students to date."

"We plan to launch more courses on augmented reality and virtual reality, machine learning, robotics, IoT and cyber security, under digiNXT and expect to train 10,000 freshers under these programmes in FY 2018," Patwardhan said.

To help companies retrain their existing professionals in digital technology and those keen to equip themselves with digital skills, NIIT has launched new products such as StackRoute Online and DdigiNXT NIC.

"We are also contemplating creation of a utility model for the industry. The training industry world wide is going through this and companies here have also taken cognizance of it," he said.

Hindu Business Line, New Delhi, *June 05, 2017*

Automation is killing some jobs, but creating others, says NIIT Chairman

Stays optimistic while admitting the need to reskill 4 million-strong IT workforce

KV KURMANATH

Hyderabad, June 7

The bad news is that jobs in the IT sector are not growing in sync with the growth in population and automation is making some job profiles disappear. But the good news is that automation is happening in newer sectors, and that newer job profiles are getting created, says Rajendra S Pawar, co-founder-Chairman of NIIT.

Unfazed by the doomsday predictions on IT jobs, Pawar is optimistic. He feels there was a need to reskill the 4 million-strong IT workforce to make them digitally ready. "It is a big task to re-purpose them to make them relevant and stay longer in work life," he said.

The learning management and training firm is working with IT companies and engineering colleges to train staff and students in machine learning, artificial intelligence and big-data analytics. "We are using online platforms to reach out to employees in large num-

Rajendra S Pawar, Chairman, NIIT

bers," he said.

"Big manufacturing companies are not creating too many jobs. Jobs are a challenge. Non linearity (more than one skills) and automation are happening very fast," Pawar, a former Chairman of Nasscom, told *BusinessLine.*

"Jobs as we know it, such as conventional programming and banking, have been hit. Newer jobs being created around services have not been labelled or documented yet. Take for example, jobs in the event management vertical; they are 'engaged' in some activity," he said.

Talking on NIIT University, he said the master plan visualised a capacity of 5,000 students. "It will take some time (to reach that target). At present, we have 1,200 students on the campus in various streams," he said.

Hindu Business Line, New Delhi, *June 08, 2017*

NIIT Nxt Tech Star hunt

THE GURGAON-BASED NIIT LTD, a global leader in IT-related skills and talent development, announced the launch of its India's Nxt Tech Star programme — "a hunt for the next gen techie who can showcase real app ideas to the world".

NIIT's Nxt Tech Star programme invites youth to develop next generation apps on futuristic platforms such as social networking, movies & music, travel, sports & fitness and finance. After a 14-week mentorship with NIIT, the top five students from each category will be selected for the Grand Finale to be organised in Bengaluru in November 2017. The finalists will be drawn from 25 shortlisted projects collected by 250 NIIT centres across India, and will be showcased to an eminent jury comprising tech stalwarts and industry leaders.

"India's Nxt Tech Star programme has been designed to encourage the spirit of innovation in youth, inspiring them to become the next tech idols who can redefine the world of technology," said **Prakash Menon**, president (global retail business) of NIIT, speaking at the launch of the programme.

Registration for India's Nxt Tech Star programme is open until June 30.

Education World, National, *June 2017*

Collaborating for a digital future

A partnering approach is key and would go beyond technology. New platforms will create more opportunities than threats to jobs

GANESH NATARAJAN

When Nasscom decided to announce and conduct its first ever customer summit in the US, not in Silicon Valley but in the heart of the financial sector in New York City, many naysayers would have thought it foolhardy. At a time when the conversation largely revolves around industry slowdowns, lay-offs, visa issues and protectionism, did it make sense to launch a customer-oriented campaign in the heartland of American commerce? Not to be denied, some of us practised what we preached in the era of digital transformation, did some design thinking with our customers and decided that the Nasscom summit would be the beginning of new customer journeys. The summit titled "Collaborating for a Digital Tomorrow" took place and has been a resounding success.

Featuring close to 200 senior participants from the who's who of the corporate world and some visionary leaders on digital transformation, the summit offered six key takeaways, eloquently summarised by Nasscom President R Chandraskehar at the conclusion of the proceedings. These takeaways point the way to future industry partnerships, which can be expected to grow and flourish and enable both customers and service providers to collaborate for a better future. At the heart of it all lies the reality that digital transformation can and will have a positive impact on individuals, corporations and countries. New platforms and technologies that enable this transformation will create more opportunities than threats to jobs and corporate success. In this situation, there is no value in incremental plays and, with Fortune 500 firms falling off the charts because of their unwillingness to take a leap of faith, successful firms must have a proactive and comprehensive digital strategy that enables them to move to the next level.

The second point, which has significant implications for customer-vendor relationships in the future, is that digital transformation will need a partnering approach, with collaboration being the core value that ensures success. Since this transformation would go beyond technology to process re-engineering, culture and skills building and business model innovation, the precise role of each partner in a large collaborative framework would need to be defined based on the customer domain, the competitive landscape and the context in which the transformation is undertaken. This leads to the third point — that developing top quality digital talent is essential. This talent would need to demonstrate "learnability" as a key virtue and investments would have to be made in all geographies and also by all partners to build and deploy new thought leaders — user experience specialists, data scientists and digital storytellers — as part of the collaboration to succeed in new digital spaces.

The fourth point has ramifications for India and society as a whole: It is the impact of digital on jobs. Job losses in traditional areas will be a natural consequence of skills obsolescence and technology changes; developments in artificial intelligence (AI), robotic process automation and machine learning can clearly destroy incumbent roles at a rapid pace. However, as the industry grows, more jobs would be added and made available to those who have re-skilled and up-skilled themselves for the emerging opportunities. It is heartening to note that training majors such as GTT and NIIT have launched significant initiatives to help more than two million industry employees become digitally ready. This is one area where AI and deep learning can be put to use to help employees rather than dent their job prospects. Platforms such as Skills Alpha and VideoKen are showing the way to skilling in this area globally.

The fifth point, which cannot be emphasised enough, is the reality for all businesses that the bottom line of digital transformation has to be demonstrated business value, not a few mobile apps here and there with some customer-oriented interfaces better designed than in the past legacy systems. Customers should be spending more time on every possible touch point and channel and consuming more; employees should genuinely behave like digital natives through adequate sensitisation and skilling and be able to engage when required at the pace expected from digital companies. Clunky processes, high latency information systems and reluctant responsiveness are anachronisms in the digital era and have to go. Relationships with technology service providers have to change, too, with service-level agreements replaced by business outcome measures, and collaborative centres of excellence becoming the true hallmark of partnership excellence.

This leads to the final point that many thought leaders emphasised at the NASSCOM summit: Technology advancement and consequent changes in lifestyles and businesses will continue to happen at a breathtaking pace and it is collaborative creativity, which harnesses and integrates the ideas of all participants in the digital journey, that will finally bring success in digital transformation.

At the end of the collaboration summit, 30 of us — the Nasscom team, key customers and speakers — were invited to Nasdaq and the idea of digital collaboration was welcomed by the bourse. As the Nasscom team rang the closing bell with the US stock markets at record highs, the image of our team on the Nasdaq tower at the busy Times Square in New York seemed to proclaim to the world that the information technology sector and Nasscom are open for business and customer support and collaboration will be the driver for a new era of growth.

The author is chairman of SF World and the National KM & Business Transformation Committee of the CII

ILLUSTRATION: BINAY SINHA

Business Standard, New Delhi, *June 07, 2017*

THE HINDU

'Re-skilling IT employees is the need of the hour'

COIMBATORE, JUNE 05, 2017 00:00 IST

Emphasising the need for re-training IT employees and engineering graduates in emerging digital technologies, NIIT Chief Executive Officer Rahul Patwardhan told presspersons here on Saturday that NIIT is looking at training over 10,000 people in the coming year through DigiNXT, its retail training programme in digital skills.

He said there was a need to re-skill IT employees in digital skills and equip students with new technologies as the IT sector was going through a phase of change in business model. Revenue growth of the industry has dropped to single digit and companies are focusing on cost. Many of them are moving towards "zero bench" policy and automation.

With technologies such as robotics, IoT (internet of things), etc becoming prevalent, the existing IT employees (about 3.9 million) need to be re-skilled on these and nearly 3.2 million students in engineering colleges across the country have to be equipped with skills in digital technologies.

NIIT came out with "StackRoute Immersive" programme for employees in IT industry. This is available in 16 new technologies currently. The StackRoute course is offered through boot camps and online for IT employees. The retail course offered at its centres is DigiNXT and this is a three-month programme. In the case of colleges, it offers similar courses in the seventh semester. These courses in digital technologies have real time issues for which the trainees write programmes and get personalised assistance. "We are also looking at creating an utility model for the industry. We are working with our international customers for this," he said. Though NIIT has 250 centres, "the model has shifted to going to campuses and companies," he added.

http://www.thehindu.com/todays-paper/tp-national/tp-tamilnadu/re-skilling-it-employees-is-the-need-of-the-hour/article18720365.ece

THE TIMES OF INDIA
BUSINESS

Companies on the hunt for full stack developers

Aparna Desikan | TNN | Jun 6, 2017, 04.00 AM IST

Chennai: If you are one among the 3 million developers in India , you better stand out. As India churns out developers like factory products, it is full stack developers that are in demand.

A full-stack developer is someone who can work on both the front-end and back-end portions of an application. While a front-end developer is a programmer who codes and creates the features that are directly accessible by the end user, back-end developers build the core functional logic and operations of the application. Traditionally, companies had dedicated developer teams to handle both parts of the application.

However, with a changing technology landscape, companies are on the lookout for full stack developers or those who can efficiently handle both front and back end development.

"We look for a developer to have the ability to solve problems - any problem. This means they can learn new technologies quickly and adapt to the fast changing technology landscape. It is true that stacks like PHP and .NET were extremely popular. Now, people are moving towards full stack, multi stack and also coding on newer technologies. This has also happened much quicker than ever before," said Atishe Chordia, founder, doodleblue innovations.

Full stack developers find more relevance in end-to-end product development startups or companies with smaller teams, says Subhendu Panigrahi, co-founder, Venturesity. "Since they have knowledge and experience in front-end and back-end coding, their insights help enterprises more. Amazon hires more of full-stack developers for their teams in India," he added.

HR firms add that in the last 8 months, with companies having leaner teams, the demand for full-stack developers increased by 30%. "In today's scenario of job rationalisation, full-stack developers are in greater demand. They can bring in the synergy to the projects and a lot of time is saved when a single resource knows the front end and back end aspects to the service or the product offered," said Thammaiah BN, MD, Kelly Services. He added that they earn upto 30% more than regular developers who specialise in backend languages such as Python, Java, PHP etc or front end languages such as HTML.

The Chennai-based Hasura is launching a back-end development course that has received 5,000 pre-registrations to date. "Most startups need full stack developers early on, as they cannot afford a large engineering team. As the organization matures, roles become more specialised, but the CTO or VP engineering role is generally filled by someone with a background in backend development. It is with this in mind that we are launching a course on back-end development, to help front-end developers become full stack developers and ensure they can contribute at every stage of a startup's life cycle," said Anand Rajkumar, head of marketing, Hasura.

E-learning platforms also see more developers with expertise in Python, Java, etc are taking up courses on HTML, UI/UX and JavaScript to become full-stack developers and cash in on the opportunity.

In a bid to address this need, NIIT aunched StackRoute, an offering to produce full-stack programmers. "Today, corporates are building small highly empowered teams to build digital systems. It not is not just about learning different languages. Corporates are looking for full stack developers who are versatile, willing to learn and work independently," said Rahul Patwardhan, CEO, NIIT.

http://timesofindia.indiatimes.com/business/india-business/companies-on-the-hunt-for-full-stack-developers/articleshow/59007708.cms?from=mdr

MORUNG EXPRESS
THE POWER OF TRUTH

Naga youth can excel in IT: NIIT CEO

Morung Express News | Dimapur | May 25

CEO, NIIT, Rahul Keshav Patwardhan (left) addressing a press conference in Dimapur on May 25.

Chief Executive Officer (CEO) of NIIT Limited, Rahul Keshav Patwardhan, who was in Dimapur today, said two major issues confronting the country today are –the growing rate of GDP but decreasing job opportunities and, the role and future of the IT sector in shaping the country's economic destination.

The NIIT chief said the rapid digital transformation taking place in almost all sectors has helped the country to achieve the GDP growth rate, but on the other hand, this has not resulted in corresponding growth of employment opportunities.

Addressing a press conference on the theme 'Digital transformation & future of IT & banking' here at Hotel Europa Inn Friday evening, Rahul said Naga youths have the attributes and potential to excel in IT and other sectors. "Naga youths are good in spoken English and are extroverts. They can be trained to be good workforce around the world. The youth talent in the state is highly marketable", he remarked.

He meanwhile stated that creating economic growth without new jobs is a serious social and economic issue that India needs to address. He said at present, India is the second leading country in the IT sector with 3.9 million workers in this sector. However, the IT sector in the country has reached maturation and saturation point and that almost 35% of the 3.9 million workers are sitting on the bench as they have become outdated and are no longer productive.

He also pointed out that profit margins of companies like automobile manufacturers have gone down due to various factors including outdated IT workforce.

The CEO said for the country to build a vibrant economy and also create jobs, the need of the hour is not only to undertake massive re-skilling of outdated employees but also to recruit new talents from the youth force.

And this, he said needs a lot of effort, resources and change of focus. While re-skilling of outdated workforce is a big problem, recruitment of new workforce in the IT sector remains a huge challenge as the curriculum of most IT institutions in the country too are outdated, and it takes time to change curriculum, Rahul pointed out.

Despite these challenges, the NIIT CEO said there also vast opportunities for new jobs in the IT and related sectors. He said with the present central government giving much focus towards providing banking facilities to the vast majority of the unreached population, there is immense potential for IT professionals in the banking sector.

"Fintech as a sector is hot", Rahul commented and added transformation in education sector is needed to skill students in digitization. In this regard, Rahul said NIIT with its whole new curriculum can give the cutting edge to institutions to equip students with the latest in IT.

http://morungexpress.com/naga-youth-can-excel-niit-ceo/

Nigeria is now Africa's largest ICT market – Tickoo

The Head, Business Operations, NIIT, Sanjay Tickoo, speaks to OZIOMA UBABUKOH on the institution's scholarship programme for Nigerian students and the need for Information Technology education

IN today's competitive environment, in what way can young people excel in a career in Information Technology?

Today, Information Technology has changed the way people work and in the next 10 years, it will be about transforming the businesses across all industry sectors to embrace the digital era. Therefore, it is very important for students and young professionals to equip themselves with the skill sets aligned with the requirement of the fast-evolving IT industry. The scholarship is an integral part of NIIT's commitment to encourage meritorious students of the country to build a successful career in IT. We are now pleased to introduce new age courses to offer multiple career options to the students in today's digital economy.

With an aim to create empowered workforce for the Nigerian IT industry, NIIT offers various other programmes to the students in Nigeria. The revolutionary Mastermind series comprises of Software Engineering and Infrastructure Management courses. While the Software Engineering course will expose the student to technologies like Java 7, Visual Studio, SQL Server, ASP.net, MVC 4.5, HTML 5, JQuery, Java Script, the Infrastructure Management course will enable students to learn Windows Server, Microsoft SQL Server and Microsoft Share Point 2013.

Having said this, what is the future of Nigerian students in the IT sector?

In the contemporary world, data is the new oil as the world's biggest companies are now technology-driven. Nigeria has become Africa's largest Information and Communications Technology market with sectors like e-commerce and cloud computing witnessing huge growth.

These are indicative of the fact that students trained in futuristic IT programmes can meaningfully contribute to the growth of the country and thus carve a successful career for themselves.

Could you elaborate on NIIT scholarship for students in Nigeria?

The NIIT, a global leader in skills and talent

• Tickoo

development, established its presence in Nigeria by setting up an education centre in Lagos in 1999. Since then, we continued to affirm our determination to prepare the youths in the country for lucrative IT careers. To this end, NIIT started a scholarship programme in the country to reward meritorious students desirous of building successful careers in today's knowledge economy. This is NIIT's initiative to enhance employability of commendable students to meet the industry needs of the country.

More than 100,000 students have benefitted from the scholarship so far. Since its inception, NIIT has been involved in creation of skilled ICT workforce and has launched several initiatives in the country.

What is the focus of NIIT's scholarship programme now?

The NIIT has now extended its scholarship programme to futuristic programmes in digital transformation under the digiNxt series like digiNxt MMS, Big Data, Java Enterprises Apps with DevOps, Digital Marketing, Oracle, CISCO, Android and other programmes. These programmes have been introduced by NIIT with a profound understanding of the changing workforce requirements of the global and Nigerian ICT industry.

The programme will include elements like the digiNxt MMS. This is an intensive one to two and half years programme aimed at building talent pool of software engineers aligned with the digital transformation requirements of the industry.

The programme also has the digiNxt-Big Data. Big data is high velocity information that is used to process and enable enhanced decision-making. It consists of Hadoop, Zookeeper, Hbase, Hive, Storm Distributed Live Computing and Sqoop.

There is the digiNxt-Java Enterprise Apps with Dev Ops, and this programme will encompass the various aspects of enterprise app development while enabling a learner to implement these aspects through project-based learning methodology.

For the digiNxt-digital marketing, the programme is designed to help the students understand how to plan, implement and manage comprehensive digital marketing strategy.

Finally, what is your take on the IT sector in Nigeria?

In 2014, Nigeria became Africa's largest economy and is projected to become a global economic powerhouse in future. Increasingly, Nigeria is becoming a centre for big-tech investment and commercially oriented start-ups. Whatever the country's challenges are, investors and entrepreneurs are attracted by the prospect of scaling applications to Africa's largest population and economy.

According to industry sources, the IT industry in Nigeria is estimated to be among the fastest growing IT industry in the world. Nigeria's tech sector is becoming a representative of repatriate entrepreneurs who are reversing the African brain drain syndrome and are reshaping the continent's global linkages. All three of Africa's most recognised e-commerce start-ups – Jumia, Konga and MallforAfrica – were founded by Nigerians who earned their university degrees and initial private sector experience in the United States.

The Punch, Nigeria, *June 27, 2017*

EMBRACING BEST PRACTICES
IN THE DIGITAL ERA

Dr. Sunil Khanna, Vice President, NIIT University, writes on the steps that advanced educational institutions in India need to take to stay ahead of the race in the digital era...

The wave of Digital Transformation is sweeping across the world. Touted as one of the biggest disruptions to face and reshape humanity and described often as the Fourth Industrial revolution, Digital is expected to lead to a paradigm shift in the way we live, work, govern and conduct business.

While the trend itself requires all the ecosystems to embrace Digital, it also brings its own set of challenges. Manpower remains the biggest impediments in the path of Digital Transformation. Just as in the IT era, where it was skilled manpower that became the fuel and fodder for industry growth, in the Digital age, once again it will be rightly-skilled talent that will be the key catalyst of this critical phase.

The Digital movement will require a workforce that is equipped with advanced skills in emerging technologies such as Cloud, Big Data, Analytics, Social, Mobility, Artificial Intelligence, Machine Learning, Robotics and a host of other tech flavours of the day.

This kind of skilling would compel the higher-end schools of learning to provide training that produces 'just what the doctor ordered' for all industry sectors. To build a gargantuan pool of highly qualified Digital Transformation professionals, colleges, universities, B-Schools and other institutions too need to usher in change.

In order to do so, it is becoming critical for them to adopt Educational Best Practices that enable them to stay cutting-edge, with an eye on the horizon. Many, in fact, will have to gravitate towards new business and
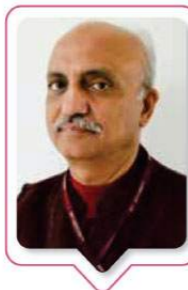
delivery models, alter their existing processes, go Digital themselves, and leverage Best Practices for teaching and learning.

According to several leading Universities, these Best Practices improve the quality of faculty and teaching. Premier institutions need to invest in faculty development, in order to stay globally competitive. Faculty has to be constantly 'upgraded', 'upskilled' and placed on the path of continuous learning to ensure that it is always abreast of what's new in education. Teachers must be encouraged to enrol for programmes in specialized areas in other institutions that possess this knowledge. Inviting experts for training faculty is also very important.

For instance, teachers have to be trained in Digital technologies so that they can in turn build students with cutting-edge Digital Transformation skills.

Besides faculty training, making learning effective also requires the implementation of a Best Practice. Typically, this involves intensive student engagement in the training process, which in turn is the result of exciting classroom and online programmes.

Ideally, Universities should create an environment that learners find engrossing and makes learning easy. Use of cutting-edge tools and methodologies that simplify complex concepts is one such way. By harnessing state-of-the-art modes of instruction (that include visual, auditory, and kinesthetic tools), institutions can capture the attention and imagination of learners. ◧

As told to Aeshwarya Tiwari

> Premier institutions need to invest in faculty development, in order to stay globally competitive. Faculty has to be constantly 'upgraded', 'upskilled' and placed on the path of continuous learning to ensure that it is always abreast of what's new in education

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"Nothing is impossible, rather, anything is possible"

Every problem that comes, you look at it as an opportunity and not as a math or a civics or a geography or biology problem
By Sreerupa Sil

A PROFESSOR is hard to locate in this university. Groups of young people experimenting with gadgets in the nooks and corners is a regular view in this widespread green campus. Early mornings rise with students trekking across the hill near the campus to enjoy the sun rise. Well, that's possible also from Astachal, a gallery on the terrace for literary meets, debates, talks and Socratic dialogues, which pretty much occur every evening during sunsets. Witnessing a view like this, often make one question- what is futuristic education, what are we thriving for, what are we trying to create as educators? The man behind this whole innovation has been always known for his new and foreseeing ideas way back from 1981, a decade before liberalization of Indian economy, when he started NIIT Technologies. NIIT University was imagined, envisioned and eventually established by Rajendra Singh Pawar, Chairman and co-founder of NIIT group and Founder in 2009. Reformative, as his ideas always are, Pawar speaks to Sreerupa Sil of BW Education on the immediate needs in the education sector, the three reforms and note for higher education leaders.

Q: What is the purpose of education?
Let me start with the story of Aman Nath who visited our university recently to take a faculty development session. A historian by education, he is the one behind re-imagining Neemrana Fort. His latest work involved building an underground hotel on the Sohna road. The building is dug around the well to keep the building's temperature under control, topped by a lawn, literally. The lesson I carried from here was 'nothing is impossible'. That is education when a young child can believe 'anything is possible'. It is also drawing, sketching, calculations and constraints with the tools you have. Education needs to unbottle the genie in a child and unshackle minds. When the world is completely uncertain, preparing a person with fine skills is harmful since you are making them outdated the day they come. Whereas if you unshackle them, make them adventurous, build a strong sense of daring and let them lose, they will cope. Certification, validation, rankings are so industrial that it boxes away the human spirit of learning. Our core principles of being research driven, innovative and entrepreneurial takes student to a new zone of learning to make them more relevant in adapting to change.

Q: The concept of relevance is quite interesting since 'relevance' is rapidly changing.
If one has a sense of daring, only then s/he will be able to cope with the unknown, unlike saying 'this is out of course'! In our life, we are seamlessly dealing with the rich, poor, birds, surrounding etc, you are getting equipped to deal with environment in a comprehensive way. Every problem that comes, you are looking at it as an opportunity and not as a math or a civics or a geography or biology problem. If we train young minds to deal with such problems and doing it in a way that serves the purpose of society. Industrial era on the other hand dealt with completely different 'relevance'. The technology for cement industry lasted 25 to 30 years. One could manage a lifetime un-

NIIT

**DigITal
Transformation**
is here

**DigITal
Transformation**
is here

NIIT

NIIT University campus, Neemrana

> **"A CHILD IS A LIBERATED LEARNER-THIS IS THE BIGGEST CHALLENGE FOR EDUCATION AT PRESENT."**

derstanding that technology in an industrial era, but it is no more relevant now. Teaching to learn therefore is the most important phenomenon.

Q: That's the most difficult skill to teach, isn't it?

Kids are learning on their own. The biggest challenge is that students are absorbing much more information from outside than from inside the system. A child is a liberated learner- this is a very big challenge for education at present. Now the student compares his teacher to a video on YouTube or Ted Talks and finds them smarter than their professors.

Q: What will then be the role of the institutions?

The potential role of the institution will change. A child can study the laws of physics sitting at home but may not be able to relate them to their daily life. A child may not get inspired since the umpteen videos and content may not intellectually challenge a young mind. Additionally peer learning does not happen online as much as it happens in the institution. That social setting makes one more responsible because of the immediate reaction as against that of 'check again' comment of a computer. Providing a setting for real interaction, dialogues, debates for collaboration, sensitivity and thoughtfulness should be provided by great institution.

Q: Faculties are not really practitioners in our system. How do you take care of that?

Our university has a norm of students working with the industry for 6 months in a year. While the students are out working for companies across the globe, they are mentored and taken care by three people- her mentor in the company, her faculty in the institution and her faculty-guide in the city. The rule in our campus is of fourteen students guided by a faculty. So when the students travel, they keep in regular touch with their on-campus faculty to discuss on the solutions for problems being thrown at them in the companies. This is a huge learning experience for the faculties. Fourteen students placed in cities across the globe communicating with one professor on several real-life problems-the learning is humongous.

Q: To make this even more effective, what kind of reforms are required?

In 1991, India opened up several sectors to foreign investment. The liberalization process unleashed enormous energy in India's corporate sector. Since then a number of Indian companies have earned a name in the global marketplace. We need similar type of policy reforms in the education sector. Players in this sector must be given the freedom to enter, operate and exit.

According to All India Survey on Higher Education (AISHE), India has 38,000 colleges making up 767 universities catering to 33 million students and 1.4 million teachers. Despite of that, India needs more universities. India needs 'curricular reforms'. In today's world, where technological knowhow is evolving with each day, educational institutions need to be granted the freedom to engage with the industry and change the curricula as and when required. Education Industry must teach what the industry needs.

And finally, the education sector also needs 'financial reforms', especially in higher education. The government should provide scholarships and loans to those who need it the most, and leave academic fee to be determined by market forces. That's what will make our educational institutions relevant and self- sustaining. The need of the hour, therefore, is to rapidly implement this three-pronged reform process- policy reforms, curricular reforms and financial reforms. BW

PRAJWAL & CHAGANTI
## B.TECH, 2ND YEAR
NIIT UNIVERSITY

Our Project Proposal is **"LOW COST MODULAR BASED WATER QUALITY MONITORING FOR AQUACULTURE AND FISHERIES"** for DST and Texas Instruments India Innovation Challenge Design contest 2016. Basically their main Theme is to think of an innovative idea which has the potential to create the next big product Enterprise.

Now a days it is very important that there are certain parameters to be maintained at an optimum level for the proper growth of the aquatic organism being grown in the ponds by farmers. This project aims at delivering a low cost semi-automatic aquaculture management system for those medium and low scale farmers who cannot afford the presently available automated water quality management systems in the market.

The target customer are mainly the medium and low scale farmers in addition to the aquaculture fisheries looking forward to low cost water quality management system Most of the automated systems currently available either come in- 1. As a device which could control the motor/ aerator/ other device control which increases the cost by a lot, thus can't be implemented by low-scale and medium scale farmers. 2. The other monitoring system comes in as one single package and thus on a long run, any fault would result in higher costs. Thus we have proposed the idea of using modules for individuals and integrating it to one base micro-controller. Which reduces the long run costs considerably.

COMPONENTS USED IN OUR PROJECT-
MSP430G2452 For pH and salinity sensors.
ADS1113 Temperature sensor.
LM741C Used in the pH sensor.
CD4052B Multiplexer to switch between the modules from the base controller.
CC3200 Base Controller for transmitting the data to the user directly and also for displaying it on a LCD.
16x2 LCD To display he data besides also being sent to the user directly through Wi-Fi.
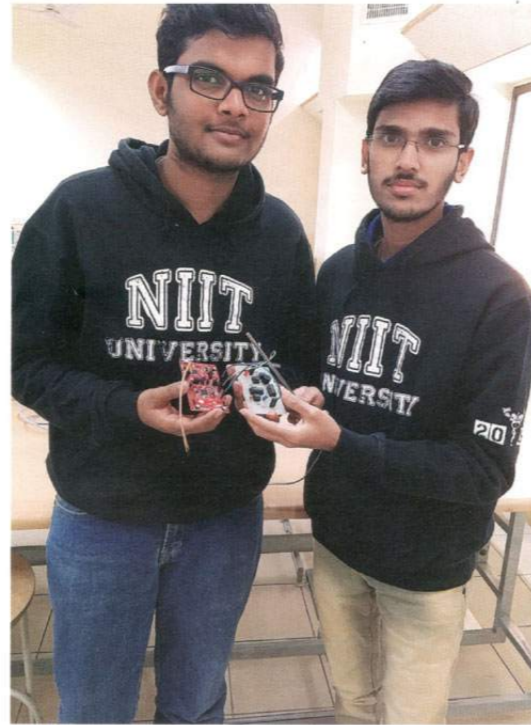
INNOVATIVENESS OF THE PROPOSED SOLUTION-
The modular design is itself a standalone in the market. The idea provides for a cheap to maintain device with low power consumption which would be essentially only the power required to power the IC's. Functionality of the system can be further increased by inducting additional modules, whose design can be included in the upgrades. Thus the user has an option to include only those modules as desired thus prompting for a cheaper product, as the user need not pay for the unwanted parts.

FEASIBILITY-
In the recent decade or so, the sector of aquaculture though has increased both horizontally and vertically, becoming almost 12 folds to what it was in 1980. This also has brought some significant issues with it like a vast un-utilized and under-utilized of land and water resources. In order to tackle the fore mentioned problem, we are determined to develop a low cost water quality monitoring system.


SREYASH TRIPATHI
B.TECH, 4TH YEAR
NIIT UNIVERSITY

It is said that 'A Stitch in time saves nine'. All over the world, people are applying this principle to personal health, by undergoing regular health check-ups, even when their health seems to be in a good condition. The reason is to catch that disease early, before its' symptoms start manifesting. If a disease is detected early, it will significantly reduce the cost of treatment; leave aside the loss of precious man hours, inconvenience and possibly permanent impairment.

The same principle is valid for any machinery. Today preventive maintenance is performed as per manufacturers schedule or in event of a malfunction, when it becomes 'symptomatic'.

This can be further explained through example of say a disease like Diabetes. Let's say upper permissible limit of sugar level is 140 and a particular individual has his/her sugar level maintained at say 115 for last decade. However, in the previous year the sugar level recorded was 117 and this year its 121, both well within the prescribed limit, where person is declared perfectly healthy. Yet if plotted graphically the rise "trend" in sugar level is observed which can be extrapolated to predict a date by when sugar levels may cross the prescribed limits. Hence preventive measures like diet control, regular exercise etc. could be adopted to avoid or at least considerably postpone the disease.

We use a similar methodology for protecting valuable machinery and industrial plants through constant online monitoring of crucial parameters, much similar to taking an 'ECG'. It involves measurement of various parameters that determine the wellbeing of the machines such as temperature, vibration, sound (noise), Pressure, flow, input values of voltage and current etc. Thereafter software can identify two important deviations from specified parameters:
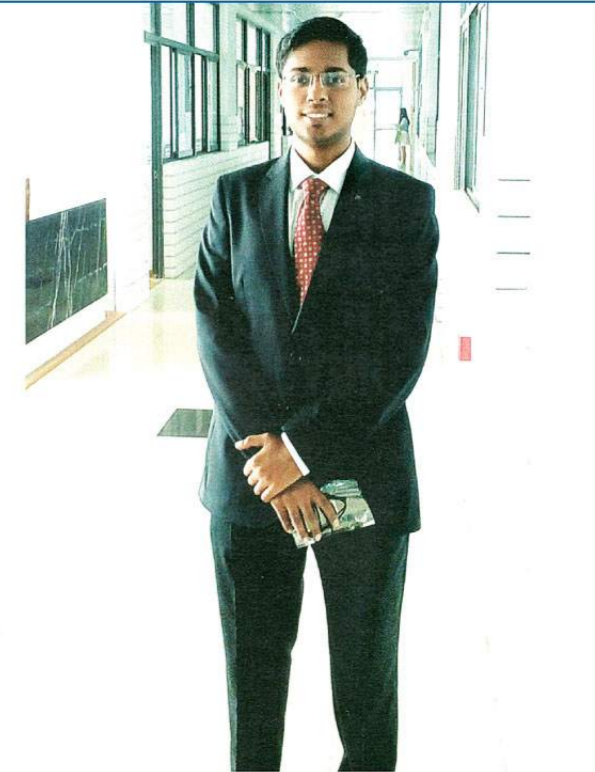
1. Parameters crossing the prescribed threshold limits (sets alerts to go for root cause analysis of the deviations)
2. Even if parameters are within the prescribed threshold limits is there any trend that can be spotted which has potential of future deviation

Any event of deviation of parameters beyond the benchmark values would suggest of a potential malfunction in one of its subsystems. This will check a major break down in the plant in its nascent stage. In this condition, immediate steps can be taken to correct the error at its early stage which would minimize the cost of repair, downtime, inefficiency, and loss of production.

Early Diagnostic and Warning Systems (EDaWS) goes to the extent of gathering various information like vibration, temperature, pressure, flow, energy consumption, power factor, process performances, historical records and the understanding of maintenance cultures in order to formulate a 'Condition Portrait' in solving predicting and preventing complex problems.

edex LIVE

NIIT University introduces Digital Transformation technologies in their curriculum to meet Industry's growing needs

NIIT University introduced Digital Transformation technologies in it's curriculum to rise-up to the challenges faced by the IT industry in the present scenario

Published: 13th June 2017

NIIT University (NU), has introduced pioneering Digital Transformation technologies in its curriculum. Towards this, NU has introduced B.Tech Computer Science and Engineering (CSE) program with emphasis on Digital Transformation technologies, to rise-up to the urgent need faced by the IT industry for Next Gen digitally skilled engineers.

The new B.Tech CSE curriculum will be powered by a project based learning methodology which enables the teacher and the group of students to mould the learning style dependent on the profile of the learners and create an environment to provide constructivism and collaborative learning. The B. Tech CSE program, will be embedded with Full Stack Programming, Big Data, Machine Learning, Natural Language Processing, Artificial Intelligence and Internet of Things (IOT) curriculum to make it more industry relevant. Industry experts will work as mentors, along with NU professors in guiding the students as per the specified methodology. While new students joining B.Tech CSE program will be able to avail the benefit of the new curriculum right from 1st semester, the ongoing batches of students will be imparted accelerated sessions, making them industry-ready, as early as six months from now.

According to a recent release by NASSCOM, the skills of the future would be Big Data Analytics, Cloud nad Cybersecurity Services, IoT, Artificial Intelligence and many other Digital Technologies. A huge demand is foreseen for roles such as mobile app development, social media, data scientists & platform engineering. According to a McKinsey report on 'Technology Jobs & the Future of Work', digital technologies could contribute $550 billion to $ 1 trillion of economic impact per year in India by the year 2025. According to another renowned survey, 69% of IT leaders expect huge surge in the job market in the next 3 to 5 years due to digital technologies.

Welcoming the initiative Mr. Raman Roy, Chairman, NASSCOM said, "Nasscom is playing a critical role in evangelising digital opportunity for the IT sector, and we will support the industry in facilitating skilling and re-skilling efforts through disruptive models. The sector needs a workforce trained in futuristic digital technologies to transform themselves from IT services providers to digital-transformation partners. Higher education institutes can play a key role here and I would like to welcome the pioneering initiative from NIIT University in creating this new-age talent pool."

India is already a home to digitally ready talent pool of 500,000 engineers, this demand is expected to increase to over a million engineers trained in digital transformation technologies by 2020. NU will play a pioneering role in creating a pool of engineers trained in Next Gen digital skills. The university will work closely with industry bodies like NASSCOM to ensure that the curriculum is aligned to the industry needs.

http://www.edexlive.com/live-now/2017/jun/13/niit-university-makes-changes-to-their-curriculum-to-meet-the-growing-needs-of-the-industry-608.html

Future is in digital tech, says NIIT CEO

PRESS TRUST OF INDIA
COIMBATORE, 3 JUNE

NIIT is in the process of creating a huge supply of freshers with required digital skills within a short period, considering the need for more such hands by the industry, a top official said today.

Since the university system was not geared to do so in the short term, NIIT is helping the industry to re-skill the existing professionals and create a huge pool of high-end, new digital skilled and full stack product engineering IP creators, NIIT Ltd CEO Rahul Patwardhan told reporters here. "They can power the emerging start-up sector, create new jobs which old-fashioned manufacturing employment models like 'Make in

India' simply cannot. We have been working with companies, institutions and the public for the last 18 months," Mr Patwardhan said.

Stating that the issue today was not skilling but creating jobs, the job-seekers should realise that the opportunity was around digital technology and artificial intelligence.

On future employment scenario, Mr Patwardhan said that there was growing unrest in the society as people get more worried and demand action on job creation and social security from the government, which is investing huge sums in skill training.

Of the expected population of 1.7 billion by 2050, 61.6 per cent was expected to be in the job market (between 15 and 59 years of age), he said.

Statesman, New Delhi, *June 04, 2017*

NIIT stresses on re-skilling of talent to stay industry-relevant

OUR BUREAU

Chennai, June 2

Information technology companies are cutting back aggressively on bench strength, even targeting zero bench, as profit margins tumble, according to Rahul Patwardhan, CEO, NIIT Ltd.

Bench strength in IT companies refers to a reserve of skilled workforce kept on standby.

Automation and use of bots are replacing repetitive manual tasks but many companies still have people who have competency in dealing with legacy systems. This is affecting fresh hiring and increasingly 'structural layoffs under the garb of performance-based layoffs," he told media persons.

While companies are trying to re-skill their employees to handle projects based on new technologies like digital, non-availability of expert trainers and training firms is affecting them, he said.

New combination

New business models are emerging using combination of automation, crowd sourcing, 'platformation' and a major shift away from custom software and process to cloud-based Software-as-a-Service and Business process-as-a-Service. The entire business model of application management service providers itself is under threat, he said.

Companies are finding it diffi-

Rahul Patwardhan, CEO

cult to find adequate supply of fresh talent with new skills as most of the engineering colleges teach older curriculum that is becoming redundant fast. Companies need to invest heavily to retain fresh graduates. "We are trying to address both these problems through our products," he said.

NIIT, a skill development company, has launched three new products — StackRoute online for mass re-skilling of existing employees, DigiNXT NIC (NIIT Insider College) to help colleges and undergraduate students get themselves skilled and Training.com and NIIT.tv retail online platform for the retail segment.

"We are ready with full fledged solutions for the IT industry, help colleges teach their students on latest technologies and help retail segment learn IT," he said.

Hindu Business Line, New Delhi, *June 03, 2017*

Tech friendly walls

Kids of Chankyapuri slum are getting more and more technology-friendly these days, thanks to the Hole in Wall project by Sony and NIIT, reports Rakesh Kumar

Chankyapuri, a posh area in the Capital, is better known for its diplomatic area as well as the residences of the rich and powerful. But very few people know that the area, which is dotted with sprawling embassies, also houses a small but significant slum in one corner. Yes, you heard it right. Just a little walk behind the Austrian Embassy will land one in the slum. Upon entering the place, overlooking the British School of Language, one can notice kids gathered in a different peer groups in a pucca house. On one side of the house are two computers, where kids queue up, waiting for their turn to play games.

"These computers were installed under the Hole in the Wall project last year," said the caretaker of the house. "Since then, kids from different age groups come here and learn about the technology while playing games."

"After school, we come here and play lots of games in a group," said a girl waiting for her turn. Another girl, a Class VIII student, echoed the same sentiments, saying, "I along with my brother visit this station every day. This helped me a lot as earlier we were unfamiliar with computers as our school doesn't have one.

But ever since these people have installed the computers here, all my friends know how to operate the computer."

The Hole in Wall project was started in 1999 by NIIT with the purpose of providing technology to the underprivileged children. Since then, NIIT, with financial help from several companies, has come up with a project to install computers in the slums of India. Last year, Sony joined the project as part of its CSR activities and helped the initiative financially as well as by providing infrastructure.

"It was started in 1999 as a research project by Dr Suborto Mitra to know how children react to technology. We make these computers available for them like a playground and let them learn things without any restrictions. We let them do whatever they want to do," said the spokesperson of NIIT.

The computers in all the stations, including the Vivekananda Centre (Chankyapuri slum) are loaded with 900 different gaming and interactive software, irrespective of any subject or class. For instance, one could find mathematical sums, geographical queries, science quizzes in both English and Hindi.

"It is like minimal education system, where there is no intervention from adults or any teachers. The software games are interactive, in which children get to learn while playing," said the spokesperson of NIIT.

The Vivekananda Centre comes under Sony, which has partnered with NIIT in 2016.

Since then Sony has established 35 learning stations in the Capital, Odisha, Hyderabad, Pune and Bangalore, and provides them televisions and laptops. Most of their study stations have two systems, depending upon

population and usage. The centre opens around 9.30 am and remains open till 5 pm. Kids can come anytime, whenever they are free from school or study.

The project organisers also follow-up. It is not that they come here once, install the system and then leave. "We come here quite often to evaluate the development. During our research, we came to know through their parents and teachers that this programme has immensely helped provide digital awareness among children and readiness towards using computer," said the spokesperson of Sony. "Other than this, we also got to know that kids improved their English, Maths and Computers."

The project was started in 1999, when the outreach of computers were very limited and rare.

Learning about it also was very tough.

However, ever since mobile technology came into being, their work seems a little easy, opine the experts.

They call it a booster to let kid get digitized. "Smartphones have made our work easy, now kids are getting more technology-friendly. They come here to play, which is very beneficial for kids," ended the spokesperson.

Statesman, New Delhi, *April 06, 2017*

Marketing and social media

The *Training.com,* a multi-modal learning platform by NIIT, and IIM Calcutta has announced the first batch of the Executive Programme in Digital and Social Media Marketing Strategy to help build a great career in the field of digital marketing. This is the first management programme with live virtual classes by IIM Calcutta which is made available on *training.com.* The six-month programme focuses on providing in-depth knowledge on digital and social media marketing and analytics which will help in planning and implementing the social media strategy to create awareness and ultimately drive sales.

The classes will be held twice a week. The programme is divided into three modules. The first module would be delivered online on training.com platform over 10 weeks. The next two modules will be conducted at IIM Calcutta campus. The two campus visits would be of one-week duration each. The programme is aimed at marketing, advertising, brand, product and sales executives. It is also relevant to entrepreneurs, e-commerce and freelance executives. Those who are interested to apply should be a graduate from recognised institute in any discipline and should have a minimum two or more years of full time work experience in media, advertising, start-ups, social or digital media, e-commerce or related domains.

For more information, log on to https://www.training.com/digital-marketing-courses-online/epdsmms.

Pioneer, New Delhi, *April 19, 2017*

A career in digital marketing? IIMC, Training.com have a new programme

Training.com—NIIT's learning platform—and IIM Calcutta have announced the first batch of the Executive Program in Digital and Social Media Marketing Strategy to help build a career in digital marketing. "This 6-month course focuses on providing in-depth knowledge on digital and social media marketing and analytics," IIM Calcutta said in a statement. The applicant must be graduate from a recognised institute in any discipline and should have a two-year, full-time experience in media, advertising, social or digital media, e-commerce, start-ups or related domains. It is divided in three modules. The first will be delivered online on Training.com over 10 weeks. The next two modules will be face-to-face classes on IIM Calcutta campus of one-week duration each. Successful candidates will be given certification from IIM Calcutta and will be awarded IIM Calcutta Alumni Status.

Financial Express
New Delhi, *April 24, 2017*

IIM Cal to launch new executive prog

HT Correspondent
» letters@hindustantimes.com

New Delhi: Training.com - a multi-modal learning platform by NIIT and IIM Calcutta has announced the first batch of the Executive Program in Digital and Social Media Marketing Strategy to help build a great career in the field of digital marketing. This is the first Management Program with live virtual classes by IIM Calcutta which is made available on training.com. The six-month program focuses on providing in-depth knowledge on digital and social media marketing and analytics which will help in planning, implementing and measuring the social media strategy to create awareness and ultimately drive sales.

Speaking on the occasion, Prakash Menon, President, Global Retail Business, NIIT Ltd., said, "The programs offered by training.com are uniquely positioned to meet the changing requirements of the industry. The program in association with IIM Calcutta has been especially designed to groom managers for various roles in digital and social media marketing thus helping create a pool of competent professionals for the industry".

The Executive Program in Digital and Social Media Marketing Strategy (EPDSMMS) has been designed to provide a solid foundation for marketers who want to specialize in the Digital and Social Media Marketing. The applicant should be a graduate from recognized institute in any discipline and should have a minimum 2 or more years of full time work experience in media, advertising, start-ups, social or digital media, e-commerce or related domains. EPDSMMS will equip professionals to take a wide sweep in digital marketing activities.

EPDSMMS focuses on Digital and Social Media for effective Digital Commerce and Advanced Digital Marketing Strategies along with an introductory module on Marketing Management. The classes will be held twice a week. The program is divided into three modules. The first module would be delivered online on training.com platform over 10 weeks. The next two modules will be conducted as face-to-face classes on IIM Calcutta campus. The two campus visits would be of one-week duration each. The course will be highly experiential and interactive with case studies and presentations by experts from academia as well as industry. Successful candidates will be given certification from IIM Calcutta and will be awarded IIM Calcutta Alumni Status.

The Program is aimed at Marketing, Advertising, Brand, Product and Sales Executives. It is also relevant to Entrepreneurs, E-commerce and Freelance executives. Any professional who is planning to implement digital and social media campaigns to create brand awareness, enhance brand recall, generate leads and enhance customer experience will benefit from this program.

Hindustan Times, New Delhi, *April 26, 2017*

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COVER STORY

NIIT UNIVERSITY
Neemrana, Haryana

Established in 2009, NIIT University (NU) is a not-for-profit university situated 100 kms from the Capital . "NU offers a new model of learning to correct the student's tunnel vision problem and allows them to educate themselves throughout their lives," says President VS Rao. Placements here are handled by the Centre for Industry Collaboration (CIC), headed by a full-time placement specialist. "Our deep understanding of the industry and strong Industry-linkages are the primary reason for the exceptional placement of 97.3 per cent last year," says Founder and Chairman, Rajendra S Pawar. It also offers joint programmes with industry experts, a flexible curriculum design with industry inputs, co-created electives with industry mentors, multidisciplinary curriculum architecture and undergraduate research and development projects.

→ **Top courses** B Tech in CSE, ECE, biotech, B Tech-M Tech dual degree integrated programme and MSc in computer science and

→ **USP** Innovation and start-up incubation; a 20-credit course for six months at industry site on a real-life problem, co-mentored by industry experts and NU faculty

→ **Entry** NU considers consistent academic performance in boards (10th and 11th) for undergraduate and additional performance in graduation for postgraduate programmes along with written and verbal communication, and technical and analytical skills

→ **Fee** ₹1.56 lakh to ₹3.46 lakh a year for B Tech courses depending upon scholarships

→ **Website** *www.niituniversity.in*

INTERVIEW WITH AN ICON

The Game Changer

NIIT Chairman Rajendra Pawar talks about India's position in the knowledge economy and creating a new model of learning

When he spoke at the inaugural Annual Lecture of NIIT University (NU) in 2009, Chancellor Dr Karan Singh said "it gives a glimpse of what future educational institutions can be". At NU, the University of the Future is not just a tagline, it is also a way of life. Founded by Chairman of NIIT Group, Rajendra Pawar, the university based in Neemrana, Rajasthan, offers undergraduate, postgraduate, doctoral and MBA programmes. But more than that it seeks to create students who will lead in what Pawar calls the "Century of the Mind". These students are trained to develop skills the new millennium needs—creativity, communication, critical thinking and collaboration. In a free-wheeling conversation at his Westend Greens home, Pawar spoke about education for a new kind of world where even as nations harden boundaries, citizens will be more deeply connected to each other. Excerpts from a conversation with *Editor (Special Projects)* KAVEREE BAMZAI:

Illustration ANUP RAY

How do we prepare children for the Century of the Mind?

We've had two centuries of the machine, in which science and technology (which is the pragmatic implementation of science), has taught humans to manage, exploit and cope with machines. In this era, the curriculum has seen social sciences and humanities give way to subjects that taught how to build and manage machines. In the 21st century, the mind is at the centre.

Where is India in this new world?

We have to marry our traditional knowledge with the benefits of technology. The Indian mind has been colonised and suppressed as many including Pavan Varma and Shashi Tharoor have written before. We were a primarily an oral society so we have lost something but it's still just under our skin. The self-confidence of the Indian mind has to be raised to the correct level, we have to take risks. Education is about looking for new problems rather than just working on solutions to known problems. With 36 years of NIIT Ltd in over 36 countries having impacted about 36 million learners, we have both skill and scale under our belt. Now we have to cater to a new generation which needs lifelong learning.

How does NIIT University fulfil that?

We have the confidence now to build the role model university and set an example through four Core Principles to become the global benchmark. One, we are **industry-linked**. Higher education is considered disconnected from the job market. In the seven batches who have graduated from NU so far, 97.3 per cent have placements. Two, we are **technology-based**, which means that there is extensive use of technology in everything at NU. Three, we are **research-based**. We have evolved the idea of research into research, discovery and entrepreneurship. Till the 1990's, Indian higher education was not challenged because of the complacency that came due to the licence raj. In a competitive market economy, higher education has to deliver exceptional research output. Four, from being a highly fractured and siloed society, we need to become **seamless**. The concept of *Vasudhaiva Kutumbakam*—the world is a family. While the industrial era demanded specialisation and siloed learning, education now demands the divergence of knowledge and a broader understanding. That's why NU is a 24X7 campus where students teach in village schools, plant trees, ensuring seamlessless with nature and society. In most programmes we have industry co-creating curriculum, whether it is in cybersecurity or data science or finance and banking.

What about the whole question of 80 per cent of our engineering graduates being unemployable?

That comment is unfair, demeaning and value laden. It is one thing to say that institutions need to improve but another to say engineering graduates are not employable. I will give you a statistic. In 1999, there were 90,000 seats in engineering education in India. In 2017, that number is 1.5 million, and 30 per cent of the capacity is empty. Clearly, there is a demand and supply imbalance because there is grave dearth of jobs for these youngsters. The problem is one of employment and not employability. In the absence of jobs even bright students are perceived as unemployable. There is another aspect to this: two thirds of students are in private higher education institutes and three fourths of institutions are in the private sector, and a large number of poor quality institutions are closing down. The poor quality government institutions however, never close down, perpetuating a steady degradation.

> "THE PROBLEM IS ONE OF EMPLOYMENT AND NOT EMPLOYABILITY. IN THE ABSENCE OF JOBS EVEN BRIGHT STUDENTS ARE PERCEIVED AS UNEMPLOYABLE."

India Today Aspire, *May 2017*

TALKING HEAD

An academic shares his views on what Indian academia must do to ride the digital wave

Prof VS Rao
President, NIIT University

As a nation that missed the industrial revolution and caught up with the world only in the IT age, India knows the importance of rightly-skilled talent for shaping the success of a country.

Today, however, that edge is under threat as technological disruptions sweep the world, causing paradigm shifts in the landscape, compelling industries to look for a new value proposition. There is a need for fresh talent that possesses skills that India's digital revolution requires. To reskill the workforce, there is also a need for India's higher education system to keep pace with technological and business trends, emerging and reshaping itself as Education 4.0. In this avatar, India's educational infrastructure has to align itself with the digital wave.

The digital era demands expertise in areas such as automation, machine learning, artificial intelligence, big data and analytics, the internet of things, robotics, cloud and more. What institutions now need to do is develop digital innovators who are equipped with problem-solving, technical, agile and DevOps skills as well as a core product engineering discipline. Their training must involve professional practice or some form of industry internships and constant interactions between academia and industry practitioners.

Education 4.0 means learning must now build the skills that fit the job roles being thrown up by the digital environment. Deep linkages and partnerships, where institutions work closely with industry and its practitioners, are the needed. These can help the Indian educational system understand how to bridge the chasm between the skills employers seek and what they produce for the market.

The Times of India, June 05, 2017

STUDENTS & THEIR BOTS BATTLE IT OUT AT INNOVACION

Students of Institute of Engineering and Management (IEM) and Techno India University pit their robots against one another on the football field at Innovacion, the fifth annual techno-management fest of IEM, in association with The Telegraph. The two-day fest that began on March 5 saw participation from 30 national and international institutions in 25 events. Ho Chi Minh City University of Science (Vietnam), Islamic University of Technology (Bangladesh) and University of Central Florida (US) participated in online competitions, while the likes of University of Engineering and Management, Heritage Institute of Technology, Techno India University and Indian Institute of Engineering Science and Technology (IIEST), Shibpur; participated in the on-campus events. Online gaming, virtual reality gaming and stock market stipulations to robotics....

Mayank Anand (extreme left), a second-year student of NIIT, steers his bot in the X-Race competition. "We had to take our robots up on slopes, slants, through water bodies and over stones. It was quite challenging," said Mayank.

Rohit Gupta (left), a first-year MTech student of Jadavpur University, and Tapabrata Mukherjee (centre), a second-year student of IEM, look on as their autonomous bot finishes the course at the Tracker event. "Our robot is completely automated. It tracks black lines on a white background and vice-versa," said Rohit.

Archan Chattopadhyay (second from left) and Wriddhi Chakraborty (third from left), third-year students of IIEST, Shibpur, work on their touch switch circuits in the Electrocuted competition.

Ajit Kumar Dubey, a fourth-year student of Calcutta Institute of Technology, tries his hand at virtual reality gaming. "This is the first time I experienced virtual reality gaming. I felt I was in a real world," said Ajit.

Pallavi Rana, a third-year student of IEM, takes a look at some shots from the photography competition.

(L-R) Sagnik Dutta and Sagnik Roy, fourth-year students of IEM, presented an autonomous quad-copter in the science exhibition. "Yes, this does fly. This is completely automated and can lift off and land on its own. All one needs to do is drop a pin on the designated location on Google Maps and the bot does the rest on its own," said Sagnik Dutta.

Text: Rushabh Shah
Pictures: B. Halder

Telegraph, Kolkata, *March 24, 2017*

THE TIMES OF INDIA
CITY

Biology students can now study computer technology

TNN | Jun 14, 2017, 01.36 PM IST

NAGPUR: There was a time when thinking of a career in technology or engineering was beyond imagination for a biology student. Studying medicine was the only option for them even if they thought of changing the education stream. This has now changed as NIIT University, Jaipur, has introduced a master's degree course for biology graduates that has been clubbed with computer technology.

Addressing a career counselling seminar for engineering aspirants, organized by NIIT University at Chitnavis Centre on Tuesday, its founder chairman Rajendra Pawar, and president and professor VS Rao, who was acting vice-chancellor of BITS, Pilani, spoke about the opportunities and scope students have for pursuing engineering. Pawar said that in future, the demand for biology and computer together will rise which is why the university has been putting extra focus on the new MTech course.

"Current biological and medical laboratories use methods that produce extremely large data sets which cannot be analyzed by hand. Therefore, modern biological and medical research and development cannot be done without bioinformatics. Also, bioinformatics plays an important role in biomedical research. Research in the area of genetic diseases and medical genomics is rapidly increasing and the future of personalized medicine depends on bioinformatics approaches," he added.

Rao said, "In education field, everything is changing so fast that you cannot even believe that half of the knowledge you learn gets redundant within a year." He said that students should keep updating their knowledge and be a lifelong learner to sustain in this technology oriented world. Pawar and Rao also took questions from students.

At the undergraduate level, NIIT University offers BTech (computer science and engineering, electronics and communication, and biotechnology), four-year MSc (computer science) and five-year Integrated BTech-MTech (computer science, electronics and communication, biotechnology, educational technology and geographic information system).

Replying to the query of a student, Pawar said that India will have more start-ups in the coming five years than America. Therefore, if students have independent ideas, then they can have a lot of scope. "Today, you just need a good idea and investors will automatically come to you. Even the manufacturing stream is emerging fast and we will be watching 3D manufacturing in near future." Public sector jobs will no longer be a craze for youngsters, but employment opportunities will definitely increase in small and private sectors, he added.

http://timesofindia.indiatimes.com/city/nagpur/biology-students-can-now-study-computer-tech/articleshow/59134659.cms

IIFL

Shaping a Future beyond NEET

Business Wire | Mumbai | June 24, 2017 11:30 IST

Prof VS Rao, President, NIIT University

It is indeed time for the country to move beyond the obvious, sought-after and thus-far, most advocated path of pursuing a career only in medicine or dental college and fast realise that the pot of gold does not glimmer only at the end of the MBBS (Bachelor of Medicine and Bachelor of Surgery) rainbow!

The numbers speak for themselves, really. A whopping 11.5 lakh aspirants registered for the National Eligibility-cum-Entrance Test (NEET), held in 2017. Last year, NEET was conducted in two phases and the total number of candidates stood at 7.5 lakh. At the same time, the number of seats in medical and dental institutes across the country stands at a mere 56,000. Given that 2017 saw a huge increase in the number of candidates appearing for NEET, securing admission in a medical or dental college will, without a doubt, only become tougher in the years ahead. What becomes of those candidates that do not make the cut? How are they to make peace with the fact that they have missed their chance at a coveted medical or dental seat?

The answer is simple, actually. It is not the end of the world and neither does it mean that their dream can never be fulfilled. Instead of being disheartened, it is time to look ahead and realise that there are a whole host of opportunities available, apart from medical and dental education. Besides a professional course in Allied Health services, pursuing specialisations like microbiology, botany and biotechnology can also open up lucrative alternatives. As a matter of fact, until very recently, it was unfathomable for a biology student to even think of a career in areas like technology and engineering. However, NIIT University (NU), has changed the game and has gone so far as to introduce an integrated Master's Programme for biology students that have been clubbed with computer science. With more and more start-ups setting base in India, the demand for knowledge in both biology and computers together is expected to rise. And this is the reason behind NU's focus on a 4-year Integrated Masters Programme in Computer Science along with the BTech Biotechnology programme.

At NU, the Biotechnology programme is curated to enable students to develop a robust theoretical knowledge base, while at the same time, keeping in mind, the business needs of the biotech sector in the country. Students are competent in biotechnology through training in the areas of Microbiology, Biological Chemistry, Analytical Techniques, Molecular Biology and Bioinformatics. The Biotechnology course in NU, is unique in that it integrates theoretical knowledge with hands-on practical experience. The four year course focuses on Molecular Genetics, Industrial Biotechnology, Plant Biotechnology, Food Biotechnology, Environmental Biotechnology, Computational Biology and Bioinformatics.

The Four Year Integrated M.Sc. programme in Computer Science at NU for the biologist is designed to provide students an overview of computing, an understanding of the concepts, principles and skills in their application and extension, and a practical experience in computing, as applied to biology. The M.Sc. Computer Science Programme at NU uses the university's four core principles: Industry-linked, Technology-based, Research-driven and Seamlessness, as its foundation to develop collaborative opportunities in biology and computer science. Keeping with our core principle of seamlessness, and being aware of the changing nature of jobs and workplaces, at NU, we recognise that school students need to be given the flexibility and support to change their career choices and the four year integrated M.Sc. Programme in Computer Science is designed to address these very needs.

What sets the NU course apart is the fact that it is constantly evolving – being consistently mapped against the rapidly changing needs of the industry. Going forward, the course will emphasise text and data mining tools within biotechnology as these tools use specific algorithms that go through scientific research to provide relevant insights. This, in turn, will increase R&D efficiency by shortening the scientific literature research process, allowing for the development of new hypothesis & discoveries and bring down research costs significantly.

Often students complete a course and find that they do not have the necessary skill sets to operate in the industry. At NU, we are committed to preparing our students with the required technical and analytical skills that enable them to have potential employment in industry, education, research and management. Alongside, we equip students with an adequate background of Biotechnology, Engineering, Humanities, Social Sciences and Management, allowing them to play an effective role as a productive member of society.

On completion of the Biotechnology programme at NU, students have several lucrative career options before them – be it a research scientist, forensic DNA analyst, clinical researcher, microbiologist, marketing manager, science writer, bioinformists, quality control officer or production in-charge in food, chemical, pharmaceutical, aquaculture & agricultural companies such as Hindustan Lever Ltd, Thapar Group, Indo-American Hybrid seeds, Biocon India Ltd, Bivcol, IDPL, India Vaccines Corporation, Hindustan Antibiotics and other Pharmaceutical companies. Additionally, the Integrated MSc programme enables students to work in IT organisations such as IBM, Microsoft, Accenture, Tata Consultative services etc. as Data Specialists, Software Development Engineers, Web Designers, Digital Marketing Specialists and SEO Specialists, among others. Those students who choose biology-related concentration areas such as Bioinformatics and Computational Biology can work in both IT and Biotechnology, Pharma, Healthcare and allied companies in cross-functional roles such as Bioinformatics Analyst and Computational Biologist. They would be part of interdisciplinary teams consisting of molecular biologists and biomedical scientists working towards collaborative innovation, targeted analytics, and the development and deployment of nextgen solutions and platforms in areas such as drug discovery, drug delivery, genome sequencing, etc.

NU is dedicated towards forging strong industry linkages as one of its core principles. This ensures that the University is connected with the best organizations and institutions, and is the primary reason for the exceptional placement of 97.3% last year. We strongly believe that skills and knowledge are the key drivers of socio-economic development in a country. Therefore, our commitment to scaling up Next Gen skills training efforts, starting at the university level, are targeted to meet the needs of future employers, so as to drive economic growth.

http://www.indiainfoline.com/article/news-business-wire-advertising/shaping-a-future-beyond-neet-117062400105_1.html

'Trump policy impact exaggerated'

ENS ECONOMIC BUREAU
@ Hyderabad

THE real impact of US President Donald Trump's protectionist policies on the Indian IT sector may not be as grave as feared, according to Rajendra S Pawar, chairman of NIIT and former chairman of Nasscom. He said the Indian IT sector is dynamic and will be able to tap the domestic market, which also has great potential.

"The apprehensions prevalent in India over the impact of Trump's policies on Indian IT sector are magnified. Trump's policies may put some stress on India, but it's mainly an 'immigration' issue and not an 'industry' issue. Also, there is a shortage of manpower in the US to work in the IT sector and it is unlikely that the Indian IT sector will face major impact in the near future," he told Express here on Saturday adding that many countries are now embracing protectionism.

Explaining how Indian IT firms will be able to tap into domestic opportunities, he pointed out that the government's Digital India initiative is gathering momentum and that the Union and state governments are extensively using IT applications in government schemes, opening a new market for IT firms.

Noting that India's unemployment problem is huge, he said the government needs to come up with policies to create new jobs and step up skill development programmes.

"Every year, two million new youngsters start search for job after graduating, while Indian IT sector employs about five million. We need to look towards innovation and newer solutions to create jobs in India," he added.

> The apprehensions prevalent in India over the impact of Trump's policies on Indian IT sector are magnified
>
> Rajendra S Pawar, chairman, NIIT

Indian Express, Chennai, *May 07, 2017*

NIIT unveils Centre of Excellence

NIIT unveiled a Centre of Excellence in Dhaka. The centre will offer an array of programmes in Digital Transformation to create a talent pool trained in futuristic technologies. It also introduces future-ready programmes under the revolutionary digiNxt series aligned to the vision of Digital Bangladesh. The series have been introduced with a profound understanding of the changing workforce requirement of the Global and Bangladesh IT industry.

Indian Express, Chennai, *May 08, 2017*

TECHIE HUNT

A hunt for the next-gen techie who can showcase real app ideas to the world has been launched by NIIT Limited recently. The registration window for the search for 'India's Nxt Tech Star' is scheduled to be open from May 16 to June 30, 2017. The winner will be awarded a cash prize of Rs 2,50,000 by the company. All the finale participants will be given a certificate of appreciation. Students are expected to build, test and release a complete demonstrable version of their app. Further details are available at *www.niitdiginxt.com*
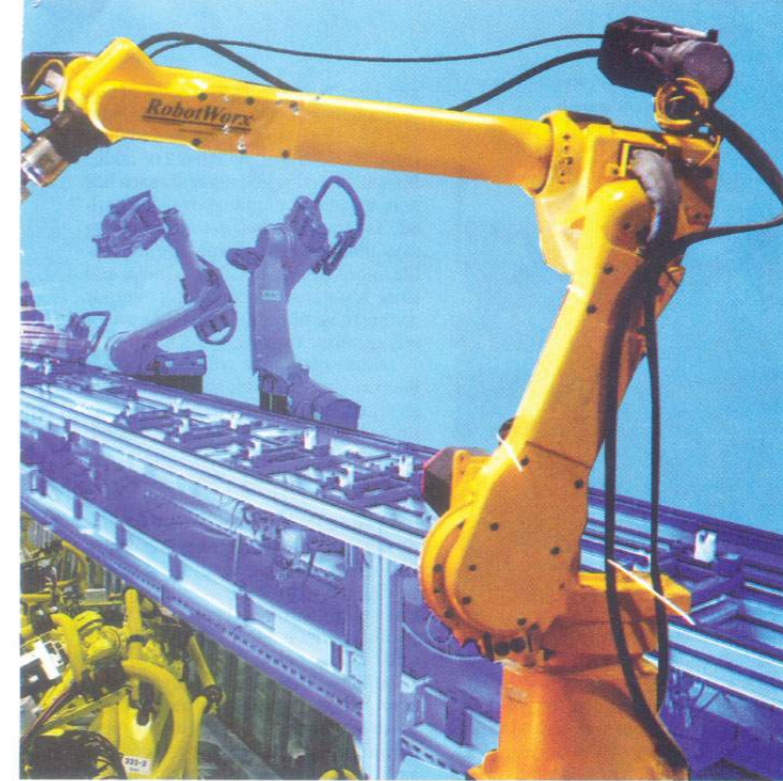
The Times of India, New Delhi, *May 15, 2017*
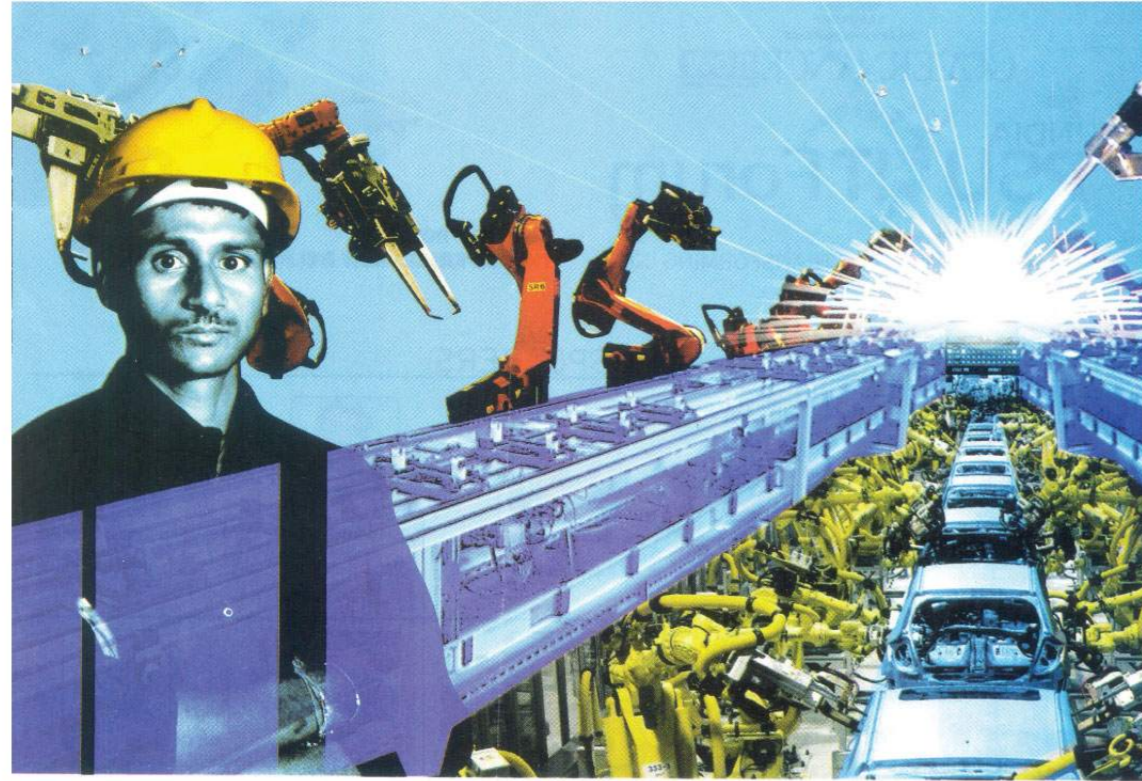
Here Come The JOB KILLERS!

Robots, automation, artificial intelligence, deep learning software and similar techno advances are supplanting humans globally and taking away jobs. What does the future spell for India?

Pratap Vikram Singh

At Raymond Limited's modern textile facility in Vapi, whenever a supervisor has to check up on the looms, he doesn't go walking around the factory floor asking the workers. He just looks at a computer screen. Looms in operation, their speed, their electricity and steam consumption, their error alarms – everything is available to him at a glance. The factory rolls out 75,000 metres of fabric daily, employing 1,100 workers. Just four years ago, a traditional weaving unit would produce no more than 18,000 metres, employing 2,600 workers. Harish Chatterjee, vice-president (manufacturing) at Raymond, attributes the four-fold gain and halving of labour cost to automation. Fabric quality improved: the Vapi unit, he says, produces better stuff than their unit in Thane.

With advantages like that, it shouldn't be surprising that manufacturing will see a sea change that will kill thousands of jobs and even end whole professions. Already, lists are being made of professions and trades likely to die out in the next five, 10 or 15 years. Immediate effects, though, are already starting to be felt in industry. In September 2016, Raymond chief executive officer (CEO) Sanjay Behl told the *Economic Times* that, of the 30,000 workers in 16 factories, 10,000 would lose jobs to robots and automation. "We have machines which do over 50 percent of loading, pressing, wrapping and bale making," says Chatterjee. Leave alone factories, canteens have been automated: there are machines making 90 chappatis in a minute, matching the produce of 25 workers.

It's the same story across geographies, across industries.

To reduce production cost, German sportswear maker Adidas had moved production to China some 20 years ago. But with wages rising over the years in Asia, especially China, the company has decided to resume manufacturing in Germany, this time using automation and robotics to cut costs. Adidas chief executive Herbert Hainer announced that the company is setting up a 'Speedfactory' in southern Germany, where shoes will be made using robots and 3D printers. Each 'Speedfactory' will employ about 160 workers, against the 1,000-odd a normal factory would require. This will also save on transport – factories can be set up where the market is. Similarly, Nike is considering, in the words of its chief financial officer, "engineering the labour out of the product". This might translate into shutting down Nike factories in Indonesia.

In his book *The Rise of the Robots*, Silicon Valley entrepreneur Martin Ford explains how automation is leading to the reshoring of factories and services in

first world countries. He cites the case of Kura, a Japanese restaurant chain: "In the chain's 262 restaurants, robots make the sushi while conveyor belts replace waiters... Kura's automation-based business model allows it to price shri [rice] plates at just 100 yen [roughly ₹58!], significantly cutting its competitors."

Industrialisation 4.0

The first industrial revolution rolled in with the invention of the steam engine. Centralisation of production ushered in the second. Computerisation of factories, workflows and services brought about the third. Now, with advances in IT, algorithm making, cloud computing, 3D printing, analytics, and the internet of things, a very high degree of efficiency is being achieved in not only manufacturing, but also engineering, transport, retail and even medicine and journalism. This new wave, which banks on self-learning or deep learning software and robotics, is being referred to as industrialisation 4.0.

Last year, the International Labour Organisation (ILO) found that nearly 60 percent jobs in five ASEAN countries (Indonesia, Philippines, Thailand, Vietnam and Cambodia) faced a high risk from automation. Its report said women, less educated workers, and unskilled or semi-skilled workers were most vulnerable. The contours of this varied from country to country. According to ILO's report, in Vietnam, "where the share of low skilled elementary occupations in total employment (around two in five) is the highest among the five ASEAN country samples, the overall probability of computerisation is also most pronounced". On the contrary, Thailand has the smallest share of low-skill employment – less than one in ten. Vulnerability to automation was also related to the structure of the economy. Workers in Thailand and Vietnam, which have diversified economies, run a 50 percent risk, whereas in Cambodia, which is less diversified, they run a 68 percent risk.

Jobs particularly in danger are in agriculture, garment making, construction. Extrapolating to India, well over 60 crore people (nearly half the population) are dependent on agriculture, and 26 crore are directly engaged in

agriculture. Yet the yield per hectare is less than half of what 25 lakh Americans produce. Economists predict that the quest for efficiency will perforce bring automation to Indian farmland. In March, Peter G Hall, vice-president and chief economist of Export Development Canada (EDC), a credit agency for exporters, told a business gathering in Delhi: "If 600 million Indians contribute only 15 percent of the GDP, it's not efficient." Automation, say economists, is inevitable if production targets are to be met.

Study after study says developed countries won't be spared: being advanced in technology, they are bound to posses, sooner rather than later, robots that will eat jobs. A Deloitte study predicts a 77 percent probability of repetitive jobs being lost and estimates that the UK's public sector alone will lose 8.5 lakh jobs by 2030. Four years ago, Carl Benedikt Frey and Michael A Osborne of Oxford found that 47 percent of US jobs are at risk. They listed 702 jobs, including telemarketing, sewage work, insurance underwriting, watch repair, clerical work, library work, and data entry. On their list are quite a few jobs one wouldn't expect: math technicians, freight agents, tax paper preparers.

Jaijit Bhattacharya, a partner at KPMG, says, "Initially, automation replaced jobs *and* created new ones. But we are heading for disaster. At the pace we are going in for automation, more jobs will be destroyed than created." He offers two examples. The first is of driverless cars, which could put millions out of jobs. The second exemplifies a paradigm shift in innovation: the differential axle, aimed at preventing skidding while automobiles negotiate a curve, at which time wheels on the inside of the curve have to move slower than those on the outside. Decades of continuous innovation went into creating better mechanisms to transmit the power of a single engine to different wheels at different rates. And, of course, the internal combustion engine too underwent hundreds of improvements. "On the other hand, look at a Tesla car," he says. "It's got four motors (one for each wheel) and a battery. That's it! The old technology was quite sophisticated; the new one
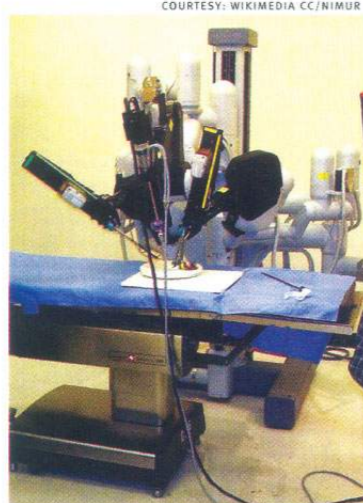
COURTESY: WIKIMEDIA CC/NIMUR
A robot that performs laparoscopic surgery

takes away all the complexities."

Besides, a new wave of advances in artificial intelligence (AI) and self-learning software is taking over targeted advertising, investment and stock-broking, diagnostics, report writing and face and voice recognition. These are bound to end several jobs where one supposed humans are absolutely required. Some experts go so far as to say that in 20 years, all present-day skills will become redundant. What, then, will be the skills of the future? No one is guessing.

Impact on Indian economy

It's not going to be sweet for India. The IT sector, responsible for a big boom in the economy, is readying to cut jobs. Already there are reports that automation may lead to a lay-off of 6,000 employees at an IT giant. One study says 3.4 million IT-sector employees stand to lose jobs.

Mohandas Pai, former director at Infosys and chairman, Manipal Global Education, says, "Jobs that require creativity, logic and discipline like an architect or software engineer will be difficult for machines to do right now, it will take time." But jobs that involve following a step-by-step routine will disappear. Banks, for instance, are doing with less staffing, thanks to ATMs

and electronic money transfers. "Look at the banking data from RBI 15 years ago. The State Bank of India had a workforce of 2.25 lakh; now, it has 2.05 lakh." But still, banking activity and reach has only expanded manifold over the period. As far as IT sector is concerned, Pai says that, though job cuts are inevitable, more work will come to India, and since it's going to take a long time for coding to be fully automated, the sector will continue to grow.

Middle-class jobs will decline, says Pai, echoing the Oxford report – and spelling out a huge crisis of adaptation for a class that has, since economic liberalisation, redefined the contours of society, especially in urban India.

Reskilling India

At the pace at which change is occurring and bound to occur, it's going to be difficult to prepare a country of the young for the future – especially when it's not clear what the jobs of the future will be. Right now, the Indian government doesn't seem to have a concerted response to industrialisation 4.0. Ramesh Abhishek, secretary, department of industrial policy and promotions, said at a conference on the digital economy, organised on April 4 in Delhi: "For smooth transition to industry 4.0 and smart manufacturing, the government is working on a policy, which addresses issues such as data security, data storage and privacy." Abhishek and NITI Ayog CEO Amitabh Kant did not respond to several interview requests from Governance Now.

Major businesses, if not industry as a whole, are however gearing up. Take the case of NIIT Ltd, a learning management and training solutions provider, founded in 1981, when IT companies were setting up and didn't have enough candidates to hire. Today, as businesses across sectors are moving to the cloud and to artificial intelligence, traditional skill sets may become obsolete. NIIT itself is going through a digital transformation to make itself and its services relevant. "We see across-the-board change in our three business segments: school and retail businesses, where we deal typically with undergrads, fresh grads or working

professionals, and companies themselves," says Udai Singh, chief strategy officer, NIIT. Each of those verticals are creating charters to see how they can reinvent themselves completely for the future. "I would say that if today 15-20 percent of our work is directly in this area, five years down the line I don't think we would be able to justify anything that is not in this area. It is a 100 percent makeover that has to happen in the next five years," Singh says. Such talk is being heard from all service companies. "Today, when we look at the startup phenomenon, what people want are deep generalists, meaning, they should understand the whole development cycle and have deep expertise in their chosen area of specialisation. Just knowing one or the other won't do," says Singh. "Demand will be for developers who can develop full-scale products, right from anticipating the need, to its analysis and design, development and its final launch. That's very different from the way industry evolved over the last 20-30 years. So we built a programme to actually create people with these product development mindsets and well versed with the latest tools and technologies."

Stuck in the past?

The Skill India programme, launched in 2015, has the ambitious aim of enhancing the skills of over 402 million Indians. But its priorities seem out of sync with the future. It identifies 24 key areas requiring skilled workers, which include auto and auto components, beauty and wellness, food processing, handlooms and handicrafts, leather and leather goods, domestic help, gems and jewellery, and tourism, hospitality and travel. But many of these sectors seem ripe for automation. As it is, Skill India seems to have led to the employment of only 5-10 percent of those trained under it.

"The government strategy is flawed," says Pai. He estimates that India has some 40 crore people available for jobs, of which 10 crore are formally employed, and 25 crore are in the rural sector (largely agriculture), which leaves only five crore doing unskilled jobs. Which is why, he says, the Skill India programme doesn't seem to be
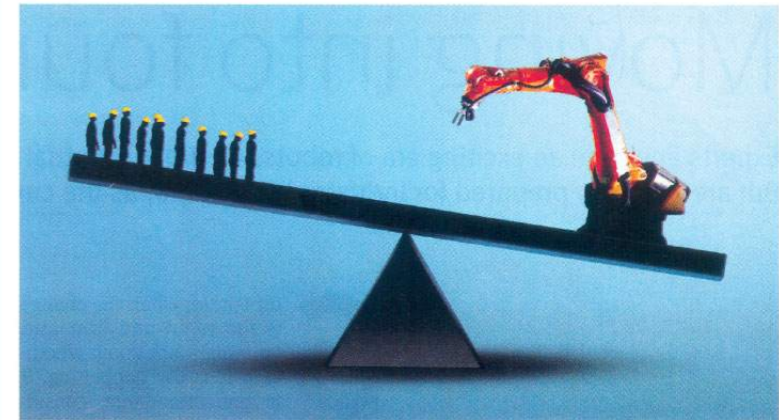
getting enough people to train, making the 400 million target meaningless. Besides, he says, many rural workers are artisans, such as weavers, and farmers are skilled in what they do. What is important, he says, is to recognise the new skills these sectors will need to make them more productive. This, he says, cannot be dictated from the centre. "Each state has to evolve its own strategy. Each state should have the kind of industry required for their workforce."

Reform India

The first major reform, and there is a consensus on this among techno-optimists and techno-pessimists, is in the school system, which doesn't impart training in analytical and imaginative

"The government policy is flawed. Each state has to evolve its own strategy; it should have the kind of workforce it needs."
Mohandas Pai
Chairman, Manipal Global Education

thinking. "K-12 school reform needs urgent attention, because the most important skills in the new world of work are reading, writing, soft skills and arithmetic – you can't teach people in six months what they should have learnt in 12 years," says Manish Sabharwal, founder, Teamlease, a human resource company. "Much of the problem is the schooling system. It doesn't teach people to think and question. It just teaches people to mug up and write."

Says Bhattacharya, of KPMG, "What are we doing? We are turning our children into fossils rather than human beings who can contribute economically. Are we teaching children how to set up a company, how to run a business? How to leverage the complex legislative system? We are not teaching any of these." He offers the example of Finland, which gives children free time to innovate.

Sabharwal also speaks of reforms that will usher in flexible labour markets, because employment is shifting from being a lifetime contract to what he calls a "taxicab relationship" – a gig economy, where a freelancer does a job, gets paid, and then takes on another. By teaching students how to learn by themselves, which is going to be the future of learning, and by teaching them to flexibly adapt to the arriving gig economy, our planners might prepare them for a world where automation will keep taking away jobs. For now, uncertainty looms. ∎

pratap@governancenow.com

IT industry seeks opportunities in China, APAC region

Sector is saddled with huge job cuts

N V Vijayakumar

BENGALURU: Realising the diminishing fortune from the North American region, Indian IT industry has decided to take proactive steps to forge alliances in countries like China, Japan and other Asia-Pacific countries to tap growing opportunities there.

Besides the pro-protectionist measure initiated by US administration, the $150-billion IT sector is facing heats from aggressive pricing pressures and technological changes taking place across the globe and growing job cuts in its home turf.

According to analysts, Indian IT companies can tap opportunities worth $250 billion in Apac region, primarily China, Japan, Korea, Indonesia, Philippines and Malaysia.

Indian IT industry association Nasscom organised a strategic meeting early this week with China Software Industry Association (CSIA) in Zhongguancun Software Park. Besides India software industry cooperation and exchange forum and the National Development and Reform Commission High-tech Industry Division

K'taka to promote 100 startups

The Karnataka government has launched 'Elevate', a scheme to fast-track the 100 most innovative startups, reports *DHNS* from Bengaluru. The startups will be eligible for guidance, consultancy, legal assistance and funding. "The startups will be given funds from one of the government's programmes including Idea2PoC Fund, Karasevam Fund, Kitven Fund, AVGC Fund, women entrepreneurs' fund, and tourism fund," State IT Priyank Kharge said, adding that Rs 2,500 crore has been allocated for distribution to these startups.

officials, CSIA Director of International Cooperation Fu Xiaoyu and India Embassy Trade and Business Counselor Banda Lu participated in the meeting.

"Rapid development of the Internet of Things, large data analysis, artificial intelligence and industrial 4.0 are areas of

cooperation. China's choice as a large data centre in Guiyang is strategic significance. Indian software and Information services companies can focus on the possibility of provincial or municipal level tie up," states CSIA release.

China is developing Guiyang as a symbol of the country's determination to transition from a manufacturing based economy to an intelligent big data economy. In January, NIIT unveiled its biggest Big Data talent training base at Guiyang.

Companies such as TCS and Infosys and IT-training have started operation in China and others like Tech Mahindra, Wipro and HCL are on their way to form units there.

Talking to *DH*, Japanese External Trade Organisation Bengaluru representative Deepak Anand said Indian IT companies are finding huge opportunity in Japan as more than 100 of them are present there.

"There is a growing opportunity in engineering, IoT, Industry 4.0 and data analysis. Indian companies can leverage on the trust developed over a period of time. Nasscom's Japan desk is helping Indian companies to expand their presence there," said Anand.
DH News Service

Deccan Herald, Bangalore, *May 27, 2017*

Vanguard

NIIT gives tech scholarship to students

ON JUNE 29, 2017 10:44 PM IN NEWS COMMENTS

NIIT, a global lead er in skills and talent development is set to commence its 18th National Scholarship in Nigeria to reward meritorious students desirous of building successful careers in today's knowledge economy. The annual scholarship test is billed for Saturday, July 15 across the country, as students are implored to visit NIIT's website for more information.

Intimating the public on the aim of the scholarship, Mr. Prakash Menon, President,Global Skills and Careers Group, NIIT Ltd, said, "NIIT has always believed in making cutting-edge professional courses available to meritorious students across the globe. This scholarship is yet another effort that recognizes and encourages students' in Nigeria to pursue a career in IT and IT related domains.

"Nigeria is on the path of sustainable growth; therefore, we are seeking to provide an opportunity to grow to students of the country." Hence, we offer scholarships for revolutionary programmes in digiNxt MMS, Big Data, Java Enterprises Apps with Dev-ops, Digital Marketing, Oracle, CISCO and more to create a talent pool armed with futuristic skill-sets that will help drive the Nigerian IT industry."

In the same vein, Mr. Sanjay Tickoo, Head of Business Operations, International Education Business Emerging Markets, NIIT Ltd said, "Over the last 18 years NIIT has created a pool of job-ready professionals, for the fast-growing IT industry in Nigeria. We are now pleased to introduce new age courses to offer multiple career options to the students in today's digital economy."

http://www.vanguardngr.com/2017/06/niit-gives-tech-scholarship-students/

NEW FOCUS

NIIT calls for reskilling staff to check IT job cuts

ENS ECONOMIC BUREAU
@ Hyderabad

AMID fears of massive layoffs in the IT sectors, reskilling the existing employees is set to gain prominence, providing an opportunity of ₹20,000 crore for the training and skilling industry, said Rahul Patwardhan, CEO of NIIT, a leading IT skilling and training company, speaking to Express here on Thursday.

While the problem of layoffs in Indian IT sector, which employs about 3.9 million people, is minimal as of now, Patwardhan stressed that there is an urgent need to reskill IT employees.

"There is no denying that IT firms in India are going through a tough phase and profits are decreasing to single digits. Obviously they will look towards decreasing costs and pressure will be on employees in the sector. The problem of layoffs was a tip of the iceberg this year as firms are grappling with the changing times, but it will be severe next year. However, reskilling is the solution to address this challenge," he added.

To reskill IT employees, NIIT has already taken up a few pilot projects with Wipro and Cognizant, It has also launched StackRoute online course — a course to train IT employees in advanced skills like Devops, machine learning, IoT, virtual reality and others. The aim of the course is to focus on niche skills, turning IT employees into business leaders.

"We are not just partnering with IT firms but also with engineering colleges. We are targeting to double the number of people to be trained in FY18," summed up the NIIT chief.

Indian Express
Bangalore, *June 02, 2017*

NIIT CEO: Future is in digital technology

COIMBATORE: NIIT is in the process of creating a huge supply of freshers with required digital skills within a short period, considering the need for more such hands by the industry, a top official said on Saturday. Since the university system was not geared to do so in the short term.

It is helping the industry to reskill the existing professionals and create a huge pool of high-end, new digital skilled and full stack product engineering IP creators, NIIT Ltd CEO Rahul Patwardhan told reporters here "They can power the emerging start-up sector, create new jobs which old-fashioned manufacturing employment models like 'Make in India' simply cannot." Patwardhan said. **PTI**

The Pioneer
New Delhi, *June 04, 2017*

Govt Plans New Electronics Manufacturing Policy

Prasad meets tech leaders for $1-tn digital economy road map

Our Bureau

New Delhi: The government will come out with a new electronics manufacturing policy better aligned to the present times and an overarching data protection and security policy, electronics and IT minister Ravi Shankar Prasad said on Friday. He was speaking after a high-level meeting with tech industry captains including Rishad Premji of Wipro, Rajan Anandan of Google, Vanitha Narayanan of IBM and Kavin Bharti Mittal of Hike.

After a brainstorming session that lasted for over two hours and was meant to work out a road map for the $1-trillion digital economy, Prasad said some participants spoke about the need for developing startup clusters – which will be like special innovation zones where startups can work together.

"We will look at developing a framework for a startup clusters policy," he said.

Prasad said there was "unanimity" about the fact that $1 trillion is an understatement and the Digital India offered big opportunities in ecommerce, artificial intelligence and internet of things. He reiterated his earlier statement that job losses concerns in the IT industry are hyped and possibly "motivated."

He said the industry has assured him that there was a potential to create millions of new jobs in the future and the number could be as high as 10.5 million.

Premji said the conversation around job losses was a bit exaggerated. On the impact of protectionism in the US, he said there has been no change in US policies yet.

NIIT chairman Rajendra Pawar said he spoke about the potential for cybersecurity and the need for skilling. "In fact, when Atal Bihari Vajpayee was the PM, we were called for a similar meeting 20 years ago and that time we spoke about touching a billion dollars and now the figure is a trillion dollars. I think it is doable, completely doable."

The government will also consider the potential of low-cost cybersecurity products and will also explore the intersection of Digital India and Startup India, especially in the areas of healthcare, agriculture and education as pointed out by the industry.

"We will look at coordinated action with the respective ministries to facilitate start-ups in these areas," said Prasad.

CP Gurnani, CEO of Tech Mahindra, said the world over, there is a scarcity of resources in new technology areas so if India takes a lead in skilling the relevant manpower, it could address the concerns around jobs.

Some concerns outlined by the industry were the need for faster dispute resolution and perhaps a more liberal policymaking.

Prasad said the government will further try to address the industry's issues by looking at a framework for setting up a dispute resolution mechanism.

The Economic Times, New Delhi, *June 17, 2017*

NIIT #EdTech. The future is here

https://twitter.com/NIITLtd

Attend LIVE webinar and counselling session by NIIT.tv and unlock the secrets behind a successful career in #engineering. Signup using https://goo.gl/DdfDTZ

ENGINEERS ARE THE NEW SUPERHEROES! LEARN HOW YOU CAN BE ONE TOO! Signup for a LIVE Webinar 5:00 PM - 6:00 PM   13th April 2017

NIIT Named to TrainingIndustry.com's Top 20 Training Outsourcing Companies List for Tenth Consecutive Year. Read more: http://www.niit.com/.../traini.../newsroom/Pages/press-rel.aspx... NIIT Corporate Learning Group

Selection to this year's Top 20 Training Outsourcing Companies list was based on the following criteria:
- Industry visibility, innovation and impact
- Capability to deliver multiple types of training services
- Strength of clients
- Geographic reach
- Company size and growth potential

NIIT Limited, a leading global skills and talent development company announced that the Real Estate Council of Ontario (RECO) has selected NIIT Learning Solutions (Canada) Limited (NIIT Canada) in partnership with Humber College Institute of Technology & Advanced Learning, Canada as the Exclusive Designate to redesign, deliver, and maintain its flagship real estate education programs for professionals in the province of Ontario for a period of 5 years. Read the complete press release here: http://www.niit.com/.../traini.../newsroom/Pages/press-rel.aspx...

NIIT Canada - Humber College consortium selected by RECO as new education provider for aspiring Ontario real estate professionals.

NIIT awarded as 'India's Most Trusted Training Brand' for the 5th consecutive year. Read the complete press release here: http://www.niit.com/.../traini.../newsroom/Pages/press-rel.aspx...

NIIT Limited, a global leader in skills and talent development, has been recognized as 'India's Most Trusted Training Brand' 2017 by Trust Research Advisory (TRA), India's foremost data insights company dedicated to understanding, simplifying and researching aspects that make the intangibles of brands more measurable.

Sanjay Tickoo, Head, International Education Business (Emerging Markets), NIIT Ltd on the launch of a Centre of Excellence in Dhaka, Bangladesh. Read the complete press release here: http://www.niit.com/.../traini.../newsroom/Pages/press-rel.aspx...

BANGLADESH IN THE WORLD OF NIIT

Sanjay Tickoo, Head, International Education Business (Emerging Markets)

Prakash Menon, President, Global Retail Business, NIIT talks about the immense job creating potential of digital transformation.

BACK TO THE FUTURE
- Edu-Tech, automation and digitisation to be more important: NIIT Prez
- India will require 1 mn trained digi professionals by 2020
- Digital transformation to create more jobs

The Corporate Communication team received this accolade for providing sustained visibility to NIIT's #DigitalTransformation initiatives in the learning domain.

Congratulations to Mr. Prateek Chatterjee and his Corporate Communications Team for being ranked amongst Reputation Today's list of 'India's Top 30 Corporate Communications Teams'.

Build a successful career in #CorporateFinance with this cutting edge program being launched in association with Training.com- a multi-modal learning platform of NIIT for Advanced Learning Programs. Know more: https://www.training.com/.../executive-program-in-applied-fin...

IIM Calcutta in association with Training.com launches the 12th batch of Executive Program in Applied Finance.
Course objectives
- Acquire a strong foundation in core and special modules in Corporate Finance and Economics
- Master the concepts of Business Accounting and Analysis
- Build knowledge on Business Valuation, Financial Derivatives, Investment Management, Alternative Investment Strategies, Financial Risk Management and Banking Management
- Learn from corporate examples using case studies to supplement theoretical inputs

Training.com wins an award at the 6th Indian Retail & e-Retail Award. Know more: https://www.training.com/

Congratulations, Training.com on winning eEducation Services of the Year- Online educational services award 2017 by Franchise India, India's leading Franchising publication.

Mr. Sapnesh Lalla, CEO Designate, NIIT Limited, on #NIITQ4 results. Read more on: http://www.niit.com/india/training/newsroom/Pages/press-rel.aspx?ID=624

Mr. Sapnesh Lalla, CEO Designate, NIIT Limited

"NIIT's Corporate Learning Group delivered strong revenue growth of 90% YoY during Q4 on the back of significantly higher strategic sourcing revenue. The overall revenue visibility at Q4 stood at USD 248.7 Mn up 24% YoY. We added 2 new MTS clients this quarter, renewed 1 existing contract; and received letters of intent for 3 more global clients, making Q4 a landmark quarter"

NIIT Limited, a global leader in skills and talent development, today reported its results for the fourth quarter ending March 31, 2017. Read more: http://www.niit.com/.../traini.../newsroom/Pages/press-rel.aspx... #NIITQ4

Glimpse of NIIT's participation in the Guiyang International #BigDataExpo 2017 in China on 26th May.

+2

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Goods and Services Tax Training by NIIT - a NACEN Approved Training Partner
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GST.TRAINING.COM

NIIT announces 18th National Scholarship in Nigeria. Annual Scholarship Test to be held on Saturday 15th July 2017, across the country. Read more: http://www.niit.com/.../traini.../newsroom/Pages/press-rel.aspx...

NIIT, a global leader in skills and talent development today announced the **18th National Scholarship in Nigeria**, to reward meritorious students desirous of building successful careers in today's knowledge economy.

Mr.Vijay K Thadani on 'De-Mystifying the Strategies and identifying the System Drivers' at the CII India Conference held in Mumbai on 8th June 2017.

Mr. Vijay K Thadani
Vice Chairman & Managing Director, NIIT Ltd & Co-founder of NIIT University
at the CII Conference on 'Future of Jobs in India: Enterprises and Livelihoods'

The new learning ecosystem must impart skills unique to humans - creativity, curiosity, imagination, persuasion, enterprising

"The bad news is that jobs in the #IT sector are not growing in sync with the growth in population and automation is making some job profiles disappear. But the good news is that automation is happening in newer sectors, and that newer job profiles are getting created," - Rajendra S Pawar, Co-founder & Chairman of NIIT. Read more: http://www.thehindubusinessline.com/.../au.../article9722250.ece

Automation is killing some jobs, but creating others, says NIIT Chairman
Stays optimistic while admitting the need to reskill4 million-strong IT workforce
THEHINDUBUSINESSLINE.COM

Mr. Arjun Shankar talks about 'How to create employable talent?' at the BW Businessworld HR Conclave today. #BWHRConclave

Mr Arjun Shankar (Chief Corporate Management Services NIIT Limited) at the HR Conclave: Future of Workplace, Talent & Jobs by BW BUSINESSWORLD

"Innovative partnerships by the industry are the need of the hour. It is not that industry has surfeit of appropriate entry level skills."

Read more here: https://www.niituniversity.in/press-release
#DigitalTransformation #IOT #ArtificialIntelligence #NASSCOM #BigData #MachineLearning #BTech #ComputerScienceEngineering

NIIT University addresses IT industry's urgent need for Next Gen digitally skilled engineers
Launches pioneering Digital Transformation Technologies in B.Tech CSE Programme