EDUCATION
TECH SUMMIT

Post Event Report

Teach, Learn and Grow with IT

21st - 22nd June 2013 at Claridges Hotel, Faridabad

DynamicCIO held India's first Forum for Innovative Education IT leaders on 21st and 22nd June 2013 at The Claridges, Surajkund, Delhi, NCR. The two day program witnessed around 40 participants that included senior technology decision makers, influencers and academicians. With the theme of "Teach, Learn and Grow with IT" the summit presented a great opportunity for IT executives in the education sector to learn and discuss the latest technology topics and trends with their peers and the leading IT industry players.

Daya Prakash, Director, Grey Head Media delivered the welcome keynote as he spoke about the untapped opportunities existing in the education sector. He was of the opinion that education is a sunrise sector in the country that is also the home of huge talent pool. He also raised some key challenges in terms of new models of technology-enabled delivery mechanisms that can make useful contribution to learning. "In order to create an enviable technology-led infrastructure for both students and teachers to be successful, technology needs to be at the forefront of our growing education infrastructure," he said.

Day 1 - 21st June, 2013

Session 1

Summit Keynotes: IT in Education: New Frontiers in Innovation

Speaker: Shri R. P. Sisodia, Joint secretary, Department of Higher Education, Ministry of Human Resource Development, Government of India.

Shri Sisodia in his keynote highlighted how the concept of classroom is undergoing a drastic change. "Information technology is changing the process of learning and overall education," he said. He was of the view that there are a

plethora of opportunities to capitalize on some of the IT trends and technologies to benefit teachers and students. He urged corporate, who fall under the bracket of mandatory CSR to channelize their investment towards education initiatives.

Speaker: Dhiraj Mathur, Executive Director and Leader Education Pricewaterhouse Coopers. He leads the National Education Practice at PwC and works across the Advisory, Tax and Regulatory practices in a client advisory role.

Dhiraj Mathur said that the IT revolution has entered the education system in the country. The transition from rote learning to tech-based education is clearly evident. He felt that the education sector is over regulated due to which there is a creation of entry barriers. "The government needs to intervene and create an unambiguous and simple regulatory regime. They need to expand IT infrastructure and supporting infra like power etc. requirements in tier 3 and tier 4 cities," he said.

Session 2

Industry Session: Role of Technology in Education

Speaker: Amitabh Jhingan is Partner with Ernst & Young's Transaction Advisory Practice in India and is the National Leader for the firm on matters related to the Education sector. He has over 15 years of professional experience in industry as well as professional services.

Amitabh Jhingan in his presentation said that the education sector in India is a large market worth USD 97 billion, of which the spending by consumers is USD 50 billion.

"The demand for education is expected to grow significantly on the back of four fundamental drivers," he said. These include favourable demographics in terms of younger population, large headroom for growth in terms of gross enrolment ratio; high spend on education and strong government support.

While general courses account for majority of enrolment, professional courses are growing much faster and are dominated by the private sector, he said. He also touched upon the Outlook for the Indian education sector in 2020. He was of the view that technology penetration, coupled with demand for employability is driving the growth of online distance education market.

Session 3

Technology Session 1: Enabling the Collaborative Education

Speaker: Kshitij Mishra, Manager, Systems Engineering, Avaya has 20 years of experience in solution design and engineering in the space of IT and telecommunications, and has led technology solution sales teams for various organizations.

Kshitij Mishra spoke on adopting new ways for institutions to communicate using Voice, Video, Content, Contact Centre, Social Media etc. "Educators must apply enterprise grade features for world class student experience.

He spoke about how solutions from Avaya can help institutions expand online and distance-learning opportunities and enhance the productivity of teachers, faculty and staff. The solutions would also enable exceptional customer service to address the growing demands from students, faculty, and parents and they provide capabilities to enhance campus safety.

"The conventional ways in which students learn is changing. Many educational institutions are now preparing students for the new design economy in which technology plays a critical role and is embedded into the learning process," he said.

Session 4

Expert Session: Need for Technology-enabled Education for Growth and Innovation

Speaker: Enayet Kabir, Associate Vice President and Head Education Practice, Technopak Advisors. He has over 13 years of experience in strategy, operations, and start-up incubation in vocational training, executive, higher education and government services (Defense).

Enayet Kabir was of the opinion that there is a huge and all pervasive deficits in education across all segments with very limited resources available.

In the next five years, relentless waves of technology will strike education," he said. Some of these technologies according to him include cloud computing, MOOCs, mobile learning, tablet computing, learning analytics, Open Content,3 D Printing, Virtual and Remote Labs and Games and Gamification.

He said that tablets allow users to seamlessly use apps and content of their choosing, making itself a portable personalized learning environment

Commenting on the Indian scenario he opined that there was little or incremental innovation n the country and there is an immediate need to turn challenges into opportunities. "Indian customers are loath to pay for information/data; but they are willing to pay for services," he said.

Session 5

Technology Session 2: Protect Information for Disaster Recovery ad Business Continuity

Speaker: Manjeet Singh, Regional Manager-North, Dell Software and Yashvinder Kumar, Systems Consultant, Data Protection, Dell Software

Manjeet Singh started the briefing with an overview of complexities in the IT industry and trends like cloud computing, explosion of data, consumerization of IT etc. along with Dell's software presence and solutions.

He was followed with Yashvinder Kumar who spoke about Data Protection. "Backup Strategy for any organization is all about defining the recovery point objective (RPO) and recovery time objective (RTP)," he said. Protecting data and applications means more than just running backups. It is about utilizing the right level of protection for business assets throughout their lifecycle – in terms of preservation, recoverability and availability. This starts by classifying data based on business needs. He recommended using a hierarchy of Static, Business-Vital and Mission-Critical.

He also touched upon how organizations can protect the full spectrum of their data across physical, virtual, and cloud; shrink backup windows to just minutes; restore in as little as seconds every time and reduce downtime costs and meet their SLAs by restoring on time.

Session 6

Expert Session: Role of Technology in 21st Century Education

Speaker: Varadarajan Sridharan is an Independent Researcher in Education Technology who has been pursuing research in Ed Tech with focus on mLearning Frameworks / Capability Maturity Model, Learning Registry, MOOC, Social or Collaborative Learning and self-learning.

Varadarajan Sridharan spoke on how the education system has undergone several changes over the years and how the Internet, mobile, tablets and MOOCs are shaping today's education systems.

"India spent less than 4 percent of its GDP on education, while the education spending globally is USD 4.4 trillion in 2012," he shared. He also gave some examples of how new technologies are helping achieve positive outcomes in various fields. Some of them included BMW's use of Augmented Reality glasses to train mechanics, how 3D printed windpipe saved a baby's life and how children can launch low cost satellites using Raspberry Pi.

He also spoke on how companies like Apple, Google and Microsoft are heavily investing in educational products / services. He raised some key questions like having Digital Content Repository from Ed Tech vendors and Centralized Approval of Ed Tech products/services.

Session 7

Technology Session 3: Cyber Security

Speaker: Kapil Awasthi, Security Engineer, Checkpoint has over 12 years of experience in Network security field which involves Implementation, Consulting, Designing Enterprise Security framework, Data center Migration and Implementation, Managed Security Services.

Kapil Awasthi spoke about security threats and cyber attacks in the form of malicious software (malware), phishing, infrastructure attacks, social network targeting, and peer-to-peer (P2P) information leakage. He said that when a student's computer on a college network is compromised, it's not just the student who pays the price—legally, so does the institution. "As more education facilities realize the cost-efficiencies and flexibility associated with the Internet, it is essential to protect virtual classroom sites with comprehensive security," he said.

He also spoke about some offerings that Checkpoint offers that can help education institutes prevent security attacks. He said that institutions require a 24/7, 365 information security service that is always on the prowl for any sort of cyber threat that utilizes a university's infrastructure and vast network of partners. "It's what's needed to navigate the 21st century's college cyber security tightrope," he said.

Session 8

Panel Discussion: Technology Integration in Education: Opportunities and Challenges

Panelists:

-Sridhar Rajagopalan, MD Education Initiatives

-Ms. Shabnam Agarwal, Edtech Consultant and Advisor at Perspectful Advisory

-Dr. Shradha Kanwar, Area Director, Educational Technology, NIIT University

-Vasudha Neel Mani, Principal, Vidya Sanskar International School

Moderator: Daya Prakash, Director, Grey Head Media

The panel expressed their views on their vision for 21st century learning and the role of technology. The panelists agreed that technology has brought about a huge transformation in the education system.

"Technology needs to be implemented with a clear focus on providing benefits to the learner. Only hype will not generate results. The use of technology should be measurable in terms of outcome," said Sridhar Rajagopalan.

The panel was of the view that there needs to be proper interface between technology and teachers.

"This is a great time to be student. Education institutions have to rethink almost everything they do in today's highly-connected, competitive digital age to ensure they maintain their pivotal role of advancing the opportunities of individuals by providing a productive, efficient learning environment," said Dr. Shradha Kanwar.

Though technology may be the magic cure India needs for the ills that plague its school education, setting up a technology-driven system is not an easy task. "Not only students but teachers, too need to fine-tune their technological skills," said Vasudha Neel Mani.

"I believe that technology is not the end-all, be-all solution but an incredible tool we can capitalize upon to truly begin to level the playing field," said Shabnam Agarwal.

The panel believed that the Internet has created a great possibility where the performance of a teacher now need not be restricted to a small classroom. Now the performance of a teacher can be opened up for the world to see through use of solutions like video conferencing and use of social channels like YouTube etc.

Session 9

Technology Session 4: Role of Video, Virtual and Collaboration Technologies in Education

Speaker: Hitesh Sharma, Lead, Education Consulting, HP Technology Services. In his current role at HP India, he helps Government, Enterprise and Education customers to transition and scale their learning and education activities through the effective use of learning technologies and change management practices.

Hitesh Sharma spoke about some of the mega trends in the education industry. He said that India is expected to spend USD 12.19 billion in 2013-14. According to him the major challenge in this segment was quality and connecting education to employment. "There is a strong demand for education with around 230 million students getting enrolled every year. The cost of education has increased 3-6 times over the last decade," he said.

He spoke about HP's offerings in the education space like its VideoBook that loads relevant videos from multiple sources including the Internet, based on keywords in the text of the book or document that a user is reading online. He also spoke about HP's MyRoom, an online meeting solution that offers audio-video IM chat, web-conferencing and cloud storage in one package.

Day 2 - 22nd June, 2013

Session 1

Expert Session: Need for Technology-enabled Education for Growth and Innovation

Prof. MM Pant, Former Pro VC IGNOU

Speaker: Prof. MM Pant, has been the Pro-Vice Chancellor at Indira Gandhi National Open University (IGNOU) and on the faculty at IIT – Kanpur (the premier Engineering institution in India), MLNR Engineering College and on the Faculty & Visiting Professor at University of Western Ontario-Canada. He has been a Visiting Scientist to research centers in Italy, England, Germany & Sweden and has delivered international lectures with about 80 published papers to his credit.

Engaging the audience towards understanding the power of the web in delivery of next generation education, Prof Pant said that

education landscape is fast changing from electronic books, mobile applications, to massively open online courses to tablet computing. "Today there is an urgent need for us to do extra ordinary things. We have ordinary students and ordinary teachers but we want to do extraordinary things. This is where technology can help," he explained.

"If we look at the future of education, then it will not be the usual classroom but the internet where most of the action will happen. Web is surely the place where people will be learning in five years from now. Concepts like games based learning will drive learning analytics and take education forward. We must brace ourselves to accept this new education culture," he explained.

Emphasising on the importance of India, he said that amidst this paradigm shift in the education sector, India holds tremendous potential to play a crucial role in the development of educational applications.

"We are almost uniquely placed to develop the new education model for the whole world where educational applications play an important role. This is a great opportunity for individuals, organisations, both Indian and foreign. We need to create an Eco-system to make this happen," he explained.

Speaking about Massive Open Online Courses or MOOCs as a new paradigm in the education system, Prof Pant said that there are a large number of advantages that are associated with MOOCs today. "MOOCs are large scale. Traditional classes have a small ratio of students to teacher, but MOOCs are designed to have a "massive" number of students. Other features are typically open licensing of content, open structure and learning goals, community-centeredness, etc.," he added.

Session 2

Technology Session: Computer Based Testing Practices by Rajan Wadhwa, General Manager – Business Development, Aptech

Speaking about computer based testing or CBT Rajan Wadhwa said that the concept of CBT is picking up fast in India and is primarily driven by security, scalability and an overall ease of data management.

"Impersonation attempt is a major problem in traditional mode of examination while CBT technology delivers authentication through Biometric, Photograph capturing and video surveillance. This ensures that testing is done in a fool-proof manner. Additionally, CBT also provides a great level of scalability with the help of cloud based approach, use of server farms and scaling up testing outlets," he explained.

Talking about Aptech's capabilities to deliver secure CBT environment for the education segment, he said that a lot of attention is being given to ensure that CBT runs in a completely secure environment.

"To deliver unique security mechanism within CBT, we have three tiered approach. As part of first tier we have system security where we provide secure browser experience, data transmission through SSL VPN etc. as part of second tier we have process security in the form of unique ID and password access, test admin certification and testing and as part of the third tier, we have content security where we have peer level confidentiality, encryption of data and data transmission via SSL VPN," he added.

Session 3

Panel Discussion: Enhancing the Learning Experience: Cutting Edge Technology for Creating an Edge

1. J.S. Sodhi, CIO, Amity University

2. K Mohan, Director - ITKM, SRM University

3. Sathish Kamath M, Assistant Director(IT), Manipal University

Moderating this panel discussion Mr Ashwani Mishra, Executive Editor, DynamicCIO probed the panel about their views on technology adoption in the educational institutes and also asked them to share their experiences and challenges being faced in this direction.

Sharing his experience, JS Sodhi, CIO, Amity University said that at Amity there was a need to connect the big experiences of large metros to the students at small locations of the university. "We have our presence in large cities as well as

small locations. So we thought of connecting the students together so that a lot of good and valuable experiences can be shared. We created infrastructure that can support our requirement to connect various locations. We created a data center from where such kind of video based traffic can be routed to its destination. We created in-house video conferencing solution where lecture can be delivered from one location to another," he explained.

Speaking on the knowledge infrastructure, K Mohan, Director - ITKM, SRM University said that it is very important for educational institutes to look at creation and nourishment of knowledge based infrastructure for their student communities.

"Knowledge infrastructure is not only about learning but also involves practical learning, so infrastructure such as mechanical labs, simulation labs etc become very important to have that knowledge focused culture. We have invested close to Rs 50 crore in creation of this knowledge infrastructure at SRM. We also believe in the power of 3C which is high quality content, connectivity to deliver that content and customer care for the student community.

Speaking about the role of technology in education, Sathish Kamath M, Assistant Director (IT), Manipal University said that technology has always been a very important component for the Manipal University and is a big differentiator.

"Technology is very close to our hearts. We have a complete technology enabled campus, with WiFi connectivity and learning management system. We also have MeritTrac online assessment and examination system in place which is doing a wonderful job for us. In addition to this, we also have the Manipal University technology business incubator where students can come forward with their technology focused innovative ideas and we

help them in taking the ideas forward," he added.

Session 4

Expert Session: Open Online Courses and Mobile Learning Prof. Kannan Moudgalya, Member, Standing Committee National Mission on Education through ICT (NMEICT)

Speaker: Professor Kannan Moudgalya is a Professor at IIT Bombay. He played a key role in making of the Akash Tablet, which is the most ambitious project of MHRD, Government of India. Prof Kannan is also a Member of the Standing Committee National Mission on Education through ICT.

Talking about the critical need for technology in order to take education in India to the next level he said that the country needs technology enabled education to become a developed nation.

"Today we have a situation where we have all the ingredients to make this happen in India. At the device level we have Akash which is surely going to revolutionise the way education is delivered. We need to utilise the vast resources of open source software in order to create the perfect learning system in the country," he explained.

He informed the audience that Akash 2 is coming soon and it will be coming with better quality (touch screen, gravity sensor, etc.). it will have 512MB RAM, Android 4.0, which is more stable! And most importantly an affordable price tag of Rs 2263.

"The primary objective of Aakash Project is to bring down the cost of tablets and also to make tablets excellent computing devices. Today we have a lot of low cost tablets being made available in the market at below Rs 5000 mark. This is surely the Akash effect," he added.

Talking about the use of open source software, he said that in today's scenario, using

commercial software is an expensive proposition, there are heavy penalties if unauthorised software is used by industry. In this situation, widespread usage of open source can ensure availability of cost-effective computing.

"Indian SME's need to exploit open source software as commercial software is expensive and makes small companies uncompetitive, because they have to invest heavy amounts in software only. In such scenario, open source software should be encouraged and used on mass scale,"

Speaking about the benefits of spoken tutorial initiative, he said that spoken tutorial has great potential for India. "Spoken tutorial is a great education enabling tool which can change the way education is delivered and received by a large set of audience. This holds tremendous potential for a big and diversified country like India. Spoken tutorial is an Audio-video tutorial of about ten minute length. It is created for self-learning. This can enable creation of self-learning workshops which can be conducted by non-experts," he informed.

Informing the gathering about the advantages of self-learning atmosphere with Aakash, he said that this combination of Aakash, Spoken Tutorial and Open Source Software has a unique synergy to offer to the education segment. "This has all the potential to make us a developed country and compete on global turf," he concluded.

Session 5

Expert Session: Social Media in Education Ms. Kumuda Gururao, Advisor, Author, Consultant, Instructional Designer, Speaker in eLearning, Edu. Technology and Social Media Marketing.

Speaker: Ms. Kumuda is a Ph.D. (Education), Masters Dip. in Business Administration (IT & Software Marketing) with over 25 years of combined experience in Education & ELearning Industries including CLO (Chief Learning Officer) at Alpha Group of Institutions. She is working as eLearning and Social Media Marketing Consultant / Advisor to Education & Corporate Sectors.

Talking about social media in education she said that education segment must take full advantage of various social media opportunities that are present in today's connected world.

"Internet has given unique ways to express oneself and Social media is fast emerging as a wonderful tool to connect with the rest of the world for social interaction, using highly accessible and scalable publishing techniques. Social media tools in education such as Ning, Elgg, Diigo (e.g. web slides on eLearing), Academia.edu, Quora, Slideshare, Storify, authorStream are setting the right platform for social interactions that can benefit the education system," she explained.

The universe of social media holds unique potential as it encourages participation from different corners of the world and takes communication to the next level.

"It is very important for us to understand the usage of social media in classroom where we can encourage group discussion-use classname / project name hashtag for discussion on Twitter and other social media avenues. Social Application such as virtual meetings can be of great help as well. Social media can also help in posting helpful information where there is a need," she explained.