

**INDUSTRY – ACADEMIC
PARTNERSHIP
SKILL DEVELOPMENT IN
IT SECTOR
MECHANISM FOR CONTINUOUS
ENGAGEMENT**

For FICCI Higher Education Summit 2007

- ARUNA KATARA



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Education Scenario Today

- Significant pressure on higher education.
- Government wants growth from current 10% to 15% by the end of XI 5year plan – 2011.
- Indian academic institutions contribute
 - 3,50,000 engineers
 - 2.5 million varsity graduates
 - 5 million remain unemployed (FICCI report Industry Academic conference)
- Need for 10,000 PhD's
 - Twice as much MTech's to meet huge Research & Development needs.
 - Barely 900 eng PhD's in a year.
- Dr. A.P.J Abdul Kalam -
 - Indian should aspire for \$200 billion revenue by IT industry by 2008 – 2010 and grab a lion's share to today's \$300 billion global share



Government, Industry & Academic Partnership for Skill Development

- Industry Academic partnership cannot sustain in isolation – should include government.
- Rules, regulation conducive for privatization in education.
- Redefine role of existing regulatory bodies with changing times and scenarios.
- Recognition by Government for key institutions making quality contributions.
- Atmosphere created to reverse “Brain Drain”.



Need to have Industry and Academic Collaboration

- **Effective use of resources and talent available for internship, development, testing and research.**
- **Encourage Entrepreneurial Sprit.**
- **Exchange of Information.**
- **Narrow the gap between Theory and Practice.**
- **Generating ideas into products / processes**
- **Incubating products / processes into ventures**
- **Nurturing ventures into enterprises**
- **Facilitating enterprises into successful business**



Need to have Industry and Academic Collaboration

- To provide the technology skill-set that is most valued by today's leading businesses.
- Establishing strong partnerships with key academic institutions;
 - Will help infuse software integration and real-time business into education.
- These collaborative academic programs aims at tackling the shortage of skilled IT graduates in the industry by including technology in the undergraduate curriculum.



Need to have Industry and Academic Collaboration

- It also provides students with research opportunities and project guidance so as to help create new academic and professional opportunities.
- The Industry partners provide the software to ensure that the necessary skills, training and knowledge are transferred to succeed in the rapidly changing global information technology market.
- To prepare students to compete and keep pace with changes in the unfolding information technology (IT) workplace.
- This initiative seeks to help spread the adoption of technology, tool and software around the world.



International Industry and Academic Collaboration

- IBM Academic Initiative to Help Schools Prepare Students with Open IT Skills for a More Competitive Workforce “In Demand Skills for an On Demand World” - ARMONK, N.Y
- Infosys Technologies Limited granted Rs 1 crore to the Indian Institute of Information Technology, Bangalore (IIT-B) for various academic activities such as
 - Education and Research
 - A think tank which will undertake policy-oriented research, IT Case Studies
 - A Technology Incubation Park on the Stanford model to nurture the entrepreneurial spirit

"We hope that this is the beginning of a long and mutually beneficial relationship between Infosys and the IIT, Bangalore", commented **Mr Nandan M Nilekani, Infosys Technologies Limited.**

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CASE STUDY

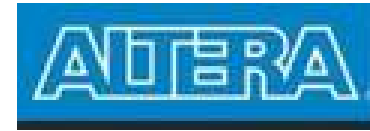
I2IT

Technology is no longer insulated from market demands. Joining hands to establish alliances that would help create a universal knowledge pool. The winds of change have touched I2IT too and it has reached out to launch private-public partnership agreements that would help us to provide quality education.



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- INTEL
- SAS LABS
- SAP
- TIBCO
- NOKIA AND SEMIENS
- AMERICAN RFID SOLUTIONS



Conferences, Seminars Workshops and Training programs organized by I2IT

- National Seminar on “Emerging Wireless Technologies” in association with Qualcomm, USA
- International Workshop on Wireless Technologies for South Asian Countries. The Abdus Salam International Centre for Theoretical Physics (ICTP), Italy.
- Hybrid Electric Vehicles: The Next Generation Automobile Revolution in association with IEEE, Pune.
- IMS Application Development in association with Nokia Siemens Network.

Conferences, Seminars Workshops and Training programs organized by I2IT

- CADENCE – ASIC Design and CAD Tools for VLSI
- ALTERA – System on Programmable Chip Design
- Embedded System and VLSI Design in Robotics
- SONIC '06 – Symposium on Novel Ideas in Computational Fluid Dynamics Industry – University Interaction Program
- Wireless and Networking Technologies
- INTEL Multi-Core Technologies
- Sun – Open source Opportunity



Conferences, Seminars Workshops and Training programs organized by I2IT

- Project Management Conference – Registered with PMI - Pune
- Linux Kernel – Application based Training Program
- NCEC – Cube 2007
- Dual Certification Program (RFID=RFIDSCM) on RFID Technology
- Workshop on Application Development on IMS Platform
- NCEC Cube'07 National Conference on Embedded Control, Computing & Communication.



How do we Synergize

- **Innovation**
 - Funding for innovation
 - Concentrate on innovation.
 - Developing research.
 - Modeling best practices in Development and Design.
- **Integration**
 - Institution of chair in emerging areas.
 - Scholarship for deserving students.
 - Will make available the strengths of the institutions to students for academic excellence.
- **Enhancement**
 - Academic collaboration among industry will create synergies; the whole will be greater than the sum of its parts.
- **Stimulation**
 - Demands a talented pool of citizens who will continue to educate, innovate and stimulate in national and international scenarios.
 - Opportunity to conduct workshop for industry, joint conferences.



- **Bill Gates Highlights Academic Collaboration**
 - "Collaboration between industry and academia is crucial to deliver on our shared vision for the future of technology and education," Gates said. "Microsoft remains committed to deepening its relationship with academia, because only by working together can we create the next generation of computing technology."