Looking Ahead: Opportunities and Challenges in ICT, Entrepreneurship and Innovation

Frank Jones
President, Intel India
“The World is Always Ready to Receive Talent With Opens Arms”

Craig R Barrett – Chairman, Intel Corp – November 2006, MRS Bulletin
The Innovation Cycle

- Tapping innovation to create commercial success
- Robust education system to foster creativity
- Create an R&D system to create smart ideas
Sowing the seed: Education System
Sowing the seed: Education System

- Education system lacks development of creative thinking
  - Learning by “rote” rather than experience

- Availability of adequately trained faculty in schools and colleges compounds the problem
  - Need to strengthen the system primary school upwards

- Linkage between higher education systems and industry are not well established; limits quick feedback of actual problems into academia

+ Intel has been using the Teach to The Future (TTF) program to get teachers educated in using computers in education; 600,000 already trained
  - Need to expand teacher training across the entire gamut of student needs to improve teacher quality

Fostering Public Private Participation in education is the need of the hour
Nurture: Incentivise Innovation
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- R&D Investment needs to increase.
  - Investment in R&D as % of GDP is 0.77% vs Israel (5%)*

- Tremendous potential for innovation despite low R&D spend
  - Highest journal publications per GDP per capita per year (31.7)**

- Incentives to attract Indian expat and local population to run local R&D projects is very low
  - Lets learn from Israel and China

- Intel has used the International Local Hire (ILH) program very successfully
  - 10% of local high tech work force is ILH
  - Great opportunity to expand such programs nationwide

*Nurture innovation potential through focused spending on incentives*
Tapping innovation: Entrepreneurship
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- *Converting innovative ideas into commercial success needs less red tape*

- *Create University-Industry-Government incubation facilities*

- TEQuIP initiative is a small step in the right direction; scale such programs

**Reap the benefits of innovation through effective commercialization**
Backup
Tech Entrepreneur Program in India

- India launch March 2006
- 11 Tech schools; 5 B-Schools participated in curriculum workshop by UC Berkeley
- DST-Intel India Innovation Pioneers Challenge launched in Sep 2006
- Team Rich Core from India wins 2nd place in the Global challenge in Berkeley, Oct 2006
- Intel given credit for leading & setting example of a public-private partnership

– Support from National Entrepreneurship Board, Dept of Science & Technology, GOI