The World is Flat

One: While I Was Sleeping

How the World Became Flat

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The Beginning

- **Thomas Friedman** traveled to Bangalore in February 2004
to understand why India had become such an important pool for the outsourcing of service and information technology work from U.S. and other industrialized countries

- He returned back with the conclusion that “The World is Flat”

- How did he come to this conclusion?
- What does he actually mean?
Bangalore - Bengaluru

- Bangalore lies in the southeast of the South Indian state of Karnataka.
- Bangalore is called the "Silicon Valley of India" because of the large number of Information Technology (IT) companies located in the city which contribute 38% of India's US$ 22 billion IT and software export market.
Bangalore - Bengaluru

- Bangalore's IT industry is divided into three main "clusters"
  - Software Technology Parks of India, Bangalore (STPI)
  - International Technology Park Bangalore (ITPB),
  - Electronics City
  - Infosys and Wipro, India's second and third largest software companies, have their largest campus in Electronics City.

- As headquarters to many of the global SEI-CMM Level 5 Companies, Bangalore's place in the global IT map is prominent.
Infosys

- Infosys Technologies Ltd. provides consulting and IT services to clients globally
  - Application development and maintenance
  - Systems integration
  - Concept-to-market R&D and engineering services
- Over 130,000 employees worldwide
- One of the pioneers in strategic offshore outsourcing of software services

- Chairman of the Board and Chief Mentor: Narayana N.R. Murthy
- Co-Chairman of the Board of Directors: Nandan M. Nilekani
- Chief Executive Officer and Managing Director: S. Gopalakrishnan
Infosys

Key milestones
- Year of Incorporation: 1981
- Became a public limited company in India: 1992
- ISO 9001/TickIT Certification: 1993
- Attained SEI-CMM Level 4: 1997
- Listed on NASDAQ: 1999
- Crossed $100 million in annual revenues: 1999
- Attained SEI-CMM Level 5: 1999
- Crossed $ half a billion in revenues: 2002
- Crossed $ billion in revenues: 2004
- Crossed $ 2 billion in revenues: 2006
- Added to the NASDAQ-100 Index: 2006
- Crossed $ 3 billion in revenues: 2007
Leveling of the business world

- Nandan Nilekani of Infosys explains
  - Massive investment in technology, broadband connectivity around the world
  - Cheaper computing power
  - Explosion of software: e-mail, search engines, proprietary software that can distribute work
  - Platform where intellectual work could be delivered from anywhere
    - Disaggregate, deliver, distribute, produce and put back together again
  - The playing field is being leveled
Flat World

- It is now possible for more people than ever to collaborate and compete in real time
  - in different corners of the world
  - in different kinds of work
  - on a more equal basis
  - using computers, e-mail, workforce software, teleconferencing, fiber-optic networks
- Connects all the knowledge centers in the world into a single global network
Three Eras of Globalization

- Globalization 1.0: 1492 (Columbus) – 1800
  - Trade between the Old World and the New World started
  - Countries and muscles
    - Dynamic force is power
    - Countries drove global integration
    - Global competition among countries
  - It shrank the world from *large* size to *medium* size
Three Eras of Globalization

- Globalization 2.0: 1800 – 2000
  (interrupted by the Great Depression, World Wars I & II)
  - Started with industrial revolution
  - Dynamic force driving global integration was multinational companies and breakthroughs in hardware
  - In the first half powered by
    - falling transportation costs due to steam engine, railroads
  - In the second half powered by
    - falling telecommunication costs due to telegraph, telephones, the PC, satellites, fiber-optic cable, early version of the www
Three Eras of Globalization

- Globalization 2.0: 1800 – 2000
  - Movement of goods and information among continents
  - Global competition among companies
  - It shrank the world from *medium* size to *small* size
Three Eras of Globalization

- Globalization 3.0: 2000 –
  - Dynamic force driving global integration is individuals
  - Powered by the *flat-world platform*
  - PC+ telecomm+ work flow software
  - Global collaboration and competition among individuals
  - It shrank the world from *small* size to *tiny* size
Outsourcing Examples

- Accounting work – US tax returns prepared in India
  - In 2003: 25,000; 2004: 100,000; 2005: 400,000
  - Software product called VTR, Virtual Tax Room
  - Medium size firms get a chance to outsource
  - Data protection and security is high
Outsourcing Examples

- Medical – Radiologists outsourcing reading of CAT scans to doctors in India and Australia
  - Teleradiology – ship images to radiologists abroad
  - CAT and MRI images are already in digital format and available on a network with a standardized protocol
  - After-hours readings by “Nighthawks”
Outsourcing Examples

- Journalism – News about company earnings and related business news
  - Reuters – 2300 journalists worldwide in 197 bureaus serving investment bankers, derivatives traders, stockbrokers, newspapers, radio, TV, Internet outlets
  - Create the news flashes
  - Then, value added work: analysis
  - Cost and speed efficiency
    - Analysts are paid $15,000 in Bangalore, as opposed to $80,000 in New York or London
    - Financially literate and highly motivated employees in India
Outsourcing Examples

- Call Centers
- 24/7 operations, inbound and outbound calls
- As of 2005, 245,000 Indian operators answering calls from all over the world
- Low-wage, low-prestige jobs in the US, but high-wage, high-prestige in India
  - You can work at night and go to school during part of the day, cost of an operator is $500/month
  - Japan outsourcing to China, Dalian
Outsourcing Examples

- Research and development tasks outsourced to India, Russia and China
- Globalization of innovation
- Indian offices of Cisco, Intel, IBM, Texas Instruments, GE filing patents
- GE transferred Indian engineers who worked in US back to India
Outsourcing Examples

- Personal remote executive assistant
  - $1500-2000/month
- JetBlue Airways homesourcing, reservation agents working from home
- McDonald’s drive-through ordering
- E-tutoring