Offshoring to India

Its past, present and future
Past
Introduction

- The development of modularized business processes at locations beyond the immediate physical vicinity of the firm.
- Company objectives: lower labor costs, entry into potential future market.
- Country objectives: employment, capital, emergence of the middle class.
Introduction

- Amazon.com
- GE
- British Airways
- Toyota
- Telefonica
- Sakonnet Technology
- India
- China
- South America
- South Africa
- Eastern Europe
- Russia
India, 20th century

- Relatively heavy investment in technical education
  - IIT, NIT

- Regulation of private sector
  - Industrial Development and Regulation Act
  - Monopoly and Restrictive Trade Practices Act
  - Foreign Exchange Regulation Act
India, 20\textsuperscript{th} century

- Restricted Foreign Direct Investment (FDI).
  - 1970s: IBM and Coca Cola leave.
- Migration of skilled labor outside of India.
1990s

- **India**
  - Abolishment of industrial licensing system.

- **World**
  - Corporate consolidation and cost pressure.
  - Y2K.
  - Information and Communication Technologies
    - Data transmission costs go down.
    - Standardization of software platforms.
Present
Low wage talent

- China
- Russia
- Philippines
- Turkey
- Thailand
- Poland
- Brazil
- Mexico
- Indonesia
- 18 other low-wage countries

Total pool = 6.4 million in 2003

28%

72%
Offshoring: labor quality

<table>
<thead>
<tr>
<th>Country</th>
<th>Thousands of suitable young professional engineers</th>
<th>Population, 2003, millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Poland</td>
<td>40</td>
<td>39</td>
</tr>
<tr>
<td>Philippines</td>
<td>82</td>
<td>60</td>
</tr>
<tr>
<td>Germany</td>
<td>100</td>
<td>83</td>
</tr>
<tr>
<td>Russia</td>
<td>143</td>
<td>50</td>
</tr>
<tr>
<td>United States</td>
<td>292</td>
<td>540</td>
</tr>
<tr>
<td>India</td>
<td>130</td>
<td>1,086</td>
</tr>
<tr>
<td>China</td>
<td>160</td>
<td>1,293</td>
</tr>
</tbody>
</table>

*With ≤7 years' work experience; includes all engineering disciplines except civil and agricultural engineering and all IT and computer science degrees.

Sources: Interviews with human-resources experts; Global Insight; ministries of education/labor statistics offices for countries shown; McKinsey Global Institute analysis.
Offshoring in India

- **Strengths**
  - Large pool of scientific and engineering manpower.
  - Linguistic capability in English
  - Low labor costs
  - Favorable time zone
  - Indian diaspora

- **Weaknesses**
  - Slow government bureaucracy
  - Physical infrastructure
  - Labor laws (but IT is exempt)
Domino effect

- Clustering to limit risk.
- Reluctance to pull out (high sunk costs).
- Untapped resources in nearby cities.
  - Expansion from Mumbai to Pune.
  - Recruitment to established site.
Offshoring in new locations

- Wage inflation in current country/location.
  - Limited to ~30% of US wages.
- Government policies.
- Infrastructure issues.
  - Traffic congestion
  - Power outages.
Future
Next IT challenge: credibility

- Data protection and security.
- Tapping into Indian diaspora.
- Certifications (e.g. ISO 9000).
- Solid telecommunications infrastructure.
- Recruitment/retention of staff.
  - Residential enclaves.
Future of Indian IT firms

- Consolidation around Indian companies
  - Infosys
  - Tata Consulting Services
- Acquisition by multinational enterprises
  - Conseco
- Remaining independent
Future of Indian IT firms

- Lower level IT processes face competition
  - Other offshore sites
  - Voice recognition software
- Survival by higher value-added processes
  - Offer full spectrum of services
  - Compete with higher level service providers in US/Europe
- Need competitive domestic IT industry (to sustain export)
National issues

- Raise the quality of university education.
- Move beyond offshoring hotspots.
- Improve the infrastructure.
- Move beyond IT and software.
Manufacturing

- Pharmaceuticals
  - Intellectual property laws recently passed.
  - Enforcement of regulations an issue.
- Hampered by government
  - Labor laws (100 employee rule).
  - Infrastructure (e.g. roads).
  - FDI.
R & D

- Competition from China, Russia, US.
- “R&D often gravitates to countries with large domestic markets for the resulting products.”*
  - India’s GDP growth: 6% per year (’01-’04)
  - Income distribution issues.

*Ensuring India’s Future
Also see Bardhan, AD, Managing globalization of R&D: Organizing for offshoring innovation, Human Systems Management 25 (2006) 103-114
Financing infrastructure

- FDI is miniscule compared to GDP
- Savings ~25% of GDP

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>China</td>
<td>India</td>
</tr>
<tr>
<td>Population</td>
<td>1.3 billion</td>
<td>1.1 billion</td>
</tr>
<tr>
<td>GDP$^2$</td>
<td>$1,577 billion</td>
<td>$831 billion</td>
</tr>
<tr>
<td>GDP per capita$^2$</td>
<td>$1,214</td>
<td>$592</td>
</tr>
<tr>
<td>GDP growth, 1993–2003</td>
<td>8.1%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Foreign direct investment as % of GDP$^2$</td>
<td>3.7%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

$^1$Includes Hong Kong and Macao.

$^2$All GDP figures are expressed in nominal US dollars.

Source: Economist Intelligence Unit; Global Insight

Inla05: India’s lagging financial system
Financing infrastructure

<table>
<thead>
<tr>
<th></th>
<th>National gross savings rate, 1997–2004, %</th>
<th>FDI(^1) as % of GDP, 1997–2004</th>
<th>Investments as % of GDP, 1997–2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>43.4(^2)</td>
<td>4.2</td>
<td>40.0(^2)</td>
</tr>
<tr>
<td>South Korea</td>
<td>33.3(^2)</td>
<td>1.1</td>
<td>29.8(^2)</td>
</tr>
<tr>
<td>Japan</td>
<td>28.5</td>
<td>0.2</td>
<td>25.7</td>
</tr>
<tr>
<td>India</td>
<td>22.6</td>
<td>0.7</td>
<td>23.0</td>
</tr>
<tr>
<td>European Union(^3)</td>
<td>20.2</td>
<td>4.3</td>
<td>20.1</td>
</tr>
<tr>
<td>United States</td>
<td>12.7</td>
<td>1.7</td>
<td>19.6</td>
</tr>
</tbody>
</table>

Checking India’s Vital Signs
Conclusions

- Near-term IT competitiveness requires expansion outside of hotspots.
- Long-term dominance of services-related exports depends on consolidation to form competitive domestic corporations.
- Entry into manufacturing requires careful government reform.