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US-ATMC workshop
October 23, 2003
What is offshoreable in software development?

<table>
<thead>
<tr>
<th>Process</th>
<th>Consulting/ R&amp;D/ Making</th>
<th>System Design</th>
<th>Program development</th>
<th>Webservices</th>
<th>Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Process Separability</td>
<td>L</td>
<td>L</td>
<td>H</td>
<td>M</td>
<td>M</td>
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<tr>
<td>2. Relevance of offshore skills</td>
<td>L</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>M</td>
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<td>3. Offshoreability</td>
<td>L</td>
<td>L</td>
<td>H</td>
<td>M</td>
<td>M</td>
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<tr>
<td>4. Share in value-chain (%)</td>
<td>28</td>
<td>22</td>
<td>23</td>
<td>12</td>
<td>15</td>
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</table>
India’s capabilities in software offshoring

- Low labor costs ($300-500/m) for high quality, adequate supply of English speaking programmers and systems analysts in urban areas, project management skills; good communications and other infrastructure, strong flow of global venture capital, and technological sophistication, MNC presence; all-in costs of $10-25/hour, compared with US costs of $40-120/hour; focus on applications development for banking and telecom.

- Negatives are shortage of vertical expertise in IT-intensive areas such as insurance, logistics and health care, and shortage of horizontal expertise in strategic consulting, engineering services, market research, product development, sales, packaging and product QA.

- MNC presence still low (13% of employment); services make up 96% of revenue, i.e., product development is negligible.

- Expect 20% growth in labor deployment p.a. from current base of 230,000 persons; continued focus on applications development for financial services industry, with vertical growth in telecom and IT, and horizontal growth in engineering services and system integration. MNC-led focus on programming for product development also likely.
What are business processes and how relevant are they to the US economy?

- BPs are white collar processes required to service employees, vendors and customers: human resources, auditing, accounting, customer-care, telemarketing, tax preparation, claims processing, payroll, benefits management and document management.
- Over 90% of new job creation since 2000 has been in services.
- Business services is the largest growth segment among service growth areas.
Not all BPs can be outsourced

- The determining factors are:
- Knowledge component, with associated quality risks.
- Interactive component, both intra-firm and with vendors and customers.
  - Process separability into interactive and non-interactive components.
- Economies of scale from concentrating in a single location.
- Efficiency gains from reengineering.
- Time and mission sensitive aspects of the work.
What is offshoreable in BP

<table>
<thead>
<tr>
<th>Process =&gt;</th>
<th>Strategic Consulting and Reengineering Services</th>
<th>Process Specification and Design</th>
<th>Process Implementation</th>
<th>Migration Services including Process Integration and QA</th>
</tr>
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<tbody>
<tr>
<td>1. Process Separability</td>
<td>M</td>
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<tr>
<td>4. Share in value-chain (%)</td>
<td>2030</td>
<td>5-10</td>
<td>5060</td>
<td>10-15</td>
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</table>

The table indicates the level of offshoreability for various processes in BP, with 'M' indicating medium, 'H' indicating high, and 'L' indicating low. The values for 'Share in value-chain (%)' are also listed for each category.
India’s capabilities in BPO

- Low labor costs ($1.5-$3/hr) for high quality, adequate supply of English speakers due to large-urban locations leading to realization of scale economies (average call center is 1000+ employees), project management skills, adequate and cost-effective communications and other infrastructure, strong flow of global venture capital, and technological sophistication, MNC presence; all-in costs of $5.50-$12/hour, compared with US costs of $28/hour.

- Negatives are high operator attrition rates (though the U.S. is higher), shortage of middle and senior migration and operations management, shortage of vertical expertise in fast-growing areas like insurance, logistics, health care, real estate, and shortage of horizontal expertise in payroll, benefits, document management and interactive customer-care.

- Rapid ramp-up possible: most firms we met planned 100%+ annual expansion into the next 3 years. Currently call-centers account for 70% of work, will drop to 30% by 2006; MNCs driving growth (40% market share), expect BP employment to cross 1,000,000 by 2006; focus on financial, telecom and IT firms’ back-office work.
Drivers, Inhibitors and Challenges of the Indian BPO Industry

Obstacles/Concerns:
- Data Security/Business Continuity Threat Perceptions
- Higher-Than-Expected Costs
- Loss of Control
- Performance/Quality Concerns
- Loss of In-House Expertise
- Fear of Employee Unrest
- Executive Management Opposition

Demand Drivers:
- Improve Service Levels
- Supplement Staff/Scalability
- Focus on Core Business
- Global Corporate Policy
- Enable E-Business Strategy
- Gain Process Knowledge
- Align IT Strategy With Business Goals
- Consolidation of Capacities
- Cost Reduction (Transaction Costs and Capital Costs)

Source: Gartner Dataquest (June 2002)
Conclusions

- Five years ago, the key issues, common to both ITO and BPO were: telecom quality and costs, lack of VC finance, long ramp-up time due to government delays. Against this, firms weighed cost savings of 40-80%.
- Today, the cost savings range from 30-80% (less in IT, higher in BP) and issues with telecom, VC and startup costs have disappeared. Clusters are emerging for both IT and BP (Mumbai and Delhi for BP, Bangalore for IT and BP).
- MNCs will be the drivers of future growth, more focus on higher-end work.
- BPO employment in India will grow from 200,000 at the start of 2003 to 1,000,000 by end 2006. ITO employment will grow from 230,000 in 2003 to 400,000 by end 2006.
- Skills shortage in high value-added areas and process management skills will initially keep value-addition low relative to developed countries. The ability to absorb or independently develop higher-level skills remains unknown, the software services experience indicating how difficult this is.
- Challenge for developed economies is to produce enough high-end labor to leverage Indian BPO business. IT provides a model for doing so.