

Lift and Shift?: Offshoring Service Provision to India*

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The Technical Enabling Conditions

- Separation of information from physical media
- Global availability of low-cost computing power and telecom bandwidth
- Standardized software packages, e.g., SAP, Oracle, PeopleSoft available globally
- Many service activities need not be done in close proximity to customers

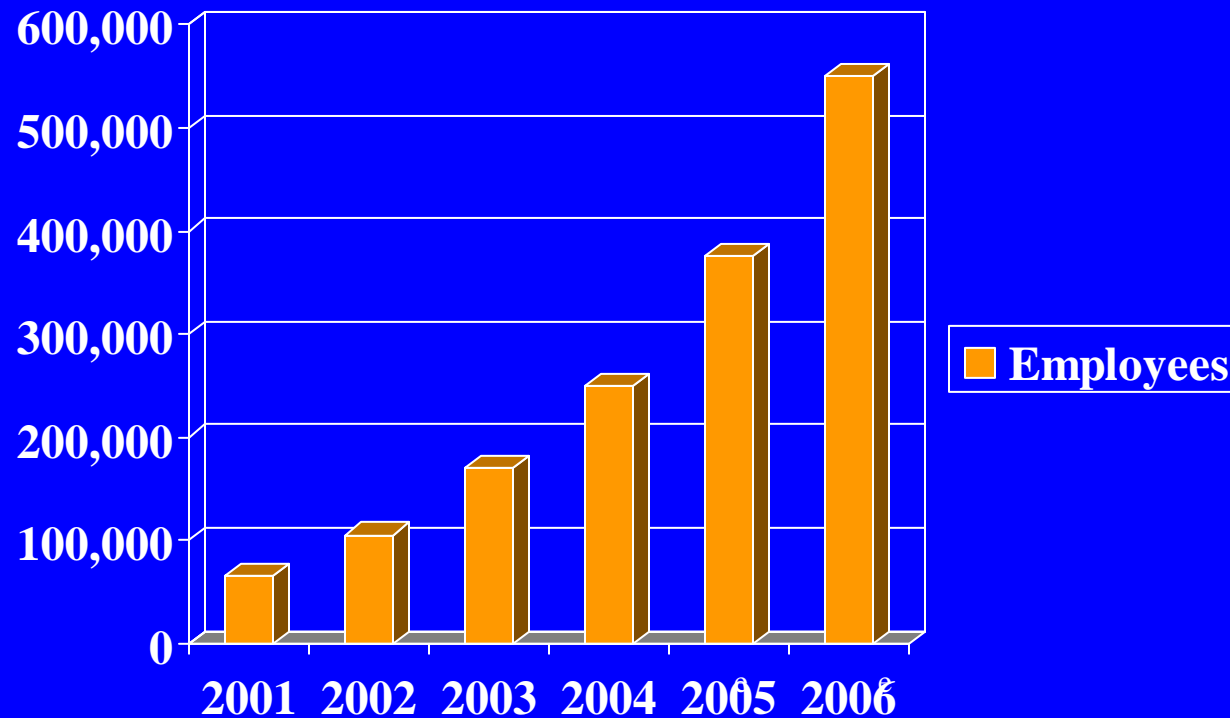
Drivers for Offshoring Services

- Cost pressures
- Experience and acceptance of reengineering and outsourcing various services
- Experience w/offshore software production in India
- Leaders such as GE, American Express, HSBC had early success and became evangelists

Why Focus on India for Services?

- Far greater numbers than other nations
 - Ireland -- 10,000 (services Europe)
 - Philippines -- 50,000 (2005)
 - China -- relatively small, but growing fast
 - India -- 175,000 (growing at 50%) + 400,000 in software growing at 20% (March 2003) [**~80% from U.S.**]
- U.S. Economy has ~130,000,000 jobs

Business Process Employment in India by Year



Source: NASSCOM-McKinsey

Key Benefits

- Savings can be large -- 40% is given
 - With reengineering can be greater
- Large quantities of labor available so operational economies of scale
- More highly qualified employees at lower prices (esp. at low end)
- Lower turnover than in developed nations (until recently)

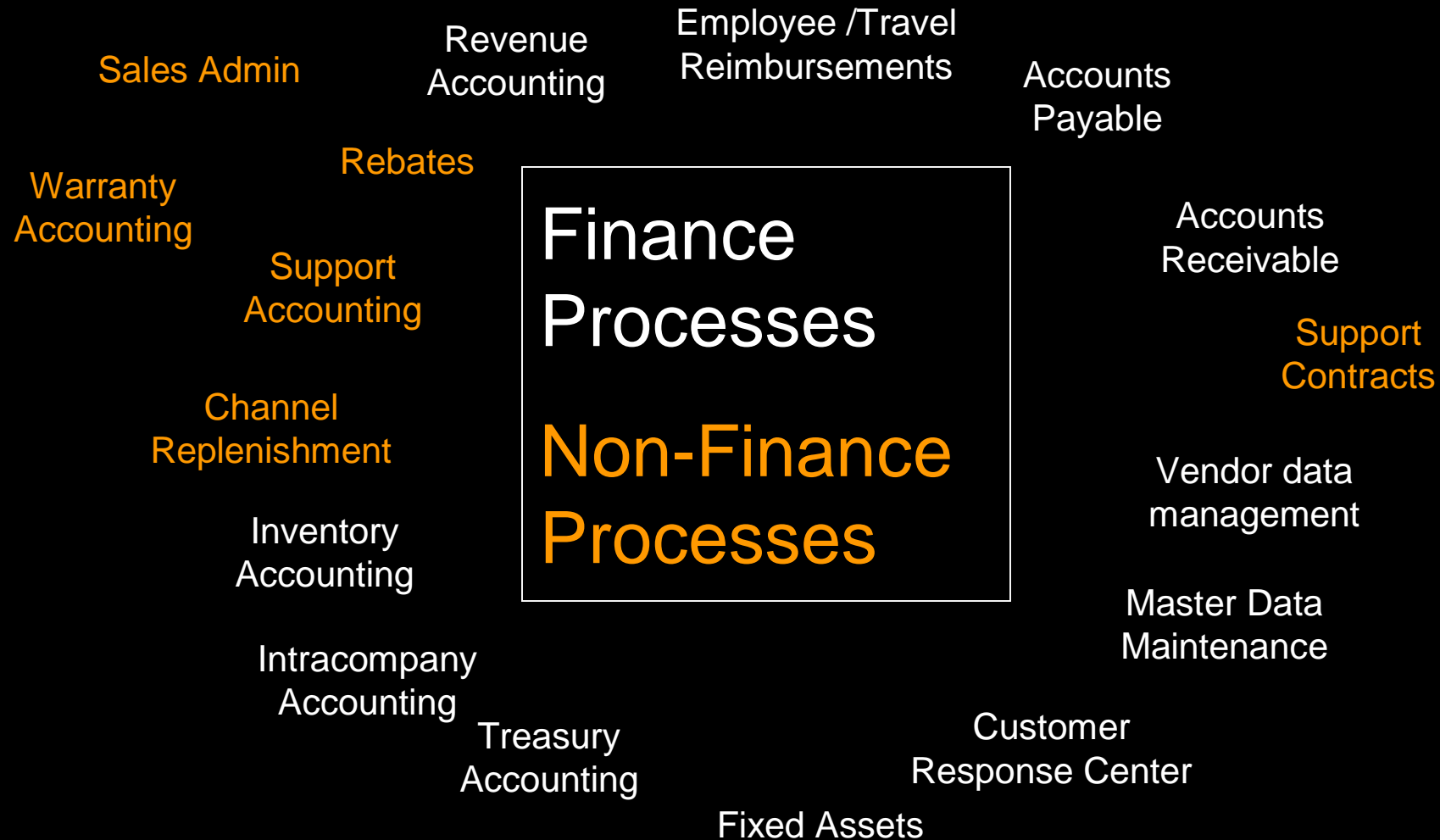
Which Firms?



And the Indian Firms



Processes Moved by One Large Firm



An Untypical, but Increasingly Common Type of Job at Intel India

Design Engineer in Bangalore, India to work on a team developing Intel's first Ultra-Wide Band wireless silicon products

Responsibilities

In this position you will be responsible for the design of RFIC circuits such as LNAs, RF power amplifiers, frequency synthesizers and mixers.

Qualifications

To be successful you will possess a B.S. or M.S. degree in Electrical Engineering with more than eight years of relevant experience or a PhD. with three years experience. Working experience with CMOS RFIC design is a must.

Implications

- Can be very rapid, but is not simple
 - GECIS expanded from 12,000 in 2003 to ~20,000 at the end of 2004. In 2005, the subsidiary was spun-off to become a freestanding entity headquartered in India with operation in Mexico, Hungary, and other nations
 - Dell had no employees about 4 years ago, now over 9,000 (2005)
 - IBM India in 2006 has over 38,000 employees, the second largest headcount outside of US.
- The number of service activities that are amenable to offshoring are growing due to reengineering etc.

Issues

- Services are the largest part of the economy -- will losers be compensated?
- Will this be a reprise of the offshoring of manufacturing?
- Will growth of service offshoring be faster than was manufacturing?
- Today the numbers are comparatively small, but growing at 20-30% CAGR

Not a Zero-Sum World

- In the post WWII period the U.S. has bet on shifting to new industries and activities as older ones move out
 - First from Northeast to South within the U.S., then global
- Other countries and their workers could become consumers for our higher-end products
 - Chips designed in SV and Nike designed in Beaverton

The Balance for the U.S.

- Benefits

- Lower cost services
- Purchases of U.S. products
 - Cisco routers
 - Avaya telecom
 - HP/Dell PCs
 - Oracle, Peoplesoft etc.
- Greater efficiency
- Better quality?
- 3rd World middle class
 - New consumers?

- Costs

- Job loss?
- Downward pressure on wages?
- Disrupted career ladders?
- Tax losses?
- Quality of service?