



Immigration & Innovation
Capturing The Best & Brightest
or
Offshoring America's Knowledge

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Technology, Innovation & America's Primacy
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Immigration & Innovation

Three Scenarios

- Policies Designed To Foster Brain Capture
 1. Skilled workers use non-immigrant guest-worker programs as a bridge to immigration
- Same Policies Now Increasingly Used For Temporary Labor Mobility
 2. Knowledge transfer programs shift tasks to offshore locations
 3. Low cost foreign labor for service delivery to US clients



US Guest-worker Visas for Skilled Workers

- H-1B – Specialty Occupations
 - ∅ Max stay in US is 6 years
 - ∅ Protections for US workers
 - Annual quota for new petitions – now 65k + exemptions
 - Wage parity
 - ∅ ~500,000 H-1B holders in US
- L-1 – Intra-company Transfer
 - ∅ Max stay in US is 5 years (7 years for execs)
 - ∅ No protections for US workers
 - ∅ ~350,000 L-1 holders in US

Brain Capture Scenario

- Foreigner Comes to US for Graduate Studies
- Foreign Student Wants to Stay in US
 - Ø Company applies for H-1B work visa
 - Ø Company applies for Green Card
 - 3-5 year wait time

Knowledge Transfer Scenario

- Company Wants to Transfer Specific Tasks from US to Overseas Operations
 - Ø Brings foreign workers into US (generally on L-1 visa)
 - Ø US worker trains foreign worker
 - Ø Foreign worker returns to country of origin and task migrates with him
 - Ø US worker laid off or re-assigned

On-site Offshore Outsourcing (OO) Scenario

- Company Brings in Low-Cost High-Skill Worker to Deliver Services On-Site in US
 - Ø H-1B or L-1 visa is used as a means for bringing in lower paid foreign workers
 - Ø Advantages
 - Significantly lower labor cost
 - Better management of offshore team
 - Ø Business model for most major IT offshore outsourcing firms
 - Cognizant, Infosys, Tata Consultancy, Wipro, etc.

Offshoring Driving Visa Use Adaptation

- Brain Capture => Knowledge Transfer
 - Ø Major corporations operating in US need more visas
 - may be a temporary phenomenon
- On-Site Offshore Outsourcers (OO)
Forcing US Outsourcers to Adapt

On-site OO Business Model

Tata has about 8,000 employees in North America, primarily in the U.S., and about 7,200 of them are here on some kind of visa. Among its U.S. workers, **about 65% have H-1Bs, and the remainder hold L-1 visas**, said spokesman Victor Chayet.

He added that many of Tata's U.S.-based employees are graduates of universities in India and that only a handful ever seek permanent residency here. The company doesn't discourage workers from applying for green cards, but its service delivery model is based on the ability to move people from country to country as needed. "Keeping that fluid workforce is to our benefit," Chayet said.

- Patrick Thibodeau, "H-1B backers want bigger increase in cap," *ComputerWorld*, November 29, 2004

On-site OO Business Model

“Our wage per employee is 20-25% lesser than US wage for a similar employee. Typically, for a TCS employee with five years experience, the annual cost to the company is \$60,000-70,000, while a local American employee might cost \$80,000-100,000. **This (labour arbitrage) is a fact of doing work onsite. It's a fact that Indian IT companies have an advantage here and there's nothing wrong in that.”**

- Phiroz Vandrevala, Executive VP, Tata Consultancy Services, quoted in, Shelley Singh, “US Visas are not a TCS-specific issue,” *Business World*, June 30, 2003.

Offshore Outsourcing Companies Are Heavy Users of H-1Bs

Company	#Jobs FY01-03	Median Wage
Accenture, LLC	12,684	\$53,042
Cognizant Technology Slns	33,148	\$54,578
Tata Consultancy Services	13,237	\$34,541

Source: R. Hira Analysis

US Dept of Labor LCA Database: www.flcdatacenter.com

H-1B Low Wage Examples: Offshore Outsourcing Companies

Company	Example Job	Example Annual Wage
Accenture, LLC	Chief Programmer	\$25,113
Cognizant Technology Slns	System Analyst	\$32,870
Tata Consultancy Services	Programmer Analyst 1	\$21,460

Source: R. Hira Analysis: US Dept of Labor LCA Database: www.flcdatacenter.com

OO Companies Pay Low Wages to H-1Bs in Spite of Prevailing Wage

Company	% Jobs < \$40k	\$40k < % Jobs < \$60k	% Jobs > \$60k
Accenture, LLC	<u>15.3%</u>	40%	44.7%
Cognizant Technology Slns	2.5%	<u>74.1%</u>	23.4%
Tata Consultancy Services	<u>81.9%</u>	17.8%	0.3%

Source: R. Hira Analysis

US Dept of Labor LCA Database: www.flcdatacenter.com

Emerging Global IT Services Business Model

<u>Tckr</u>	<u>Name</u>	<u>HQ</u>	<u>Market Cap</u>	<u>TTM Sales</u>	<u>Employees</u>
INFY	Infosys	India	\$ 12,135	\$ 1,164	25,700
WIT	Wipro	India	\$ 10,512	\$ 1,395	32,000
EDS	EDS	US	\$ 8,633	\$ 21,834	132,000
CSC	CSC	US	\$ 8,107	\$ 14,949	90,000
ACS	Affltd Comp	US	\$ 6,404	\$ 4,106	40,000
CTSH	Cognizant	US	\$ 3,215	\$ 465	5,600
SAY	Satyam	India	\$ 2,892	\$ 620	9,532
PER	Perot Sys	US	\$ 1,431	\$ 1,618	13,500

Retrieved from Reuters.com on August 13, 2004 – Analysis by Ron Hira, RIT

Dollar figures in millions

<u>Name</u>	<u>Price to Sales</u>	<u>Sales Growth % 1 Yr</u>	<u>P/E Ratio TTM</u>	<u>Net Prft Mrgn 5 Yr Avg</u>	<u>Effective Tax Rate 5 Yr Avg</u>
Infosys	10.42	40.96	42.38	28.7	14.01
Wipro	7.53	36.37	42.96	19.5	13.42
EDS	0.40	0.55	NM	3.6	35.87
CSC	0.54	30.15	15.82	3.4	30.55
ACS	1.56	8.43	12.81	8.2	38.64
Cognizant	6.92	60.74	44.92	13.7	31.23
Satyam	4.67	23.34	24.53	2.7	14.02
Perot Systems	0.88	9.65	19.4	4.2	54.37

Retrieved from Reuters.com on August 13, 2004 – Analysis by Ron Hira, RIT

WTO GATS (Mode 4) & Guest-worker Visa Programs

- Developing Countries Pushing Hard
 - ∅ View quotas and prevailing wages as non-tariff barriers to trade
 - ∅ ~70% of revenues for On-site OO firms derived from H-1B and L-1 use (Hira 2004)
 - ∅ Australia currently negotiating in its FTA
- Congress
 - ∅ Singapore & Chile FTA new visas caused concern
 - ∅ “Stealth Immigration Policy”
- USTR
 - ∅ Encouraging services industry to lobby congress to loosen restrictions (see Zoellick speeches)

Innovation Implications

- Knowledge transfer is a body contact sport
 - Ø Learning on most advanced equipment and most sophisticated customer market
 - Ø Indian H-1Bs with US experience are sought after in Indian job market
 - Ø Accelerate offshore transfer speed
- Brain Capture Squeezed Out
 - Ø Increasing share of H-1B cap being used by On-site OO
 - Ø Better job opportunities back home

Innovation Implications

- Impact on US Workers and Potential US Workers
 - ∅ Direct competition for jobs that must be done in US
 - ∅ Shift into non-H-1B occupations
- US National Innovation System
 - ∅ Loss of experiential knowledge for incremental innovations
 - ∅ Loss of spillovers – e.g., next generation of entrepreneurs
 - Particularly acute in IT services
 - ∅ Creating competitors