BRAIN PROCESS OUTSOURCING AND OFFSHORING EXPECTED TO GROW SUBSTANTIALLY

*$ Assumed ~90% of total BPO&O market in 2001, shrinking to ~76% in 2008 in light of 16% BPO&O growth and estimated 2.5% growth for U.S. economy

Source: Gartner Dataquest; Aberdeen group; McKinsey analysis, September 2002

In the next 5 years, approximately $300 billion-400 billion of services will be moved offshore and/or outsourced.
INDIA IS A DOMINANT PLAYER IN OFFSHORING

Offshored services market size

$ Billions, 2001

- India: 7.7
- China: 1.1
- Ireland: 8.3
- Israel: 3.0
- Canada: 3.7
- Philippines: 0.3
- Thailand: 0.05
- Russia: 0.2
- Eastern Europe: 0.4
- South Africa: 0.01
- Mexico: 0.5
- Australia: 0.4
- Germany: 0.05

* Includes Poland, Romania, Hungary, and Czech Republic
** Primarily composed of MNC captives

Source: Software Associations; U.S country commercial reports; press articles; McKinsey analysis; Gartner; IDC; Country government websites; Ministry of Information Technology for various countries; Enterprise Ireland; NASSCOM
OFFSHORING OPPORTUNITIES CUT ACROSS THE ORGANIZATION

Increasingly complex transactions

**Back office**
- Basic data entry
  - Application forms
- Data conversion
- Transaction processing
- Document management

**Customer contact**
- Customer relations
  - Call centers (inbound and outbound)
- On-line customer service
- Telemarketing
- Collections

**Common corporate functions**
- Shared corporate services
  - Finance/accounting
  - HR
  - Procurement
  - IT
- Help desk
- Maintenance
- Infrastructure
- Applications development

**Knowledge services and decision analysis**
- Research services
- Customer analysis
- Portfolio analysis
- Claims processing
- Risk management
  - Credit underwriting

**Research and development**
- Content development, engineering and design
- New product design
  - Design specs
  - Pilot/prototypes
  - Testing
- Production design and optimization

Sample functions
- Increasingly complex transactions

Sample companies
- **AMERICAN EXPRESS**
- **ORACLE**
- **VERITAS**
- **HSBC**
- **ABN-AMRO**
- **McKinsey&Company**

Source: Press releases and news; expert interviews; team analysis
OFFSHORING DRIVES SIGNIFICANT PERFORMANCE IMPROVEMENT

- **45-55% saving**
- **30-40% savings on offshore cost base**

<table>
<thead>
<tr>
<th>Original cost base</th>
<th>Factor cost savings</th>
<th>Additional telecom cost</th>
<th>Additional management cost</th>
<th>Offshore location cost</th>
<th>Task reengineering</th>
<th>Process reengineering</th>
<th>New cost base</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>60-65</td>
<td>5-10</td>
<td>5</td>
<td>45-55</td>
<td>5-7</td>
<td>10-15</td>
<td>30-35</td>
</tr>
</tbody>
</table>

- Task/process migration
- Task-level improvements
- Process-level improvements

Source: McKinsey Global Institute
McKinsey Global Institute

THE REAL ECONOMICS OF OFFSHORING

$1.00

$1 previously spent in U.S., now offshored to India . . .

. . . delivers value to India . . .
- Taxes ($0.04)
- Revenues ($0.20)
- Local suppliers ($0.09)

0.33

. . . brings savings and returns to U.S. . . .
- Cost savings ($0.58)
- Goods/services sold ($0.05)
- Profits from Indian ventures ($0.04)

0.67

. . . creates new value from reemploying U.S. labor*
. . .

1.45-1.47

. . . and makes the global pie that much bigger

* Estimate based on historical U.S. reemployment trends

Source: McKinsey Global Institute
INDIA CAPTURES 33 CENTS FROM EACH DOLLAR OF SPEND OFFSHORED BY THE U.S.

Value accrued from $1 of U.S. spend offshored\(^1\)

Dollars; 2002

- **Labor**: 0.10
- **Profits retained in India**: 0.10
- **Suppliers\(^2\)**: 0.09
- **Central government\(^3\)**: 0.03
- **State government\(^4\)**: 0.01
- **Total value accrued to India**: 0.33

\(1\) Estimated using the India offshored services industry case
\(2\) Includes revenue accrued to the supplier industries less sales taxes, income taxes to employees and corporate taxes
\(3\) Includes income tax from labor employed in the offshored services sector and the supplier industries and corporate tax on the supplier industries
\(4\) Includes sales tax on the supplier industries and revenue from the sale of power to offshored service providers

Source: McKinsey Global Institute
### U.S. ECONOMY GENERATES NET ADDITIONAL VALUE FROM EVERY DOLLAR OF SPEND OFFSHORED

#### Savings accrued to U.S. investors and/or customers

- **0.58**

#### Import of U.S. goods and services by providers in India

- **0.05**

#### Transfer of profits by U.S. providers in low-wage country to parent

- **0.04**

#### Total direct benefit retained in the U.S.

- **0.67**

#### Value from U.S. labor reemployed** (conservative estimate)

- **0.45-0.47**

#### Potential for total value creation in the U.S. economy (conservative estimate)

- **1.12-1.14**

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**Value potential to the U.S. from $1 of spend offshored to India**

**Dollars; 2002**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings accrued to U.S. investors and/or customers</td>
<td>0.58</td>
</tr>
<tr>
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</tr>
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<td>0.04</td>
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<tr>
<td>Total direct benefit retained in the U.S.</td>
<td>0.67</td>
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<tr>
<td>Value from U.S. labor reemployed** (conservative estimate)</td>
<td>0.45-0.47</td>
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<tr>
<td>Potential for total value creation in the U.S. economy (conservative estimate)</td>
<td>1.12-1.14</td>
</tr>
</tbody>
</table>

**Further value creation potential through**

- Increased global competitiveness of U.S. business
- Opportunities for new value-add from lower cost base

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* Estimated based on historical reemployment trends from job loss through trade in the U.S. economy

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**Source:** McKinsey Global Institute
OFFSHORING IN MANUFACTURING HAS BEEN ACCOMPANIED BY GROWTH IN SERVICES

Employment, 1983-2003

Millions

-2 Manufacturing jobs lost

36* Net new services jobs created

* Adjusted for growth in population; actual figure is 43 million. Gross new employment during this period averaged 3.4 million jobs per year

Source: Bureau of Labor Statistics
JOB CREATION WILL OUTPACE OFFSHORING BY A WIDE MARGIN

Employment, 2000-2010

Millions

Source: Bureau of Labor Statistics; Forrester
TECHNOLOGY AND MEDICINE WILL WITNESS MOST VIGOROUS GROWTH IN JOBS

Growth in fastest growing occupations
Percent 2000-2010

New occupations like nanotechnology alone are expected to create 2 million new jobs by 2015

Source: Bureau of Labor Statistics
U.S. ECONOMY IS EXPECTED TO SEE A SIGNIFICANT DECLINE IN THE SHARE OF WORKING POPULATION

Composition of U.S. population

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 55 years</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>25-54 years</td>
<td>44</td>
<td>39</td>
</tr>
<tr>
<td>Under 24 years</td>
<td>28</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: U.S. Census; McKinsey Global Institute

As the U.S. population retires, 5% (15.6 million) additional workers needed by 2015 to maintain similar share of working population as in 2001

Shortfall must be addressed through a combination of
- Increased innovation/productivity
- Increased labor inputs, e.g., immigration
JOBS OFFSHORED WILL BE A SMALL FRACTION OF THE SHORTAGE IN ELIGIBLE WORKERS

Number of workers
Millions, 2000-2015

- Jobs projected to go offshore: 3.3
- Decline in working population due to aging: 15.6

Source: U.S. Census; McKinsey Global Institute
A FRACTION OF THE SAVINGS FROM OFFSHORING CAN INSURE WAGES DISPLACED

100% = $0.58 savings on every $1.00 of onshore spend diverted offshore

Share of savings required to compensate displaced workers for job loss

4-5%

Note: Insurance offered for only 2 years following initial date of job loss and begins only when workers find a new job; subsidies for health insurance provided. Average payment is 70% of net wage loss with no cap on amount. Only workers who are full-time before displacement and after reemployment are covered.

Source: Kletzer and Litan, “A Prescription to Relieve Worker Anxiety”, IIE, February 2001; McKinsey Global Institute