

**OFF-SHORING :
ISSUES & CURRENT GLOBAL CHALLENGES**

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PRESENTATION HAS THREE PARTS

- Part 1: Maps The Current Realities
Pertaining To Off-shoring In India**
- Part 2: Highlights The Challenges And
Emerging Constraints For Vendors**
- Part 3: Identifies Relevant Research
Issues**

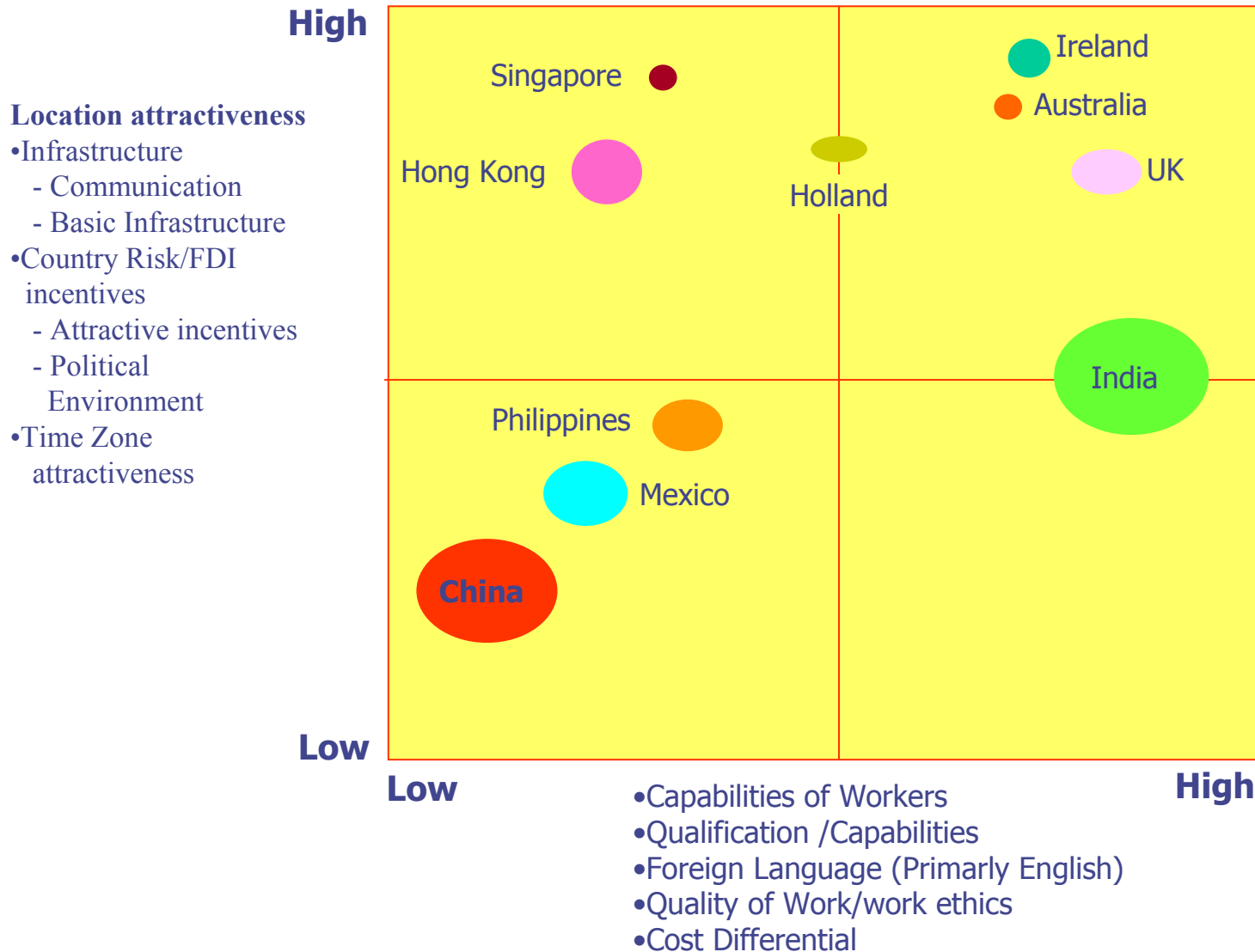
Reasons for companies to off shore

- ◆ **Reduce and control operating costs**
- ◆ **Reduce high staff turnover**
- ◆ **Access to world-class capabilities**
- ◆ **Free up resources for other purposes**
- ◆ **Reduce high staff overhead**
- ◆ **Quick turnaround through 24-hour processing**
- ◆ **Functions difficult to manage**
- ◆ **Sharpen company focus**
- ◆ **Shortage of well-trained resources**
- ◆ **Improved variations in cash flow**

Criteria and Weight in Country Analysis

Category	Country Characteristics	Metrics Used
Cost (40%)	<ul style="list-style-type: none"> • Cost of Labor • Cost of Management and Infrastructure • Tax and Treasury 	<ul style="list-style-type: none"> • Blended BPO and IT labor cost • Average cost of infrastructure (occupancy utilities, telecom management) • Corporate Tax Rates ,Profit Realization and Exchange rates
Environment (30%)	<ul style="list-style-type: none"> • Risk (Economic and Political) • Country Infrastructure • Cultural Compatibility • Geographical proximity • Security of Intellectual property (IP) 	<ul style="list-style-type: none"> • Gauge political and Economic Risk, Degree of political support • Relative strength of infrastructure and investments • Cultural difference or compatibility compared to United States • Relative distance (in brands) from United States • Relative Security of Intellectual property
People (30%)	<ul style="list-style-type: none"> • BPO and IT Process experience • Size of Labor Market • Education and Level of Work Force • Language Barriers and Literacy rates • Employee retention 	<ul style="list-style-type: none"> • COPC (Customer Operation Performance Centre) and CMM (Capability Maturity Model) and quality ratings, business process expertise and offshore market share • Available total labour market • Expected per capita education level • Percent fluency in English (Overall and select companies), country literacy rates • Select company retention and turnover rates

Mapping of countries for an Offshore location



● size of circle corresponds to number of qualified workers

Why India as a most favored off-shore location

- ◆ **Capabilities of workforce including educational qualifications**
- ◆ **Wage differential and location attractiveness**
- ◆ **Time Zone preferences**
- ◆ **English Language capabilities**
- ◆ **Technology infrastructure**
- ◆ **Country risks**

India's Current Competitive Edge Over Others:

- ◆ **Skilled labor at significantly low cost**
 - **Over 1 million students graduate from college every year**
 - **About 7 million students enrolled in higher education**
 - **About 200,000 engineers graduate every year**
 - **Second largest pool of engineers and scientists in the world**
 - **Wages in India are 75-90 % lower than in the US depending on the particular skills**

Supply – Captive and Indian Pure-play Vendors

- ◆ In mid-1990s, Citibank, Consec, Dell Computer American Express, British Airways, GE Capital etc. set up captive units for customer support/transaction processing services
- ◆ Citigroup mainly has “e- Serve” International off-shoring company in financial services
- ◆ GE Capital International Services (GECIS) is a prominent success story.
 - Major areas are finance, accounting, complex transaction processing such as mortgage loans and insurance claims.
 - Call centre services including outbound calls, actuarial analysis, risk modeling, data mining and statutory financial reporting

Major Indian Pure-play Vendors

Segment	No. of vendors	No. of Employees	Market Size	Comments
Content service	40 to 45	5,000	\$70 M	Include document Management, data management, etc
CRM	80 to 100	12,000	\$200M	Includes call centers,email outsourcing,and CRM analytics
Finance, Accounting and Transaction Processing	50 to 60	5,500	\$100M	Includes outbound calls, actuarial analysis, risk modeling, data mining and statutory financial reporting
GIS	20 to 30	8,500	\$150 M	Well established sector with some publicly traded companies
Health Care	140 TO 160	9,000	\$120 M	Includes trascription,coding,billing, and claim processing
HR	10 to 20	750	\$20M	Fairly new sector
Legal BPO	15-20	600-700	\$300-400M	Fairly new sector

OFF-SHORING IN INDIA: IT / SOFTWARE DOMINATED

- ◆ India's revenue & employment from IT and BPO off shoring
 - Revenue about \$22.3 billion by 2004-05
 - Employment of 695,000 by 2004-05 who provide about 1.8 % of worldwide IT revenue, in contrast, US has 5million IT workers.
 - Employment over 1,550,000 and 7%GDP by 2007-08 (NASSCOM)
 - India is expected to retain its leadership position in the foreseeable future.
- ◆ The off-shore market is estimated at 11 percent for IT or about \$150 billion globally.
- ◆ Fortune 1000 enterprises spend, on average 3 percent of their revenue in IT (financial services closer to 7 to 9 percent), Yankee Group Research and Consulting Firm

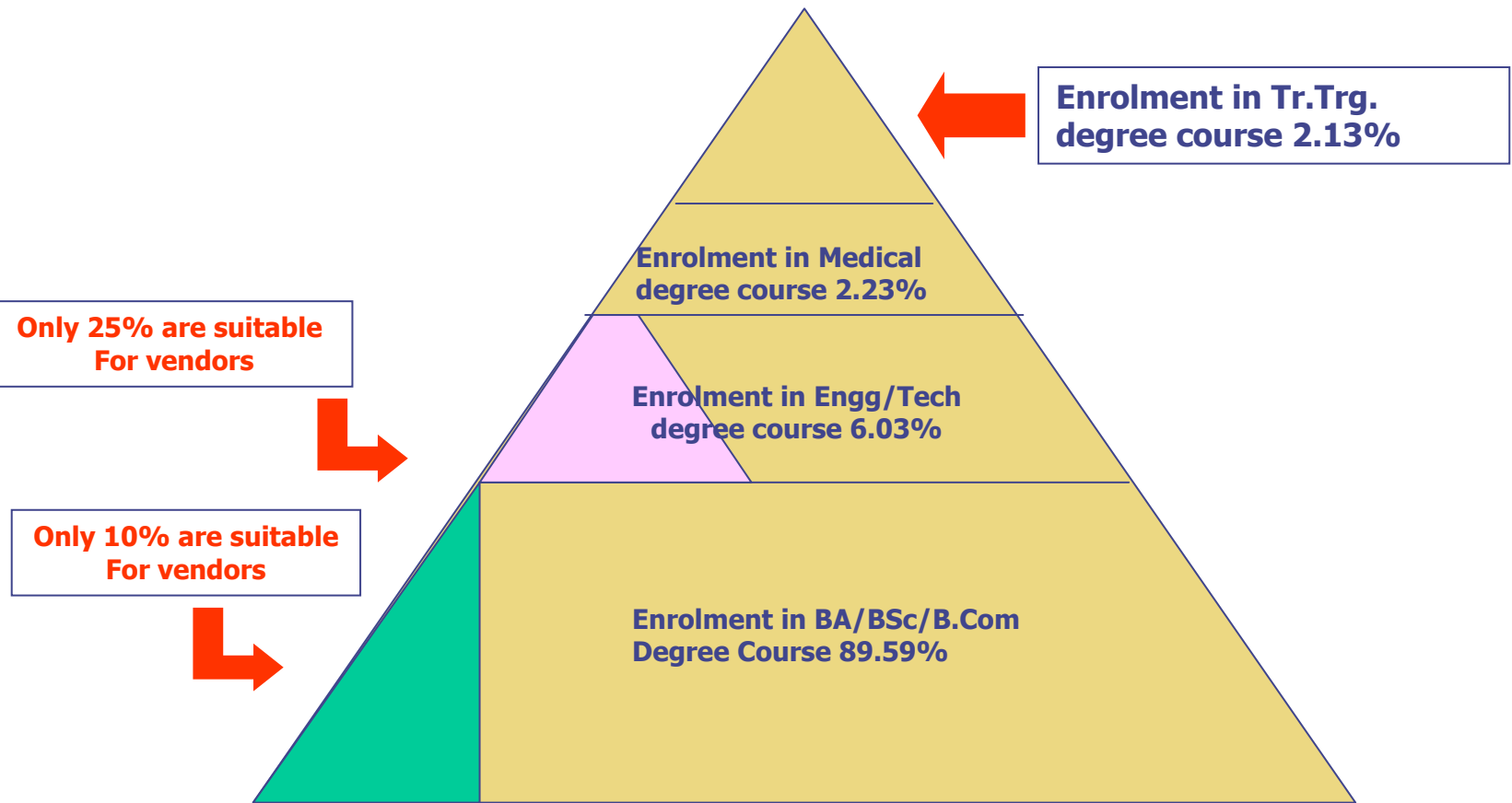
Major Challenges faced by Vendors and captive vendors

- ◆ India's vast supply of graduate is inadequate
- ◆ Concentration of vendors only in hot spots like Gurgaon, Bangalore, Mumbai and Hyderabad
- ◆ Wage inflation; **Annual Wages for project managers and programmers have increased by 23 % and 13% p.a. respectively.**
- ◆ High rate of employee attrition
- ◆ Most of solutions are technology oriented rather than Business oriented
- ◆ Poor Infrastructure
- ◆ Security Concerns

Quality and Quantity of Labor Supply – Emerging Constraints

- ◆ Only 10% students with generalist degrees in arts and humanities and 25% Engineering Degree are suitable for vendors.
- ◆ Only 1.2 million engineers- 4% of total university educated work force, Germany 20% and China 33%
- ◆ Diploma holders (3 years) 1.75 million: can fill only gaps at the less creative end of the IT Value chain
- ◆ Graduates from 7 Indian IITs and 6 IIMs are the preferred choice of vendors out of 185 Universities , 42 deemed to be universities and in addition 11,000 colleges.
- ◆ Poor English – a major drawback for most of the university graduates from most of the regions.
- ◆ High Level of emigration: An estimated 40,000 IIT graduates have migrated to US.
- ◆ Middle Managers lacks international experience to switch to the multinationals

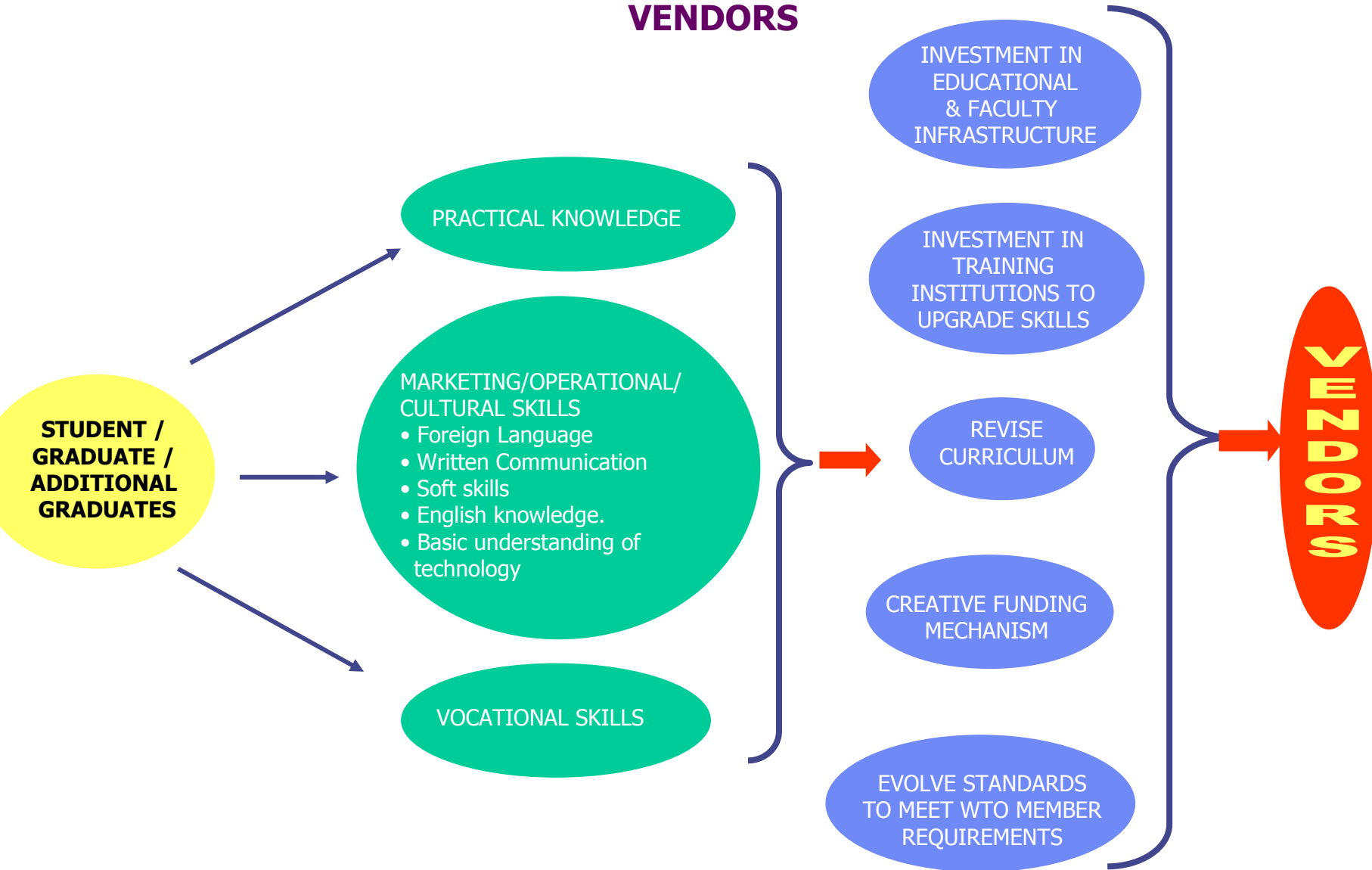
UN-EVEN PATTERN OF ENROLEMENT IN INDIA



BROAD CONCLUSIONS

- ◆ **Demand of skilled workers will soon exceed supply. (NASSCOM estimates shortage of 2,35,000 IT Professionals by 2008)**
- ◆ **Wages will further increase.**
- ◆ **Significant shortfall may be in Business process off shoring.**
- ◆ **Major threat to India's vendors to lose competitive edge.**

SKILL – SET MODEL FOR OFF-SHORING VENDORS



Skill sets of students should be internationally accepted

ISSUES FOR FURTHER RESEARCH

This presentation is exploratory in nature to assess the emerging supply constraints in off-shoring business in context to India .

Research Inputs required for the identified actions:

- **To identify the emerging areas of off shoring beyond IT & BPO**
- **To develop the appropriate skills & competencies in more than 80% generalists pool of graduates.**
- **To develop appropriate curriculum & training programs for
Imparting relevant competencies & skills among graduates.**
- **Upgrade educational infrastructure for training of teachers.**
- **Upgrade educational infrastructure for training students.**

THANK YOU