# Information Systems (IN5210)
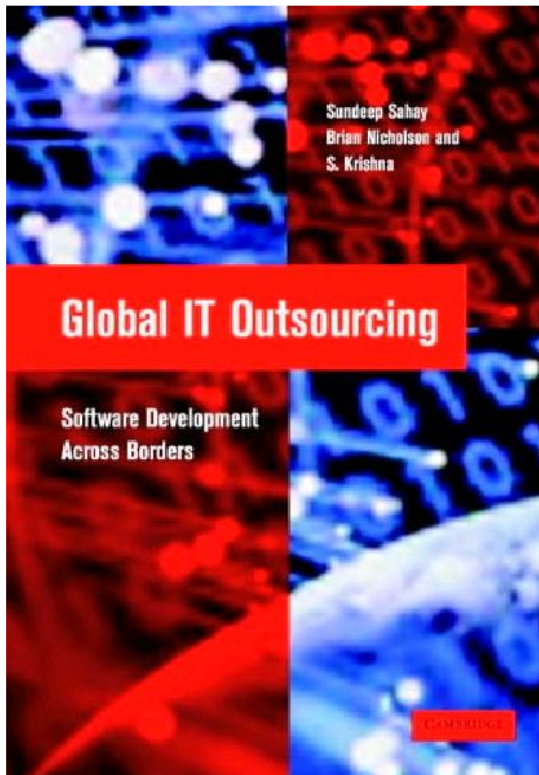# Global Sourcing



Prof Brian Nicholson

Brian.nicholson@manchester.ac.uk

# Learning objectives

- Outline the rationale and determine the implications of global sourcing

# Agenda

- Background and definitions
- What, why, where of global sourcing
- "The Human Cloud"
- Impact Sourcing

**Global IT Outsourcing**

Sundeep Sahay
Brian Nicholson and
S. Krishna

**Software Development Across Borders**

CAMBRIDGE

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## Transaction costs and control of outsourced accounting: Case evidence from India

Brian Nicholson*, Julian Jones, Susanne Espenlaub

Accounting and Finance Group, Manchester Business School, Booth Street West, Manchester M15 6PB, UK

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## Some political and cultural issues in the globalisation of software development: case experience from Britain and India

Brian Nicholson [a,*], Sundeep Sahay [b]

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## Embedded knowledge and offshore software development

Brian Nicholson [a,*], Sundeep Sahay [b]

[a] School of Accounting and Finance, University of Manchester, Mezzanine Floor, Crawford House, Booth Street East, Manchester M13 9PL, UK
[b] Institute of Informatics, University of Oslo, Oslo, Norway

SUSTAINABLE GLOBAL
OUTSOURCING
Achieving Social and Environmental
Responsibility in Global IT and Business

RON BABIN AND BRIAN NICHOLSON

TECHNOLOGY, WORK AND GLOBALIZATION

Corporate Social and Environmental Responsibility and Global IT Outsourcing

# OFFSHORE ACCOUNTING OUTSOURCING: THE CASE OF INDIA

A report by

Dr Brian Nicholson
Manchester Business School

Dr Aini Aman
Universiti Kebangsaan, Malaysia
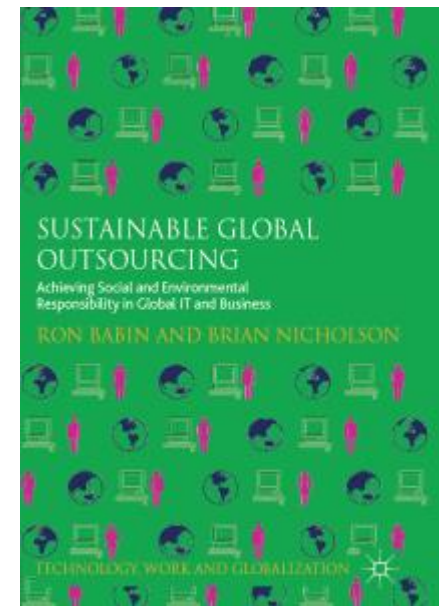
## MIS QUARTERLY EXECUTIVE

# CORPORATE SOCIAL AND ENVIRONMENTAL RESPONSIBILITY AND GLOBAL IT OUTSOURCING[1]

**Ron Babin**
**Ryerson University**
**(Canada)**

**Brian Nicholson**
**Manchester Business School (United Kingdom)**

## Executive Summary

*Buyers of IT outsourcing services increasingly expect providers to demonstrate strong commitment to corporate social and environmental responsibility (CSER). We identify two key challenges for CSER in global information technology outsourcing (GITO): (1) environmental issues related to increasing power consumption and related greenhouse gas emissions, and to e-waste, and (2) social responsibility issues, which are growing in importance as global CSER guidelines, standards, reporting frameworks, and regulations raise public expectations. Our research has identified four key trends in the CSER knowledge and capabilities required by outsourcing buyers and providers. We provide guidelines for acquiring the knowledge and capabilities that will enable buyers and providers to effectively integrate CSER within GITO.*

Research Article

# Exploring the effects of liminality on corporate social responsibility in inter-firm outsourcing relationships

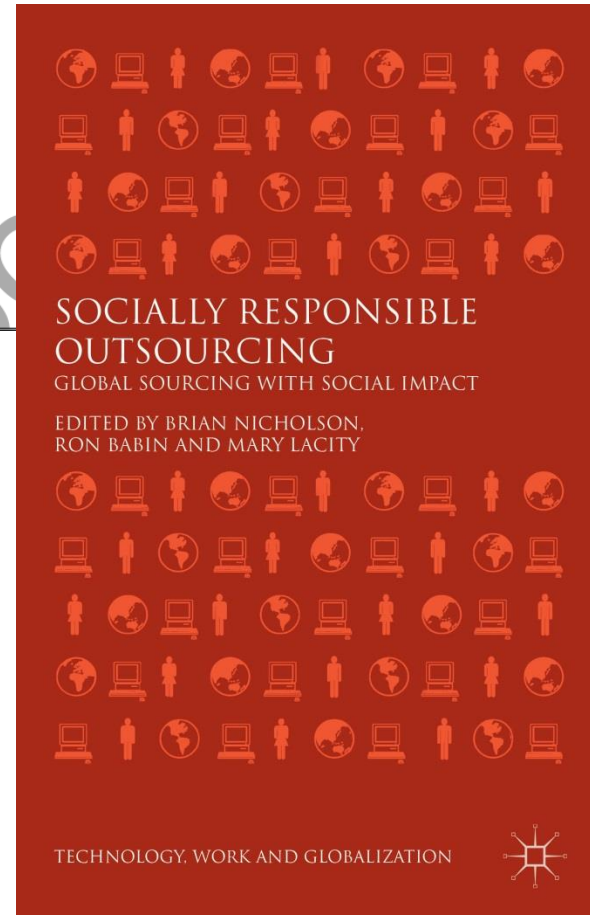Brian Nicholson[1], Ron Babin[2], Steve Briggs[3]

[1]Manchester Business School, University of Manchester, Manchester, UK;
[2]Ted Rogers School of Management, Ryerson University, Toronto, Canada;
[3]Leadership Partner, Gartner Group, Manchester, UK

Correspondence:
B Nicholson, Manchester Business School, University of Manchester, Booth Street West, Manchester M15 6PB, UK.
E-mail: brian.nicholson@manchester.ac.uk

SOCIALLY RESPONSIBLE OUTSOURCING
GLOBAL SOURCING WITH SOCIAL IMPACT

EDITED BY BRIAN NICHOLSON,
RON BABIN AND MARY LACITY

TECHNOLOGY, WORK AND GLOBALIZATION

# Definition of offshore outsourcing

- Offshore outsourcing describes the practice of contracting to outside vendors in another country, in which the client company has no direct ownership
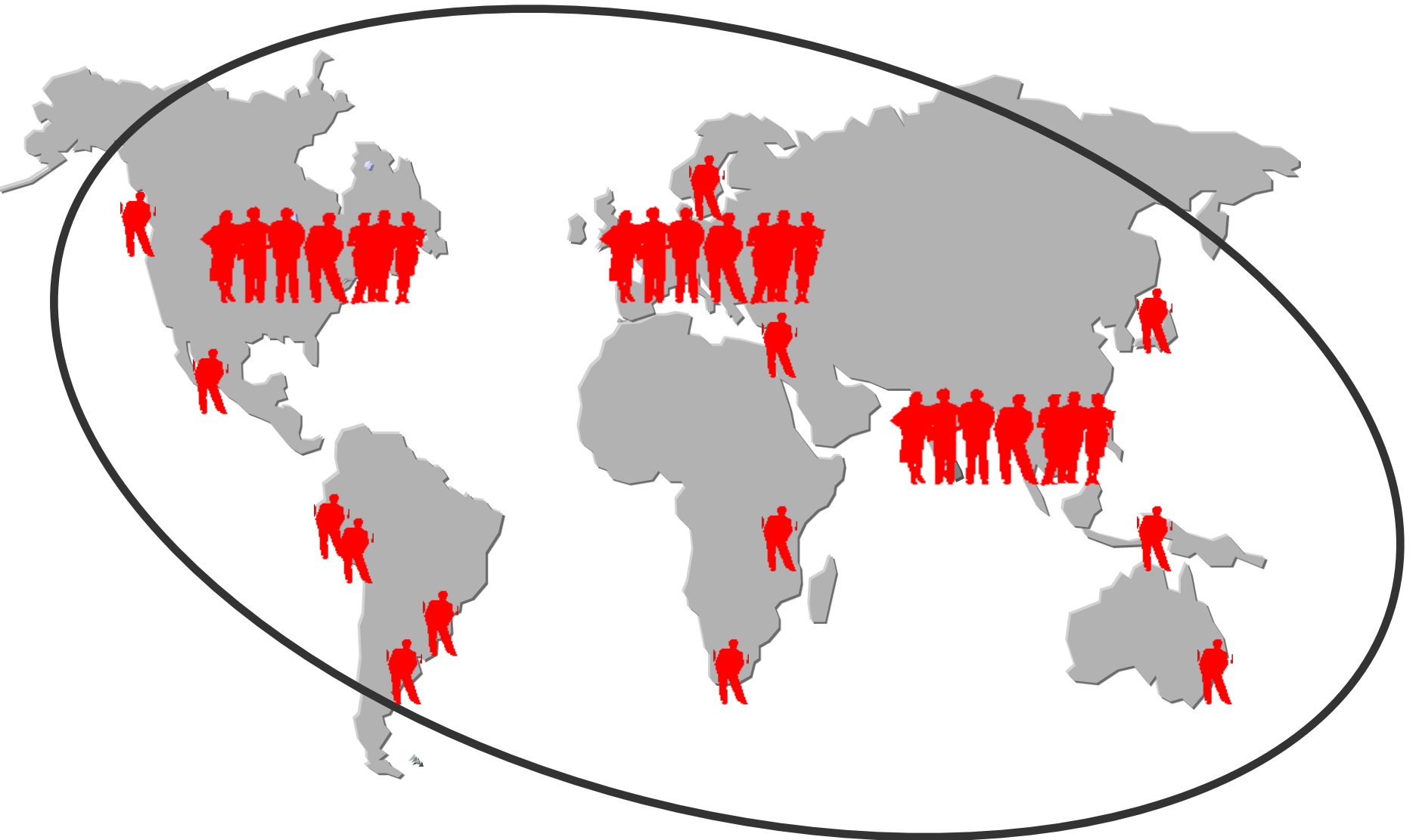- Also offshore "captives" - offshoring

# IT enabled distributed expertise

*Genpact, Accenture (ACN ), IBM Services, or another big outsourcing specialist dispatches teams to meticulously dissect the workflow of an entire human resources, finance, or info tech department. The team then helps build a new*

Historically : Manufacturing was disaggregated globally – services were bought and consumed in places

Today : services are disaggregated globally and consumed globally

*Cisco Systems (CSCO ), ABN Amro (ABN ), Unilever, Rockwell Collins (COL ), and Marriott (MAR ) were among those that signed such megadeals, worth billions.*
Bloomberg Businessweek

# What, why and where of offshore outsourcing

- Why outsource offshore
- What to outsource offshore
- Where are the venues for offshore outsourcing

# Why outsource offshore?

- Technology "push" :

    - digital information can be transported cheaply and easily

    - Dramatic reduction in cost of hardware, cheap broad band fibre, satellite communication

    - communication and groupware technologies: low cost or free - email, skype video conference, net meeting, various social computing etc

First stored programme computer 1948 : The Manchester Baby

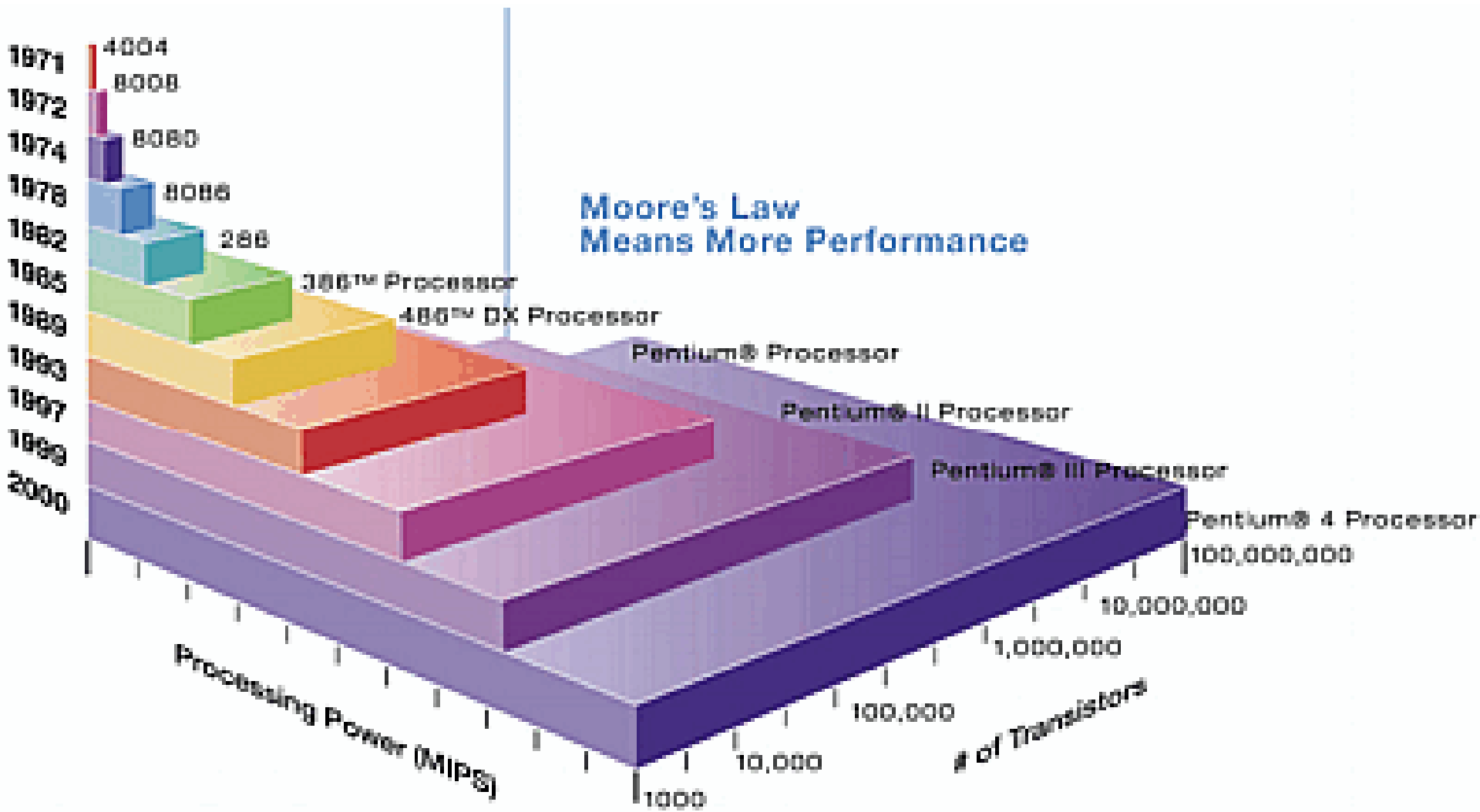| Feature | Manchester Baby, 1948 | Processor from year 2000 |
| --- | --- | --- |
| Size | Filled a room | fills 7 mm by 3mm of silicon |
| Electrical power usage (Watts) | 3.5kW (3 500 W) | 215mW (0.215 W) |
| Instructions executed per second | 700 | 100,000,000 |
| Energy efficiency (Joules per instruction) | 5 | 0.000 000 002 (e.g. 2,000,000,000 times more efficient than The Baby) |

$20 million

Staggering fact number 1: The worlds most powerful Cray supercomputer available when I was an computing undergraduate late 80's ("the world's most expensive love seat") is easily beaten by the iPad on your desk !

Staggering fact number 2 : The equivalent entire computer memory available on the whole planet 50 years ago can today be bought or leased to you or I for about $100 !!

Cost (US$)

1000
100
10
1
0.1
0.01

1980    1982.5    1985    1987.5    1990    1992.5    1995    1997.5    2000

http://www.basic.northwestern.edu/primers/techfest.html
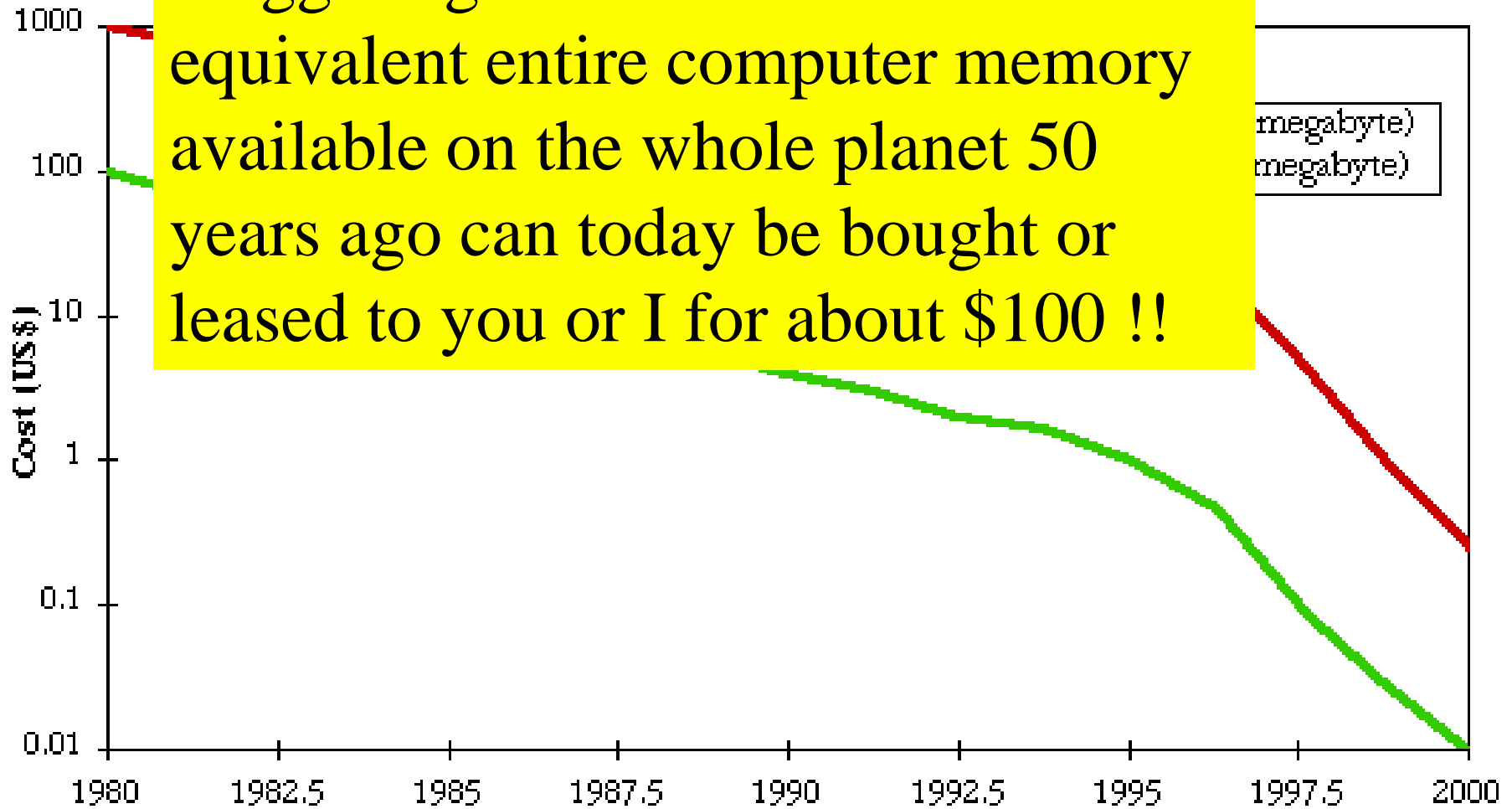
# Number of transsistors on a chip doubles every two years



Moore's Law
Means More Performance

- Satellites
  - 1965 Intelsat I 240 telephone conversations or 2 TV channels
  - 1998 Intelsat VIII 112500 telephone conversations and 3 TV
  - 100 + geo stationary satellites in orbit
- Fibre optics
  - A single pair of optical fibres could carry North Americas entire long distance traffic. Gemini completed 1998 had more capacity than all existing transatlantic cables combined

Staggering fact number 3 : The dramatic increase of global connectivity

Fiber in use as of year-end 2004

>500    500    50    10

Gbps
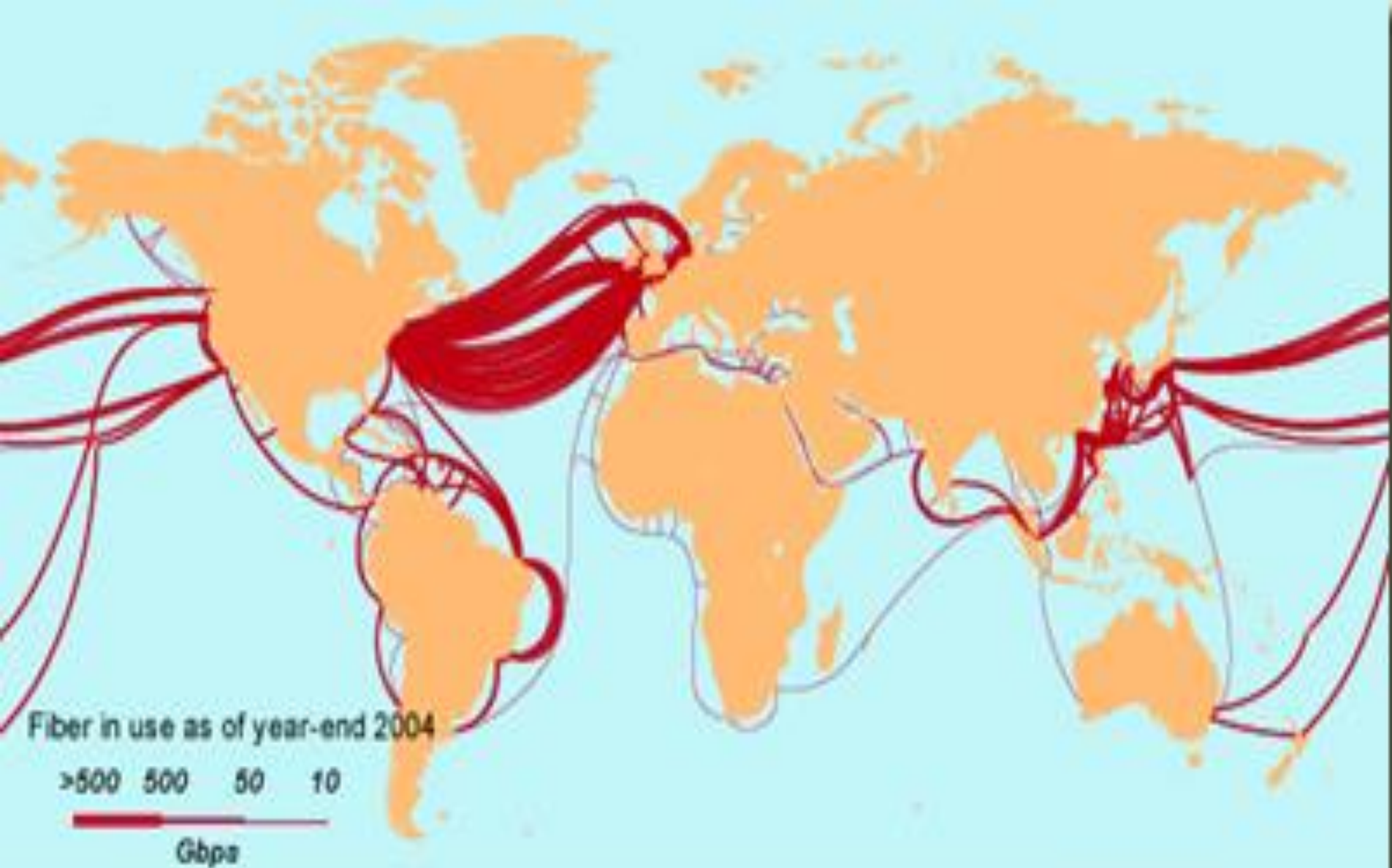
Wireless and mobile devices have allowed connectivity without expensive physical infrastructure

# Free collaboration

# Why outsource offshore?

- Managerial "push"
    - shortage of skilled programmers
    - increased competition
    - faster product cycles

# Why outsource offshore?

- Managerial "pull"
  - cost
  - free resources
  - access new skills, ideas and technology
  - access new markets
  - flexibility in staffing

# Why not outsource offshore?

# Why not outsource offshore?

Job loss

Beneficiaries of labour cost arbitrage?  race to the bottom

Workers in developing countries not unionized,  health and safety, pressured into working long hours


Thank You India For Taking My Job

# Why not outsource offshore?

- Additional coordination and supervision costs
- Loss of internal technical knowledge
- Problems of quality and time
- Intellectual property
- Cultural differences

# The case of the small but global accounting firm

- Small 10 person accounting firm in North Wales

- Outsourced accounts preparation to India and Pakistan

- Managed risk by outsourcing only client work of low importance, benefits of more time for strategic analysis

- Outsourcing manager resigned and poached outsourcing relationships and clients !

Cultural management example : mobilising creativity with conflict and alcohol in a British software company with an India subsidiary

- Rising cost of salaries in India
- Recession and public image, unemployment running at 47% of under 24year old in Spain

# Reshoring : why?

# What to outsource

- IT enabled services
- IT services

## IT enabled services

- Software maintenance, support
- Customer Interaction Services
- Back Office Operations
- Insurance Claims Processing
- Medical Transcription
- Legal Databases
- Online Education
- Data Digitisation
- Payroll / HR Services
- Web site Services
- Accountancy Services
- Animation
- XRays

# Where are the venues?

| Rank | Country | Financial attractiveness | People skills and availability | Business environment | Total score |
|---|---|---|---|---|---|
| 1 | India | 3.13 | 2.48 | 1.30 | 6.91 |
| 2 | China | 2.59 | 2.33 | 1.37 | 6.29 |
| 3 | Malaysia | 2.76 | 1.24 | 1.97 | 5.98 |
| 4 | Thailand | 3.05 | 1.30 | 1.41 | 5.77 |
| 5 | Indonesia | 3.23 | 1.47 | 0.99 | 5.69 |
| 6 | Egypt | 3.07 | 1.20 | 1.37 | 5.64 |
| 7 | Philippines | 3.19 | 1.17 | 1.24 | 5.60 |
| 8 | Chile | 2.41 | 1.20 | 1.89 | 5.50 |
| 9 | Jordan | 2.99 | 0.91 | 1.59 | 5.49 |
| 10 | Vietnam | 3.21 | 1.02 | 1.24 | 5.47 |
| 11 | Mexico | 2.48 | 1.50 | 1.45 | 5.43 |
| 12 | Brazil | 2.18 | 1.83 | 1.37 | 5.39 |
| 13 | Bulgaria | 2.83 | 0.89 | 1.62 | 5.34 |
| 14 | United States | 0.47 | 2.71 | 2.15 | 5.33 |
| 15 | Ghana | 3.26 | 0.70 | 1.36 | 5.32 |
| 16 | Sri Lanka | 3.13 | 0.95 | 1.17 | 5.25 |
| 17 | Tunisia | 2.86 | 0.91 | 1.45 | 5.22 |
| 18 | Estonia | 2.06 | 0.93 | 2.20 | 5.19 |
| 19 | Romania | 2.63 | 0.91 | 1.59 | 5.12 |
| 20 | Pakistan | 3.12 | 1.08 | 0.91 | 5.11 |
| 21 | Lithuania | 2.31 | 0.91 | 1.99 | 5.11 |
| 22 | Latvia | 2.28 | 0.96 | 1.96 | 5.10 |
| 23 | Costa Rica | 2.67 | 0.89 | 1.50 | 5.07 |
| 24 | Jamaica | 2.77 | 0.79 | 1.49 | 5.06 |
| 25 | Mauritius | 2.32 | 0.95 | 1.77 | 5.04 |
| 26 | Senegal | 3.06 | 0.88 | 1.08 | 5.03 |
| 27 | Argentina | 2.47 | 1.34 | 1.21 | 5.02 |
| 28 | Canada | 0.54 | 2.10 | 2.38 | 5.02 |
| 29 | United Arab Emirates | 2.10 | 0.94 | 2.04 | 4.98 |

| | | | | | |
|---|---|---|---|---|---|
| 30 | Morocco | 2.62 | 0.93 | 1.42 | 4.97 |
| 31 | United Kingdom | 0.43 | 2.13 | 2.38 | 4.94 |
| 32 | Czech Republic | 1.74 | 1.14 | 2.07 | 4.94 |
| 33 | Russia | 2.39 | 1.45 | 1.08 | 4.92 |
| 34 | Germany | 0.42 | 2.10 | 2.40 | 4.91 |
| 35 | Singapore | 0.72 | 1.56 | 2.62 | 4.90 |
| 36 | Uruguay | 2.46 | 1.00 | 1.43 | 4.89 |
| 37 | Hungary | 1.95 | 1.01 | 1.92 | 4.88 |
| 38 | Poland | 1.82 | 1.22 | 1.73 | 4.77 |
| 39 | South Africa | 2.28 | 1.02 | 1.44 | 4.74 |
| 40 | Slovakia | 2.05 | 0.94 | 1.75 | 4.73 |
| 41 | France | 0.40 | 2.03 | 2.29 | 4.72 |
| 42 | Ukraine | 2.63 | 0.97 | 0.99 | 4.59 |
| 43 | Panama | 2.48 | 0.70 | 1.40 | 4.59 |
| 44 | Turkey | 2.01 | 1.23 | 1.29 | 4.54 |
| 45 | Spain | 0.57 | 1.90 | 2.00 | 4.47 |
| 46 | New Zealand | 1.12 | 1.18 | 2.15 | 4.45 |
| 47 | Australia | 0.42 | 1.62 | 2.22 | 4.26 |
| 48 | Ireland | 0.27 | 1.56 | 2.26 | 4.09 |
| 49 | Israel | 0.85 | 1.39 | 1.78 | 4.02 |
| 50 | Portugal | 1.00 | 1.00 | 1.97 | 3.98 |

# Why has India emerged as an offshore venue
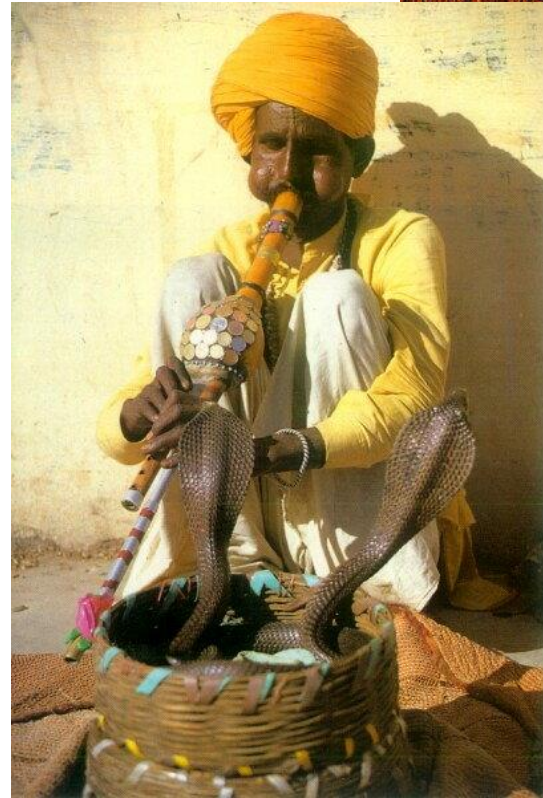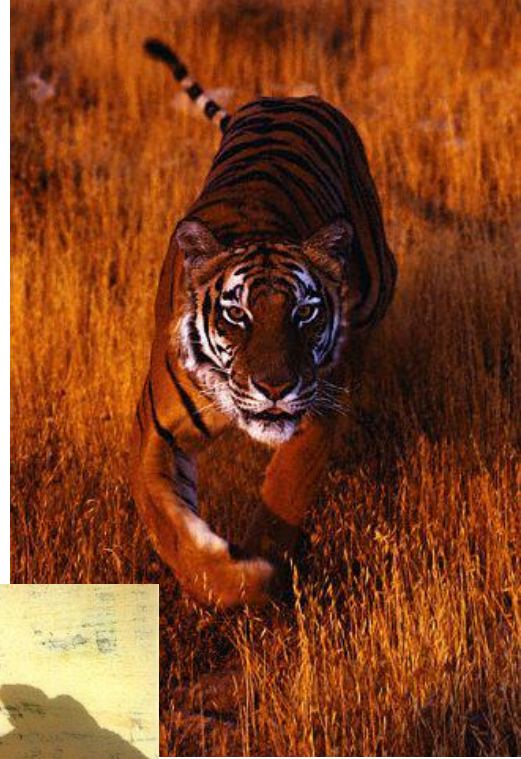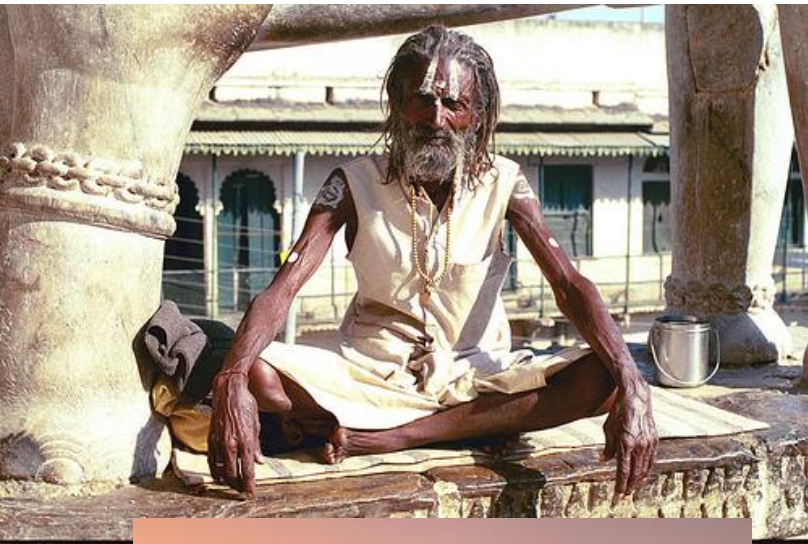
- English language, skills, education, reputation, legal system, good telecommunications
- Early days : body shopping
- Now:  full projects, onshore and offshore staff
- ISO, structured methods,
- Capability maturity model

# The "Human Cloud"

**Table 2**  Three Waves of Outsourcing

| Terms | Definitions |
|---|---|
| Outsourcing (1980s -) | The handing over of assets, resources, activities and/or people to third party management to achieve agreed performance outcomes. (Lacity and Willcocks 2006) |
| Offshoring (1990s -) | The provision of organizational products and services from locations in other countries (Davis et al. 2006) |
| Microsourcing (2000s -) | The provision of micro-tasks and other small enterprise services from an online community of providers residing in an online microsourcing platform (Lu and Zeng 2011; Gefen and Carmel 2008) |

Hire Freelancers & Find Freelance Jobs O...

https://www.freelancer.co.uk/?mkwid=sZpQW6ZmB&crid=40066373017&mp_kw=freelancer&mp_mt=e&

Google

**freelancer**

LOGIN   SIGN UP   Post a Project

# Work done easy

Tell us what you need done and discover talented freelancers within minutes for just a fraction of the cost!

Hire   Work

I need a website made for my new restaurant

14:42
28/10/2014

| PLATFORM MODEL | DESCRIPTION | EXAMPLES |
|---|---|---|
| Facilitator | Connects suppliers and buyers directly through a bidding process | Freelancer, Elance, oDesk, Coffee & Power |
| Arbitrator | Engages multiple suppliers through competitions | crowdSPRING, 99designs, MediaPiston, InnoCentive, Witmart |
| Aggregator | Aggregates hundreds or thousands of microtasks performed by multiple suppliers | Mechanical Turk, MobileWorks, CrowdFlower, CloudFactory |
| Governor | Provides project governance and certifies supplier quality | TopCoder, Trada, uTest, 10EQS |

# Impact sourcing

"employing people at the base of the pyramid, with limited opportunity for sustainable employment, as principal workers in business process outsourcing (BPO) centers to provide high-quality, information-based services to domestic and international clients"
Rockefeller Foundation

samasource


Digital Divide Data

# Case Study: AlphaCorp (A US-based Healthcare Information Technology Company)

- **Locations**: USA (2002), Islamabad-Pakistan (2002) and AJK- Pakistan (2009)

- **Employees:** > 1000

- **Revenue:** $32.5 million (March 31, 2014 )

- **No of Clients:** 930 practices representing approx. 2,020 providers in 40 states of USA (as of March 31, 2014)

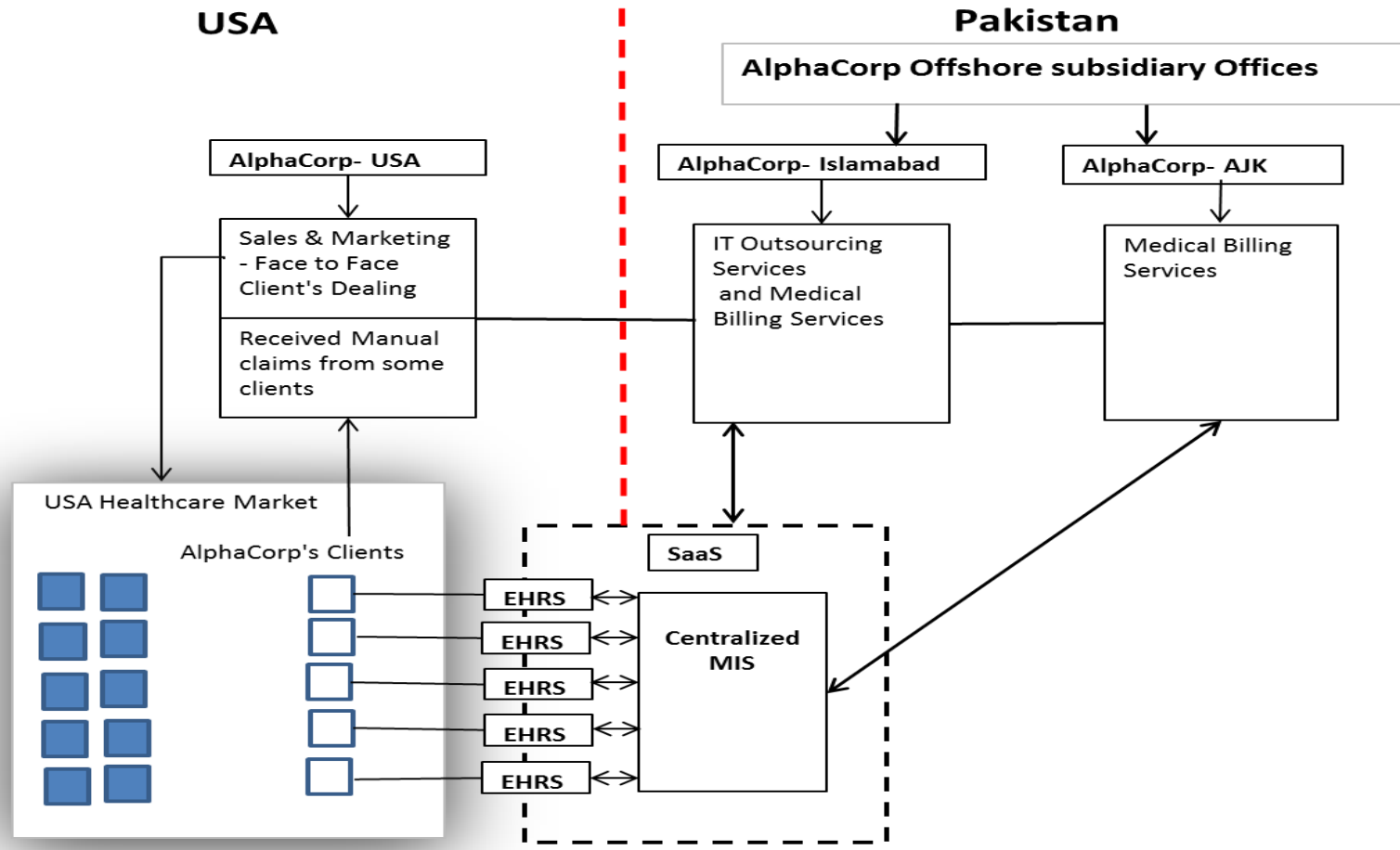- **Legal Status:** A public listed company - NASDAQ stock exchange (2014)

# 2005 Earthquake

# AJK Centre

# Enclaves of Competing Logics

# Conclusion

- Offshore outsourcing controversial but impossible to ignore in almost all business services

- Transaction costs get lower, trend set to continue

# Masters dissertations – "disruptive technologies"

- Digital work platforms – upwork, taskrabbit etc. implications; impact sourcing; Unions, development

- A.I., robotic process automation

- Digital startups / ecosystems in developing countries

- 3d printing, V.R.,

- See diode network
  https://diode.network/about/