



The means to compete

Benchmarking IT industry competitiveness

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What factors impact IT industry competitiveness—and how?

IT Competitive

- Research conducted from November 2006 through April 2007
- Component 1 – building the “IT industry competitiveness index”
- Component 2 – conducting in-depth interviews with >20 executives and experts
- Sponsored by the Business Software Alliance
- All research and analysis conducted by the Economist Intelligence Unit

Most IT Competitive Index leaders are also top IT sector performers

The IT industry competitiveness index

| Rank | Country | Score | Rank | Country | Score |
|------|------------|-------|------|------------|-------|
| 1 | US | 77.4 | 12 | Neth'lands | 62.9 |
| 2 | Japan | 72.7 | 13 | Finland | 62.7 |
| 3 | S Korea | 67.2 | 14 | Norway | 59.7 |
| 4 | UK | 67.1 | 15 | Ireland | 58.6 |
| 5 | Australia | 66.5 | 16 | Germany | 58.2 |
| 6 | Taiwan | 65.8 | 17 | N Zealand | 57.5 |
| 7 | Sweden | 65.4 | 18 | France | 55.8 |
| 8 | Denmark | 64.9 | 19 | Austria | 55.3 |
| 9 | Canada | 64.6 | 20 | Israel | 54.5 |
| 10 | Switz'land | 63.5 | 21 | Hong Kong | 53.4 |
| 11 | Singapore | 63.1 | 22 | Belgium | 53.3 |

IT labour productivity:

Total output per IT employee

| | | | |
|----|------------|----|-----------|
| 1 | Taiwan | 12 | Norway |
| 2 | S Korea | 13 | UK |
| 3 | Ireland | 14 | Belgium |
| 4 | Singapore | 15 | Germany |
| 5 | Australia | 16 | Israel |
| 6 | Switz'land | 17 | France |
| 7 | US | 18 | Austria |
| 8 | Japan | 19 | Brazil |
| 9 | N Zealand | 20 | Greece |
| 10 | China | 21 | Hong Kong |
| 11 | Denmark | 22 | India |

Competitive IT industries beget strong IT companies

✓ The US boasts the strongest environment in the world for IT firms



• *Ranks in the top five in all index categories*

✓ Asia-Pacific nations are prominent in the top tier of leaders



• *Combines scale and quality in all key areas that promote competitiveness*

• *East Asia and Australia are strong performers in R&D – a heavily weighted index category*

✓ Few can compensate for major environmental weaknesses



• *Asia and Australia – as well as the US – do better than most in developing talent for the industry*

• *India and China are exceptions, but few can replicate their unique assets*

• *Their cost advantages will erode*

The key findings

Government priorities: ensure the flow of talent; support competition and innovation – without stifling them

✓ Skills requirements are changing radically



- *The supply of skilled talent will tighten*
- *Only a few – US, Singapore, Australia – have begun to address new demands on training*

✓ Legal and business environments are key differentiators



- *Open competition among IT firms must be balanced with robust protection for IPR*
- *Few APAC nations match the US and western Europe in legal & business environment strength*

✓ Eager governments must strike the right balance



- *Wise policy – particularly in education, R&D, tech adoption – can help enable competitiveness*
- *But they must avoid picking winners*

The results – regional

Asia-Pacific leaders excel in R&D and supplying talent, but exhibit weaknesses in legal protection and infrastructure

Asia-Pacific index performance

| Rank | Country | Score | Rank | Country | Score |
|------|-----------|-------|------|-------------|-------|
| 2 | Japan | 72.7 | 41 | Thailand | 31.9 |
| 3 | S Korea | 67.2 | 46 | India | 29.1 |
| 5 | Australia | 66.5 | 47 | Philippines | 28.7 |
| 6 | Taiwan | 65.8 | 49 | China | 27.9 |
| 11 | Singapore | 63.1 | 50 | Sri Lanka | 26.0 |
| 17 | N Zealand | 57.5 | 57 | Indonesia | 23.7 |
| 21 | Hong Kong | 53.4 | 60 | Pakistan | 20.2 |
| 36 | Malaysia | 34.9 | 61 | Vietnam | 19.9 |

Overall business environment

1. Hong Kong 7. Australia

IT infrastructure

4. Australia 9. S Korea

Human capital

2. Singapore 4. Australia

Legal environment

6. Australia 16. Singapore

R&D environment

1. Japan 2. S Korea

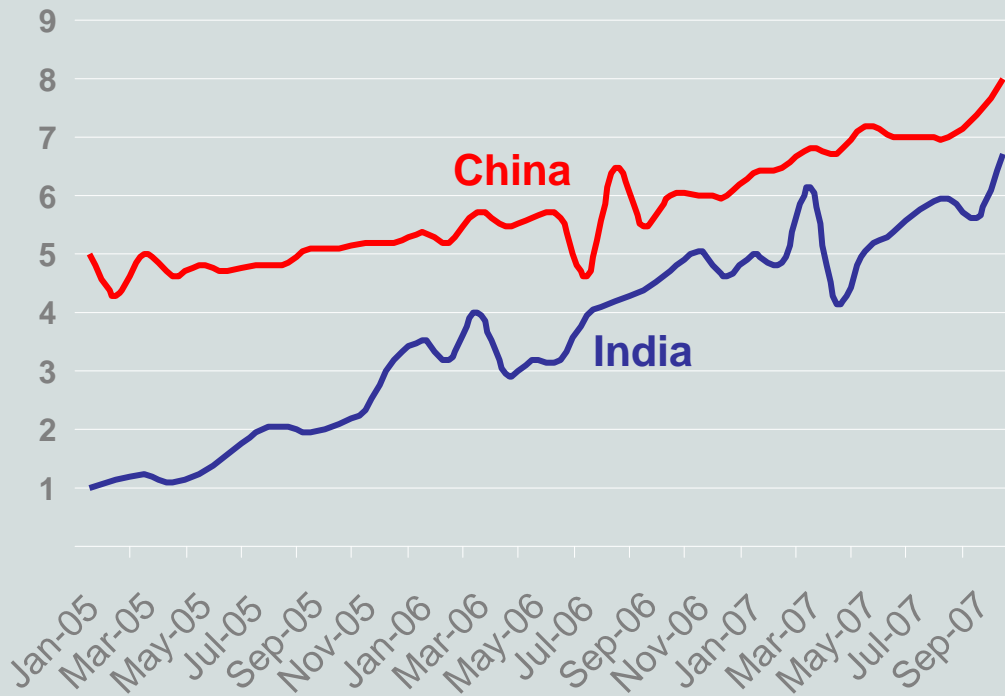
Support for IT industry development

3. Singapore 6. Australia

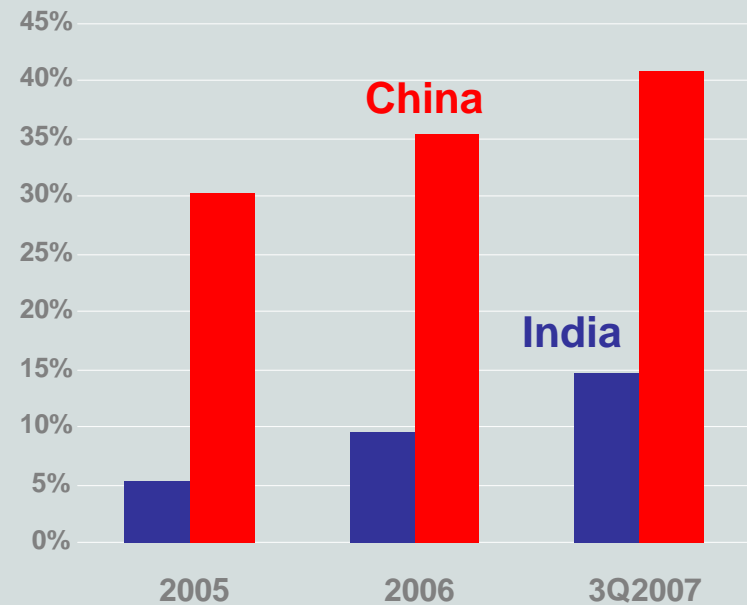
Light touch or iron fist?

In key sectors, India's liberalization is emulating China's command economy growth

Average monthly new mobile subscriptions millions



Mobile accounts per 100 population



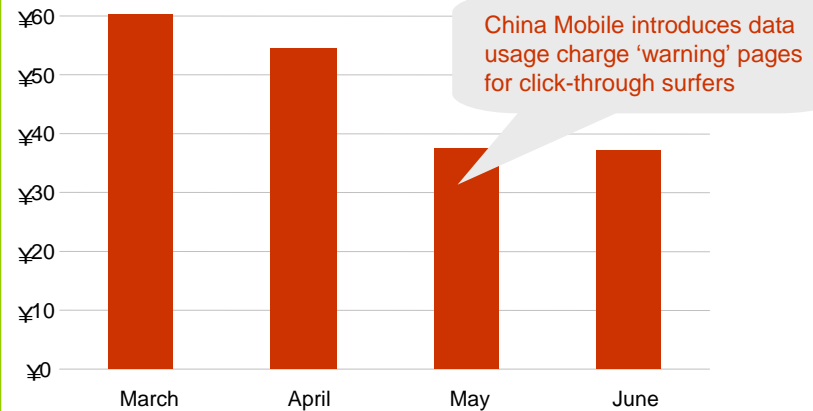
Source: COAI, Marbridge Consulting

E-Commerce with Chinese characteristics

- B2C and C2C models are mixed
- 50m online consumers, spending more than they do at Wal-Mart
- But the Internet is still government property
 - China Mobile effectively 'owns' 90% of mobile Internet
 - Will a 3G launch (when, if) break China Mobile's Internet control?



China Mobile WAP service providers:
Monthly revenues, 2007 (RMB m)

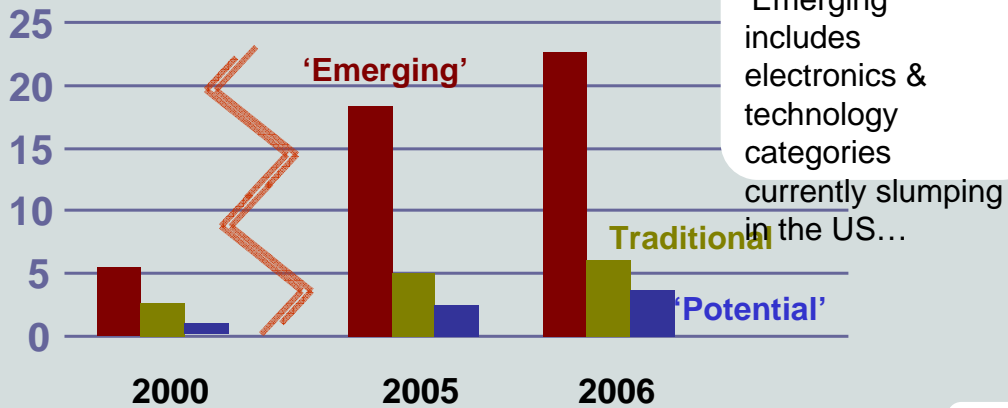


Source: Pacific Epoch

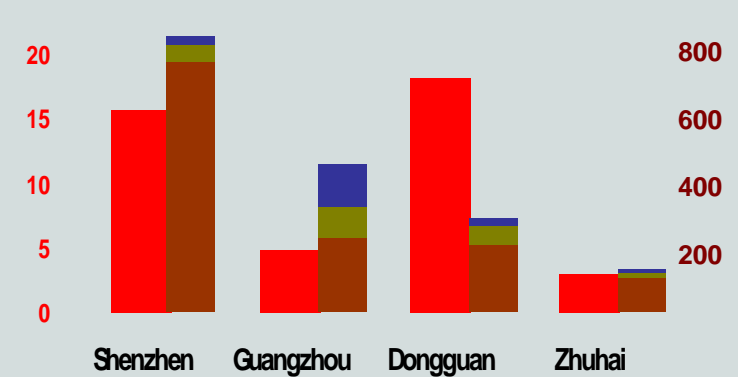
When growth engines grow up

Pearl River Delta technology manufacturing is transforming painfully—but we'll all be better for it

Industrial output in Guangdong by strategic sector
RMBbn



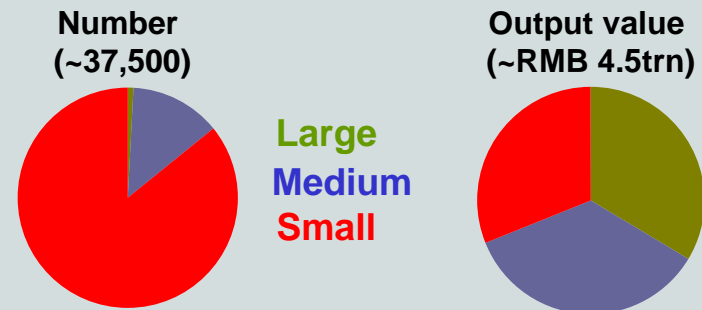
Estimated factories (000s)



...and produced by far too many small factories

- The 20% myth
- Good news for the well-branded
- PRD to become a sourcing hub

Industrial enterprises in Guangdong



Source: Guangdong Statistical Yearbook 2007

When growth engines grow up, II:

Indian ITES climbs up the value chain—and out of India?

Indian IT service companies starting to move in 'mature market' ways

- shifting operational focus to cheaper markets (Philippines, South America, Russia)
- M&A to buy market share and scale

MNCs will have to (and should) stop equating outsourcing with cost reduction

- India is making fast moves into 'full solutions'...and won't be competing on price performance
- Outsourcing relationships will change dramatically in the region in coming

Will China's and India's maturing 'centres of excellence' help push Vietnam, Philippines *et al* move up faster?

