

# **Repositioning Asia in the Knowledge-based Economy**

**The Challenges and Opportunities for  
Industry and Society**

Catalyst for Change

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## “New Economy”?

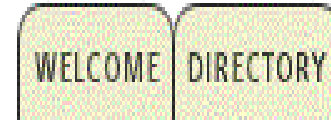
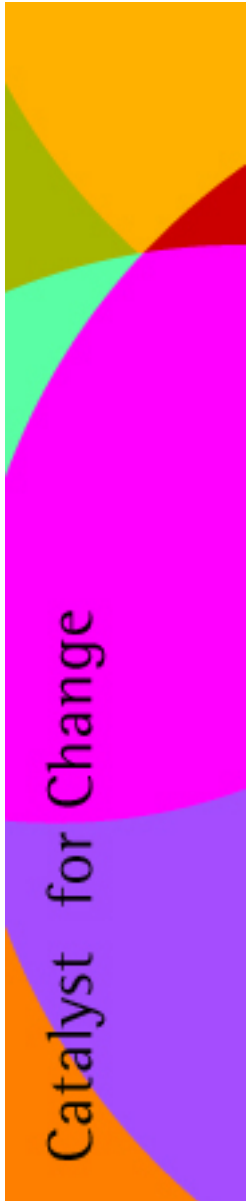
**Fast Times in the New Economy as Asians join Internet start-ups in droves.**

Asiaweek



[www.ida.gov.sg](http://www.ida.gov.sg)





# What Paradigm? Shift where ?



# Traditional vs. KBE

## OLD ECONOMY

### Business Model:

- ✦ Fixed salary, fixed increment, iron rice bowl, don't take risks
- ✦ Fringe benefits (chauffer-driven cars, first class air tickets)
- ✦ focus on net profit only
- ✦ *Monopolistic* (regulation protected)
- ✦ *Diversify* to survive

### Nature:

- ✦ Bricks & mortar
- ✦ Maintain market shares
- ✦ Steady, boring
- ✦ Fixed in mindset on how to do business, *unwilling to change*
- ✦ Vision = printed statement

## KNOWLEDGE-BASED ECONOMY

### Business Model:

- ✦ *Entrepreneurship*, risk-oriented
- ✦ New ways of compensating CEOs & top executives (stock options, jet planes)
- ✦ ROE's, enhancing shareholder value
- ✦ *Alliances* (global basis)
- ✦ Outsource to others, *focus* on core competencies

### Nature:

- ✦ Clicks
- ✦ Building market shares
- ✦ Fast moving, need to innovate & create
- ✦ Change-oriented/*search for change*
- ✦ Vision = echoed in employees

# Addressing the Opportunity

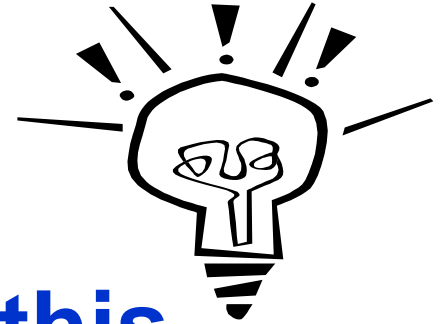
- ➔ Asia's changing economic landscape
- ➔ Opportunities and challenges for Asia in the KBE
- ➔ Impact of the KBE on businesses
- ➔ Digital Divide & Ethnic Divide
- ➔ Singapore's approach to compete in the KBE
- ➔ Singapore and India partnership
- ➔ Seeing the possibilities and living them (video presentation)

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# What Has Changed?

- The internet is driving three key areas:
  - ↳ **Integration, convergence, and time-to-market**
- E-business is real and in a dynamic growth path
- **“Speed to profitability”** is more important than **“speed to market”**
  - ↳ Focus on not just revenue but also profit models
  - ↳ First mover advantage is good but sustainability is crucial
- Old economy business management skills apply to e-business as well

# What Is the Knowledge-Based Economy?



- **Two major forces shape this emerging economy.**

➔ Globalisation of businesses



➔ Revolution in IT



# Changing Landscape in Post-Asian Financial Crisis

- ⚡ New found confidence in the New Economy
- ⚡ Convergence of IT, Telecom and Media
- ⚡ Accelerate changes and paradigm shifts in way businesses are conducted, services are delivered and markets are reached
- ⚡ Brick and mortar businesses threatened by “virtual” companies -- “space ships” that are on different plane from the traditional players
- ⚡ Talent is a Global Game Now and Has No Passport
- ⚡ Mergers & Alliances are aplenty





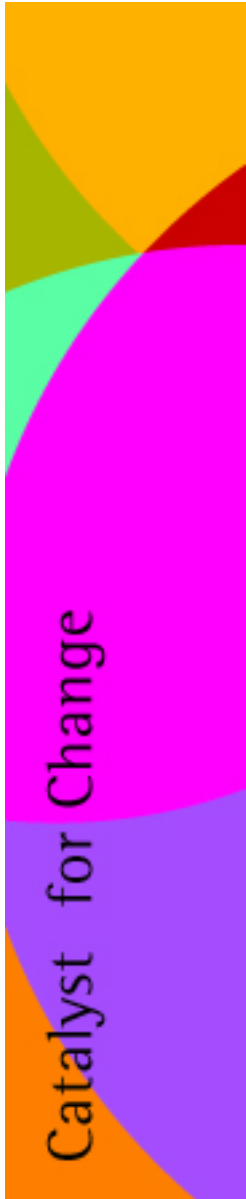
# Asia: New Opportunities



- Internet users in Asia will reach 233 million in 2005 (Lehman Brothers) - Asia will make up almost half of world's Internet users (Lehman Brothers)
- B2C e-commerce in Asia will reach \$1.2 billion in 2005 (Lehman Brothers)
- B2B e-commerce in Asia will reach \$1.2 billion in 2005 (Lehman Brothers)
- IT spending in region will reach \$44 billion in 2005 (IDC)

**Asians Likely to Overtake Americans on the Web**

-- Bloomberg News 13 September 2000



## Asia's IT Initiatives

- ➔ **Hong Kong:** Digital 21 and Cyberport
- ➔ **South Korea:** CyberKorea21
- ➔ **Taiwan:** Asia-Pacific Regional Operations Centre (APROC)
- ➔ **Wide Network of Interconnected Asian Information Societies:** The Asia-Pacific Information Infrastructure (APII)

# Asia: Technology Challenges

## ⚡ Technological achievements in Asia

- ➔ Taiwan is world's largest maker of PCs
- ➔ India -- where 158 Fortune 500 companies outsourced their software developments to last year
- ➔ Singapore -- home to world's largest sound card maker company (Creative Technology)

## ⚡ Asia needs to:

- ➔ develop "endogenous" technology
- ➔ be early adopter of cutting edge technology

# eASEAN



PEACE  
STABILITY  
COURAGE  
DYNAMISM  
PURITY  
PROSPERITY

- ⚡ ASEAN: an economic cyberzone
- ⚡ ASEAN Highway for High-Speed Connectivity: Malaysia's MSC, Indonesia's Nusantara 21, Thailand's Phuket Cyberport, Philippines IT21 and Singapore ONE
- ⚡ Governments to put in place laws and policies to liberalise market
- ⚡ Private sector to supply technology, resources and creativity



# The KBE and What It Means for Asia



- ✦ **Mindset Change:** higher degrees of freedom, risk taking, embracing change, creative destruction
- ✦ Effort to steer education towards creative and independent learning environment -- **Lifelong Learning**
- ✦ **Talent is the key** Race to attract foreign talent and retain local talent
- ✦ **Competition** will spur development and growth -- Market Liberalisation
- ✦ Degree of openness to **collaboration across industries and countries**
- ✦ **Conducive environment** for start-ups and technopreneurs

# Government's Roles in KBE

## ⚡ Changing role of Government

- Not Master of the Universe
- What's important is a common understanding of what direction to take, and ability to execute with speed and flexibility
- Governments need to work closely with industry to co-create a conducive environment for innovation

## ⚡ Direction-setting, but not prescriptive

- Provide a roadmap for the industry
- Sense-&-respond: responsive to change

## ⚡ A new type of partnership

- public sector as catalyst, facilitator & educator
- sharing the vision; helping human networks come together; providing a framework for action



# Business Models in the KBE

## ⚡ It's a whole new world

- ➔ New breed of companies with new valuation methods
- ➔ New business models based on new types of “fundamentals”
- ➔ An onslaught of new technologies coming out of all types of “garages”

## ⚡ What's underlying it

- ➔ A new revolution
- ➔ A new generation
- ➔ A new lifestyle



# KBE and the Industry: Challenges and Opportunities

- ⚡ e-business is real and in a dynamic growth path
- ⚡ focus not just on revenue but post-NASDAQ correction, P2P (path to profitability)
- ⚡ old economy business management skills apply to e-business as well
- ⚡ deconstructing of businesses -- KBE separates the physical and informational components of businesses with business value of information being competitive advantage



# KBE and Society

## ⚡ Are all profiting from KBE?

- Less than 1% of people in South Asia are online even though it is home to one-fifth of the world's population
- Structural unemployment -- companies need workers yet a pool of unemployable workers

## ⚡ Digital Fault-lines: Education (functional literacy), Income, Ethnicity, Language, Mindset

# Asian Language Content

- ⚡ **Dominance of English** -- Four-fifths of all websites are in English, which is understood by only one in 10 people in the world
- ➔ **Singapore is encouraging the growth of multi-lingual content** -- proliferation of Asian content

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50 • TECH & SCIENCE THE STRAITS TIMES

## Asian languages to boom on Net

**In three years' time, 70 per cent of online transactions will be done in local languages, forecasts committee chairman of Tamil Internet Conference**

By NATALIE SOH

ASIAN languages are set to be big on the Internet — simply due to Asia's population size and its growing economic power.

"It is reasonable to believe that Asian languages will be used more extensively on the Internet than most western languages, save English," said Mr Arun Mahalingam, chairman of the International Conference Committee, Tamil Internet Conference 2000 and deputy director of the Institute of Policy Studies.

The expected scenario three years from now, he said, is that 70 per cent of Internet transactions will be in local languages, leaving only 30 per cent for English.

He said: "The beauty of the Net is that it allows you to treat your audience in a personalised way — it can help you communicate your messages to your desired audience — in the way they choose to hear it and in the language they are most adept in."

"The Chinese villager is most likely to surf in his native or national language — not English!" he illustrated.

However, much depends on the communities themselves, said Mr Arun, noting that they had to play a proactive role in getting and growing their languages online.

Asian languages that have made headway in the information highway include Mandarin, Japanese, Vietnamese, Korean, Hindi, Tamil, Tagalog and Thai.

And it spells great news for businesses waiting to tap into the vast Asian market as well.

"What if your online store is able to take orders from 60 different Asian languages at the same time?"

But the orders could be processed into a single language that your prefer, that might not have to be English," said Mr Arun.

"The Internet is a truly multi-lingual tool, and should be used as such!"

**ENABLING TOOL: Began 5 years ago**

"ABOUT five years ago, Asian languages started to proliferate on the Web — whether on webpages, e-mail, even as domain names. An overwhelming majority of Asians do not speak or read English, so this is a great enabling tool."

— Tamil Internet Conference committee chairman Arun Mahalingam.

### TAMIL NET CONFERENCE

## International gathering to thrash out standards

WHAT is "file" or "edit" in Tamil?

Technical terms we usually take for granted, but these nitty-gritty details will have to be sorted out when Singapore hosts the next Tamil Internet Conference (TIC2000).

"These are very common terms on the English Inter-

net, but we have five different terms to express the concept of 'file' and perhaps six ways to render 'edit'," said TIC2000 conference chairman Arun Mahalingam.

English has been the dominant language since the beginning of the Net, he noted.

"But about five years ago, Asian languages started to proliferate on the Web — on webpages, e-mail, even as domain names."

"An overwhelming majority of Asians do not speak or read English, so this is a great enabling tool."

And the Tamil Internet has seen an explosion, from a few hundred webpages in 1995 to some 250,000 now, said Mr Arun, who is the deputy director of the Institute of Policy Studies.

The conference, slated from July 23 — 24 at the Singapore International Convention and Conference Centre, will see delegates from India, Sri Lanka, Malaysia, Europe and the US

address issues such as:

- ◆ The need for an international agreement on Tamil fonts.
- ◆ Developing technologies and tools, like Tamil voice-recognition and optical-character recognition — which can "read" Tamil script, then digitise it — for example.
- ◆ Building an online Tamil community.

Said Mr Arun, "The potential is here, the Tamil diaspora is estimated at 65 million around the world.

"The possibilities for e-commerce targeted at these consumers is enormous."

# KBE and Society



- ⚡ Challenge to Cultural Values and Habits
- ⚡ Challenge to eliminate the IT “poverty line” i.e., masses should achieve this minimal level of IT literacy
- ⚡ Opportunity for Govt-Industry partnership to bring everyone up to at least a minimum accessibility to IT

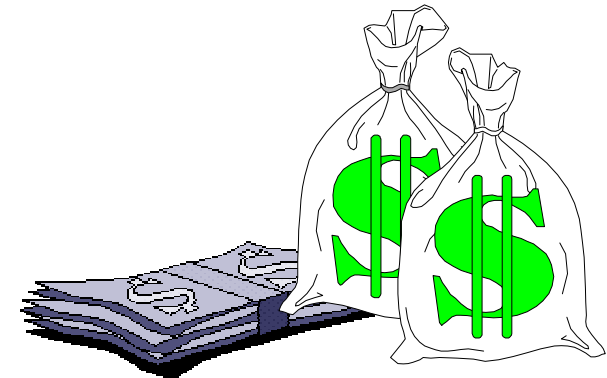
# Singapore's Initiatives

## ⚡ Infocomm21: Programmes to dotcom the 3 Ps (Private, Public and People Sectors)

- Guiding Principles:
  - ↳ Free-market driven
    - The market works
    - Competition is fundamental to innovation and dynamism
  - ↳ Private-sector oriented
    - Planning approach must be consultative
      - » Private sector to take lead where possible
      - » Government will educate, catalyze, facilitator, serve as main “anchor tenant”, but not build or compete with private sector
  - ↳ Business is global
    - we must fit within broader environmental developments & global orientation
    - competitiveness can be gained ... or lost... rapidly
    - Ireland, Finland, Sweden, S Korea are new-econ tigers

# Singapore's Plans in the KBE

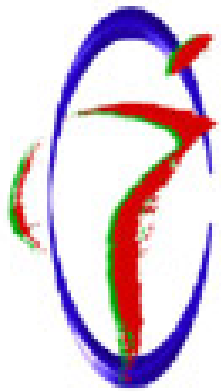
- ⚡ Talent to the fore
- ⚡ Beyond the hard infrastructure, to the soft
- ⚡ A ready capital market to finance ideas
- ⚡ And a support network to help local companies flourish



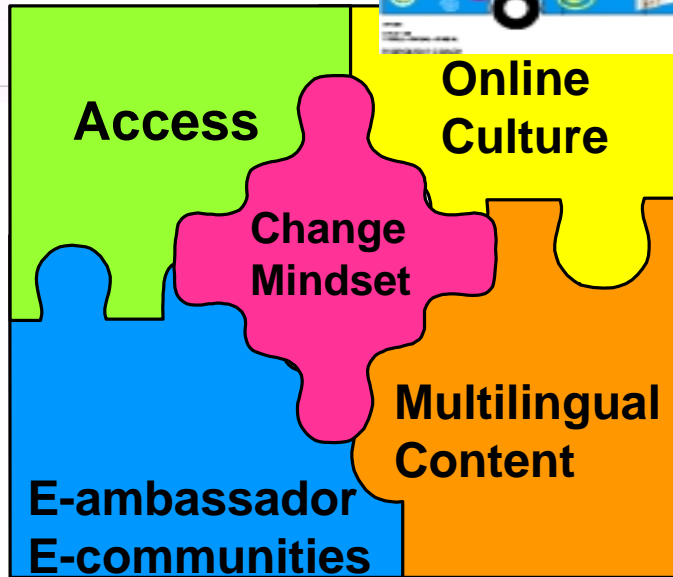


# Singapore's Efforts to Bridge the Digital Divide

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got to be connected



# Gartner's 10 Imperatives to E-Business Success

1. Never plan more than 24 months
2. E-Business Strategy Consistent with Full Business Strategy
3. Different Strokes for Different Folks
4. Equal Weightage to Internal and External Processes
5. Get buy-in from Board
6. Consider alternative ways to reach objectives
7. Recognise and Play by “new rules”
8. Enhance or destroy distribution channels based on value and power
9. Set benchmarks for effectiveness of e-biz strategy
10. Speed and execution are everything



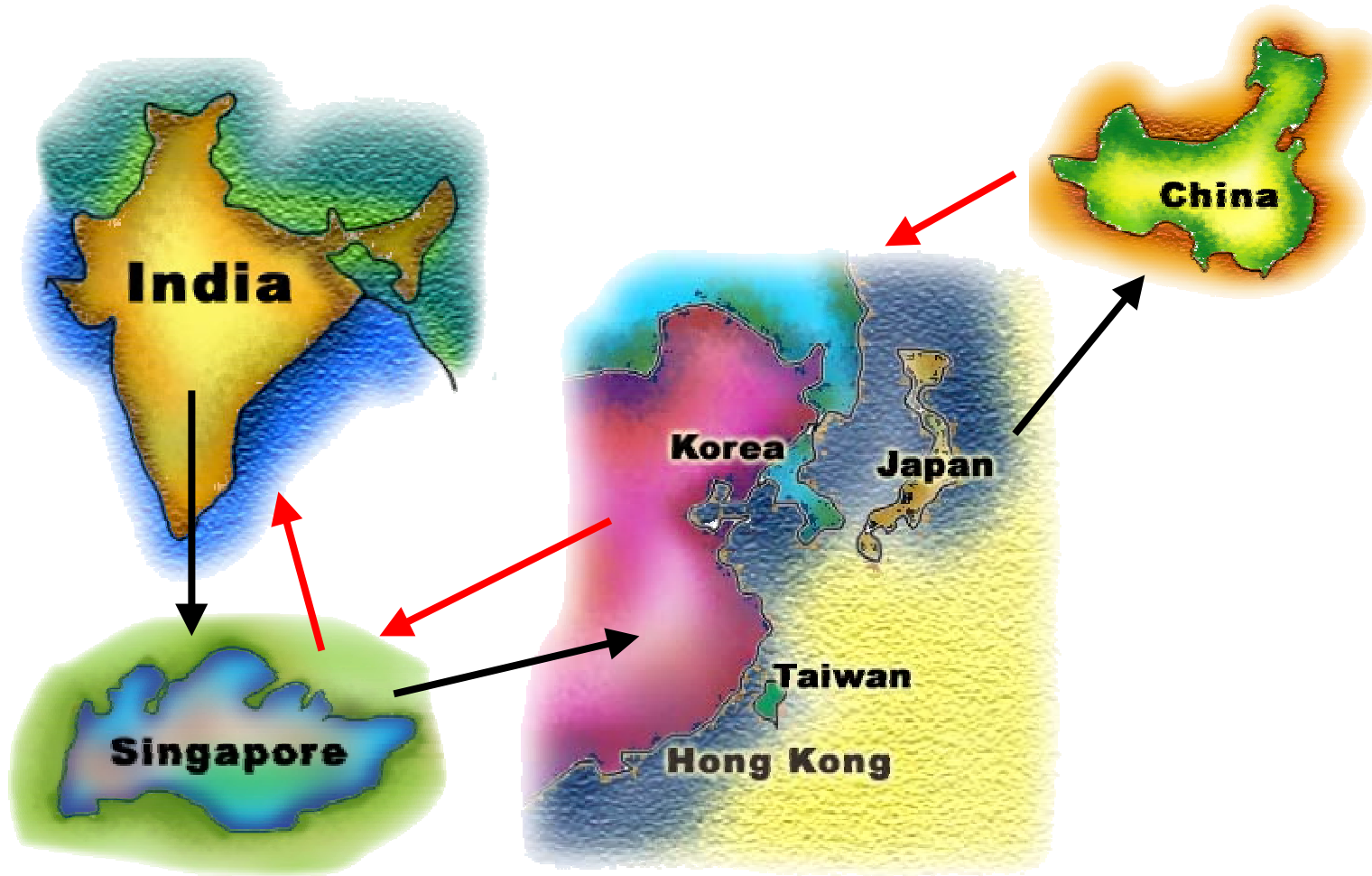
# Singapore and India Partnership



- ⚡ Singapore can be launchpad into Asia
  - ➔ English speaking
  - ➔ culturally similar
  - ➔ good infrastructure and international connectivity
  - ➔ testbed for technology -- broadband, wireless, e-commerce
  - ➔ close proximity
  - ➔ VC funding base
  
- ⚡ Win-Win Collaboration: **India** (IT Technology and Manpower) ⇒ **Singapore** (Infrastructure) ⇒ **North-east Asia** (Dotcom Markets) ⇒ **China** (Biggest Internet Market in Region)



# Asia-Pacific: Collaboration

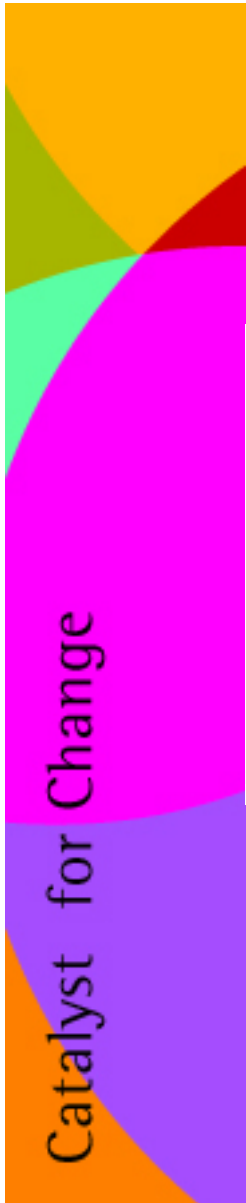


# Our Role

Helping people see **possibilities**  
and **live into** those **possibilities**



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*Thank You*

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