EE-402a Series "Doing Business with Your Technology in Asia"

Overview: What Asia Means for U.S. High Tech Businesses

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Outline for today

- Putting Asia into the perspective of high-tech business today
- General points about doing business overseas, especially in Asia
- Survey of the sessions in this course
- Administrative items: getting credit, etc.
- Asking you for input

When I say "Asia high-tech business" What do you think of?

- (to be added during the class)
- Computer chip production
- People-intensive applications: testing, etc.
  Cost advantage
- Internet cellphones
- Broadband Internet access
- Outsourcing from the U.S.
- WiFi (in India: Reliance invested in infra.)
  Leapfrogging earlier technology

Roles of Asia for U.S. high-tech businesses

- Markets
  - Robust (young) early technology adopters
  - Testbed for new technologies
  - People willing to pay
- Source of technologies
- Low cost source of engineering, skilled labor
- Low cost source of manufacturing capacity

Three stages in the history of international outsourcing

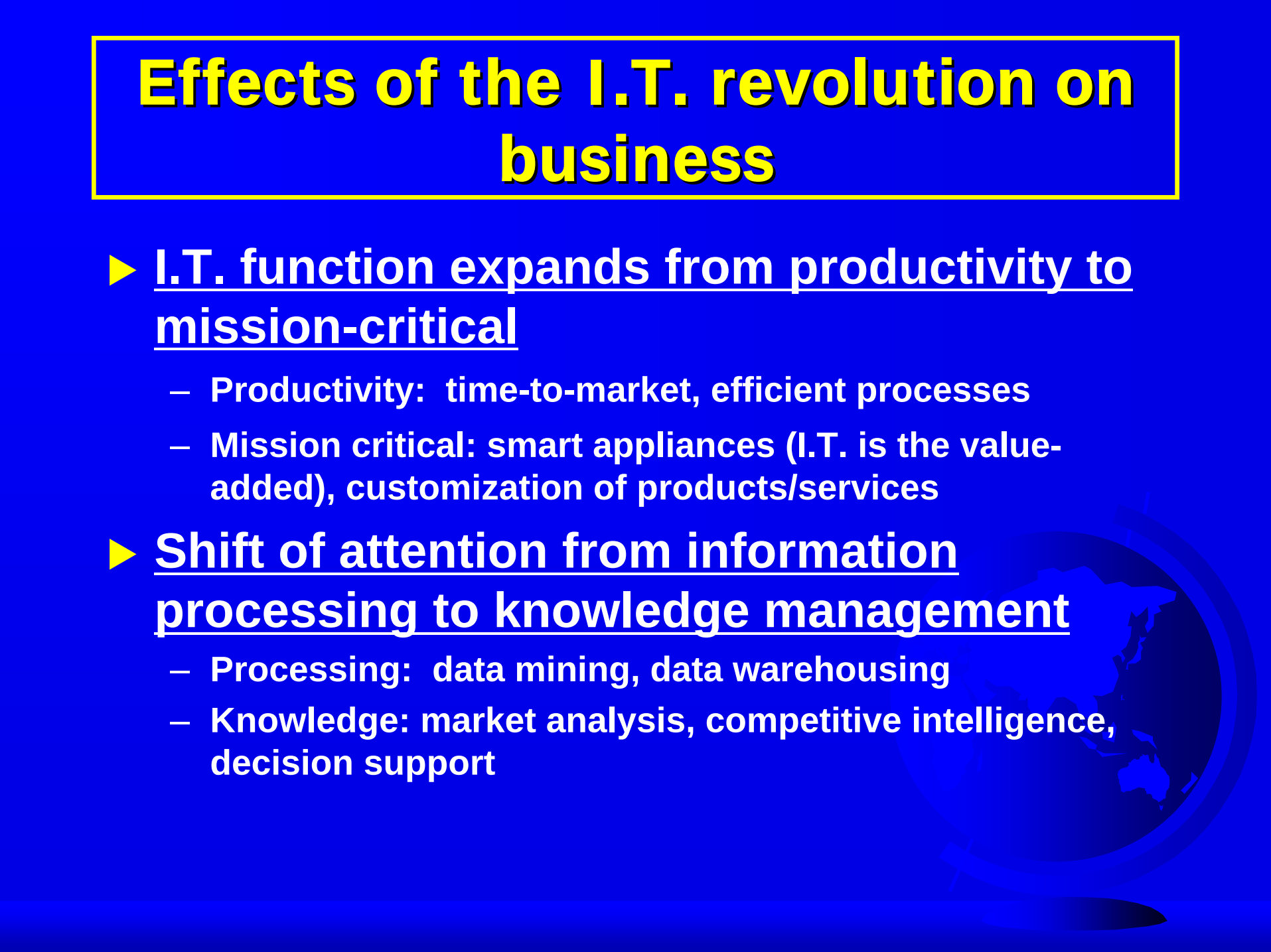
1. It really started with “downstream” processes: distributors, warehousing, product forwarding
   - Customer service call centers may fit here
2. It then moved upstream to business processes
   - Payroll, financials (transaction processing), IT systems administration
3. It is now moving further upstream to strategic activities
   - Product development, some research, joint design, joining in coordinated worldwide market strategy

Outsourcing: a natural result of IT/Internet Revolutions

- IT Revolution: not only performance but cost
  - Steady reductions in cost-per-bit along with steady increases in microprocessor performance, memory density
- Internet Revolution: makes integration of multiple data streams possible, and also cheap
- Great! Opens up new business opportunities
- Oops! Opens up competition to instantaneous worldwide playing field

Effects of the I.T. revolution on business

- I.T. function expands from productivity to mission-critical
  - Productivity: time-to-market, efficient processes
  - Mission critical: smart appliances (I.T. is the value-added), customization of products/services
- Shift of attention from information processing to knowledge management
  - Processing: data mining, data warehousing
  - Knowledge: market analysis, competitive intelligence, decision support

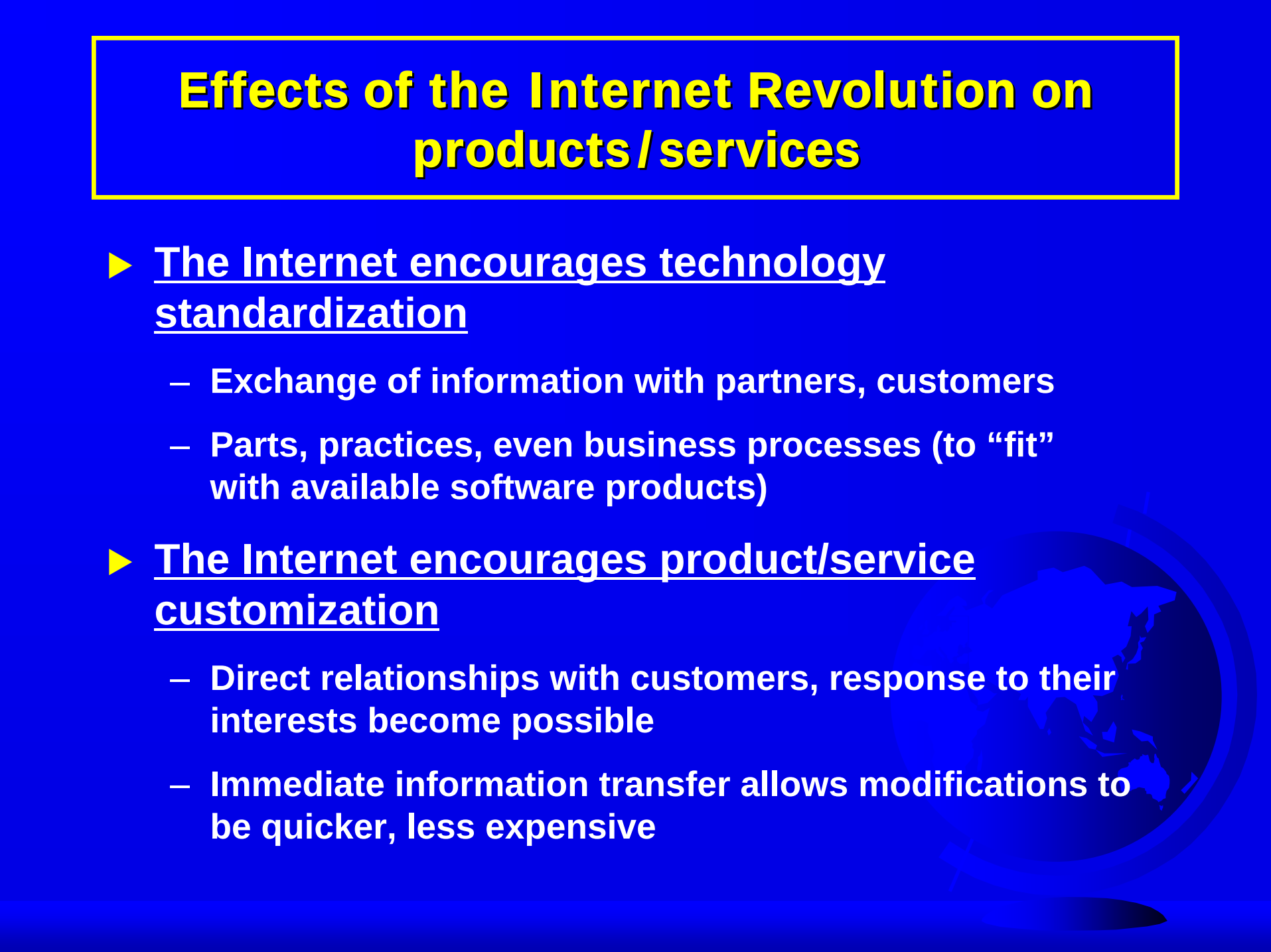


Effects of the Internet Revolution on the business environment

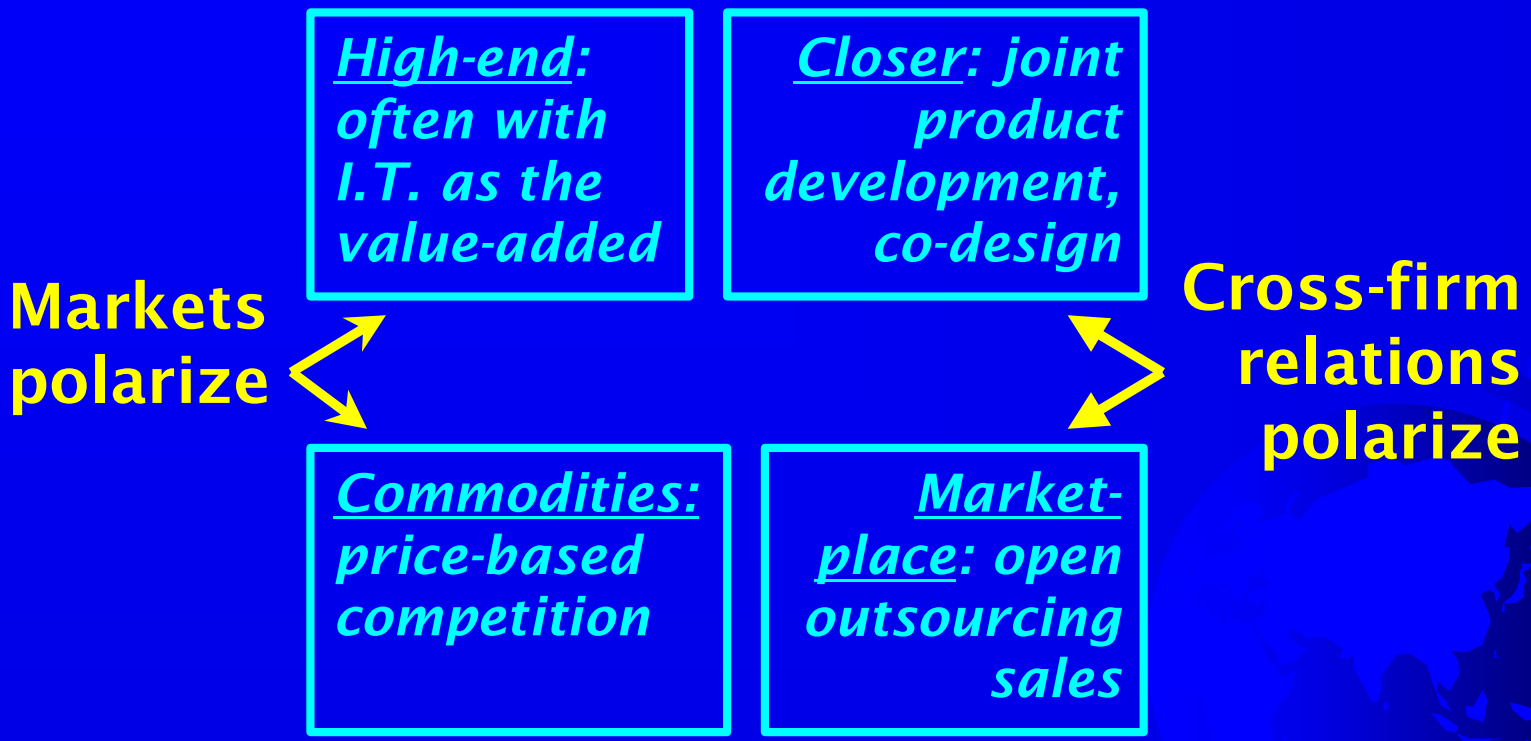
- **Breaks down barriers of time and place**
  - Information is accessible to just about everyone
  - Communication is possible in real time
- **Result 1: Many new business opportunities**
  - New markets, industries (e.g. ISPs, data centers)
  - New business models, transformations of old businesses
- **Result 2: Severe increases in competition**
  - More competitors,and they have more information
  - Potential customers also have more alternatives, information

Effects of the Internet Revolution on products/services

- The Internet encourages technology standardization
  - Exchange of information with partners, customers
  - Parts, practices, even business processes (to "fit" with available software products)
- The Internet encourages product/service customization
  - Direct relationships with customers, response to their interests become possible
  - Immediate information transfer allows modifications to be quicker, less expensive

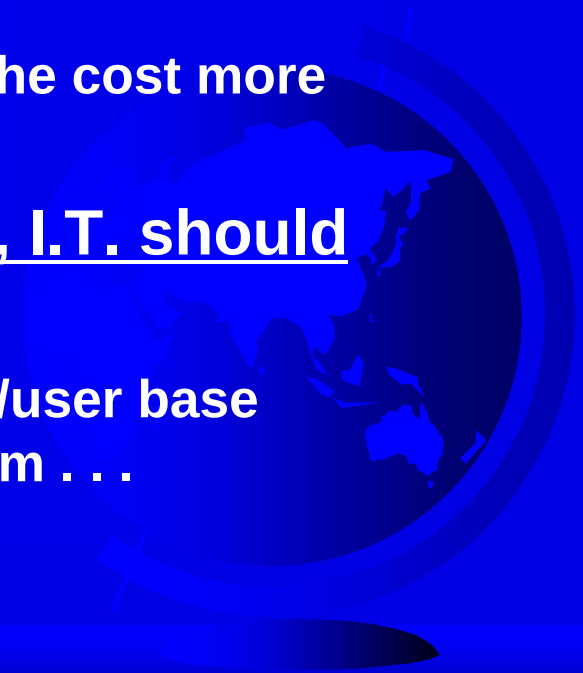


Effects of the Internet Revolution on business relationships



Current business responses to the Internet / I.T. Revolution

- Shift from product-focus to customer-focus
  - Provide whatever customers want, even if from a different "industry." E.g.: Yahoo Broadband (Japan)
- Focus on core competitive processes; outsource others
  - To expert specialist firms who can cut the cost more than if do the processes in-house
- Controversy about how the Internet, I.T. should affect strategy, planning
  - What are the right goals? Market share/user base versus immediate profit versus long-term . . .



Outsourcing to Asia

- Began with large firms some years ago
- Increasing pressures on start-up companies to obtain maximum efficiency in product development
  - May come from investors
  - Often entrepreneurs seeking competitive advantage from their international contacts, skills

Why high-tech business in Asia now?

- **Some rapidly growing markets**
  - Broadband mobile wireless, etc.
- **Major developments in major markets**
  - Opening up of China
    - Positive stance toward getting benefits of foreign management know-how
    - Ramp up to 2008 Olympics
    - Obviously rising standards of living
    - Roll-out of IT and communications infrastructure
    - Gutsy young entrepreneurs & potential partners

Major developments in major Asian markets - (2)

- India
  - Worldwide recognition of highly gifted engineers, skilled labor
  - People-focused approach to business
  - Gradual emergence from tight regulatory environment
- Both India and China
  - Influence of a highly successful diaspora
    - Money, business/management expertise
    - Interest in taking success back home
  - Incredible cost advantages for skilled work

Major developments in major Asian markets - (3)

- **Japan**
  - Major world economy
    - Bigger than all other economies in Asia combined
  - Economic restructuring
    - Making mergers and acquisitions more attractive
  - Testbed for more advanced technologies
    - Some technologies further ahead, commercialize earlier than in U.S.
- **Tigers (Singapore, Korea, Taiwan)**
  - Heavy use of IT and Internet
  - Relatively stable environment for business

General points about doing business overseas

Four channels for being in an overseas market - (1)

1. Sell directly (e.g. by Internet)
   - Challenges: currency conversion, customs, customer support, loss of "touch" with market trends
2. License product / technology to a distributor
   - Costs less up front, guarantees some revenue
   - Requires ongoing monitoring of licensee
   - Licensee may become competitor
   - You may not have sufficient knowledge of market, business practices, and customers to ensure that you're getting best results

Four channels for being in an overseas market - (2)

3. Set up wholly owned subsidiary
   - You get all the revenue
   - You make all the investment, take all risks, pay all the costs, including your time and effort (that may be needed in other markets)
4. Set up a joint venture with a local partner
   - In some economies, this was the only option for foreign businesses that wanted to get business licenses
   - Gain a motivated, expert partner
     - Less likely to become a competitor
   - Getting the right partner is the most difficult problem

Some special challenges of international business

- IP rights management
  - Piracy avoidance and also maximizing value
  - Not just a problem with legal systems: problem of enforcement
- Product localization
- Government regulations
  - U.S. export controls
  - Foreign government barriers (“tariff” and “nontariff”)
- Managing distributed or remote teams
- Getting access to the money you make

Topics this series will address

- The challenges mentioned on previous slide, with special reference to the situation in Asia economies
- Selected emerging high-growth markets in Asia
  - Mobile wireless communications (10/02)
  - Biotech (10/16)
- Special presentations on the world's (potentially) largest markets
  - India (10/23)
  - China (12/04)

Administrative issues

- Everyone is welcome; registration not necessary
- For-credit Stanford students
  - Read the syllabus!
  - Attend and comment on nine out of the ten sessions
    - 30-60 words for each session
    - One session per email: within two weeks of session date
    - What new thing you learned from the session, or something that impressed you in the session
    - Not a summary, but should provide evidence that you attended or watched the videotape / streaming video (info just from a slide presented in talk is not acceptable)
    - SCPD students exactly same as other students

Administrative Issues - (2)

- No final write-up paper this quarter!

Contact points:

- Weekly course comments to course assistant
  - Nishant Verman (nishant@stanford.edu)
- Questions, problems, other comments to instructor
  - Richard Dasher (rdasher@stanford.edu, 650-725-3621)

Finally, input from you . . .

What would you especially like to see addressed in this series?