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

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

September 25, 2003
Richard B. Dasher
Director, US-Asia Technology Management Center
Stanford University
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

Markets polarize
- **Commodities**: price-based competition
- **High-end**: often with I.T. as the value-added
- **Closer**: joint product development, co-design
- **Market-place**: open outsourcing sales

Cross-firm relations polarize
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)
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?