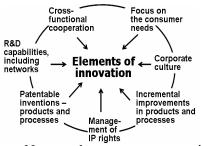
Innovation and Strategy

Learning objectives:

- To identify the elements of innovation essential to global competitiveness
- To apply theories of innovation in the organizational and national contexts to gain a deeper understanding of the dynamics of innovation processes
- To appreciate national environmental differences in the creation and dissemination of new products and technologies, including the role of FDI and government
- To understand the strategies and practices involved in managing innovation in differing types of international organization, highlighting the role of IP in the researchintensive company

Elements of Innovation



- Innovation covers all those activities that yield new or improved products or services.
- technology drives radical innovation (by translating the scientific knowledge in to practice).
- New products or processes = inventions, for which patent application can be made.
- Incremental innovation = continuous improvement.
- Innovation is now seen as central to corporate culture, not just the R&D departments.

Innovation and competitive advantage

- Innovation is a core competency and source of competitive advantage.
- Catalysts of innovation are (Porter): (1) new technology, (2) new or shifting buyer needs, (3) rise of new industry segment, (4) shifts in input costs or availability, and (5) changes in government regulation.

Read Michael Porter's Oct 2008 Business Week op ed "Why America Needs an Economic Strategy" at http://www.businessweek.com/print/magazine/conte nt/08 45/b4107038217112.htm

Innovation and economic development

- Capitalist economic development relies on radical changes which break with the past (<u>Schumpeter's</u> "<u>Creative Destruction" model</u>), due to new products, new methods of production, new markets, and new forms of industrial organization. Try this URL http://en.wikipedia.org/wiki/Creative destruction.
- Economic development occurs in stages, from low innovation-intensive to high innovation-intensive (no two economies display the same patterns however).

Early development

Investment-based development

- Reliance on natural resources or low-level labor-intensive, manufactures for export.
- Craft industries, few
- competencies Inward investment limited to enclaves of activity
- Increasing expenditure on transport, infrastructure, utilities, communications, education. Growth in capital-intensive sectors, e.g.,

growth

Innovation-led

Growing consumer society.

Greater expenditure on edu-

Promotion of FDI in innovation-intensive sectors, facilitating spill-over effects and technology transfer

cation and communication

chemicals and moderately knowledge-intensive consumer goods (e.g., electricals). Increase in FDI Stage 3

Stage 4

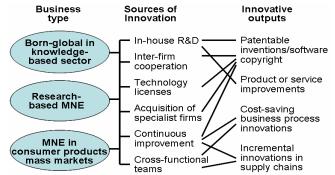
Services-led development

- Focus on direct services of goods with high level of service content.
- More cross-border, inter-firm linkages, aiming for global competitive roles for domestic firms.
- Increase in outward MNE activity. Aim to attract high-value FDI, e.g., R&D.

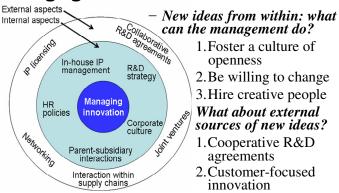
- National innovation capacity
- Some countries have forged ahead in technological innovation, and others have lagged behind, because a huge gap often exists in innovation capacity between the developed and the developing countries
- Some necessary conditions to boost innovation are



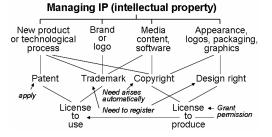
- (3) the strengths in science and technology.
- Technology transfer can partially bridge technology gap between developed and developing countries.
- There are two aspects to technology, however: *codified* knowledge, seen in the tangible elements like products and designs, and tacit knowledge — the greater the extent of tacit knowledge, the harder it is for the host developing countries to replicate.



Managing innovation



- 3. Seek innovation from all participants in the supply chain so that all stakeholders sense a vested interest ("Let noble thoughts come from all over the world" – Rig-Veda).
- 4. Managing IP (intellectual property) is perhaps the



most challenging task here because, while not sharing this core business strength curbs the growth, the sharing of it can only create new rivals!