**L11: Capturing the Benefits of Innovation**

**Benefits of Innovation**

* Possessing innovation leadership
* As market pioneers
* Existing technological leadership
* Having strong creativity and involving risk-taking
* Becoming a major source of new knowledge
* Ability to respond to the needs of customers
* Becoming leading innovation fellowship

**Factors influencing firm innovative performance**

* Product R & D
* Process R & D
* Patents
* R & D/Value Ratio
* P/E (price/earning) Ratio

**Constructing a model of effective innovation**

It is difficult to construct such a model for effective innovation because of:

* Relationship between inputs-outputs is much weaker than at the industry level.
* Reporting behaviour of firms may change in respect of any variable monitored to be used.
* Objective of indicators may be to influence financial markets and lending behaviour.
* Financial markets will concern themselves only with the gain appropriate by the firm itself.

**Exploiting Knowledge**

The ability to bring about innovation in a firm depends greatly on its ability to acquire knowledge to respond creatively to the forces of change. Therefore the ability to exploit knowledge depends on:

* The capability to generate and acquire knowledge.
* The ability to identify and codify existing knowledge
* The existence of the capability to store and retrieve knowledge
* The possession of the capability to share and distribute knowledge across the organisation.
* The capability to exploit and embed knowledge in process, products and services.

**The hierarchy of knowledge**

* Data - set of discrete raw observations
* Information – data that has been organised , grouped or categorised into some pattern.
* Knowledge – information that has been contextualized:
* Explicit knowledge which can be codified
* Tacit/implicit knowledge which is personal, experiential, hard to formalize

**Converting Knowledge into Innovation**

 Knowledge Management for Innovation

 Phases in the

 innovation process

 Discovery Realization Nurture

 Generic

 routines

Search Capture Articulate Contextualize Apply Evaluate Support Re-innovate

 Idiosyncratic knowledge management activities

**Exploiting Intellectual Property**

* Patents – reflect the corporate capacity to generate innovation
* Copyright – the expression of ideas that is made concrete
* Design rights – protected by design registration which covers only visual appearance.
* Licensing IPR (intellectual property right) – allowing others to use your legal IPR in some way in return for some payment.

**Innovation and Economic Development**

* Process upgrading
* Product upgrading
* Capability upgrading
* Inter-sector upgrading

 Note: Firms in emerging economies pursue different routes to upgrading through innovation.

**Innovation as Solution Environmental Issues**

* Cleaner products – with a lower environmental impact over their life cycle
* More efficient processes – to minimise or treat waste, to reuse or recycle
* Alternative technologies – to reduce emissions, provide renewable energy
* New service – to replace or reduce consumption of products
* System innovation – to measure and monitor environmental impact, new socio-technical system