UNIT 2

MARKET FOR INFORMATION GOODS

INFORMATION ECONOMY

- **Information**
  - Anything that can be digitized, i.e. encoded as a stream of bits is information
- **Information good**
  - Anything that is digitized, and also consumers are willing to pay for it
- Eg. Music, online books, DVD movies
- Information has value to different consumers
  - Entertainment value
  - Business value
-

FOUNDATIONS OF THE INFORMATION ECONOMY

1. **Communication**
2. **Technology**
3. **Information**

- Communication requires technology to transmit information.
- As that technology progresses, the volume of information communicated can rise
- New technologies arise at a faster rate when information can be communicated to more people at a cheaper price and more quickly.

The Cost of Producing Information

- Information is costly to *produce but cheap to reproduce.* • *High fixed costs but low marginal costs.*
  - *The cost of producing the first copy* may be substantial, but that of producing additional copies is negligible
- Price information according to its value, not its cost

Managing Intellectual Property

- Intellectual property
  - Any information entity that is a creation of mind and has a monetary value
- Cost is incurred in producing the first copy of that information and hence a suitable price is set to sell it
- Creators of information look to overcome cost incurred
- Threat
  - Cheap reproduction and sales by other parties
- E.g.. EA Sports FIFA games, the cracked versions

- Can be protected through **Copyrights, Patent, and Trademark Acts**
- When managing Intellectual property, your goal should be
  - To choose the terms and conditions that maximize the *value of your intellectual* property,
- Not the terms and conditions that maximize the protection

Information as an economic good

- Information properties that would seem to cause difficulties for market transactions.

1) **Experience good.**
   - You must experience an information good before you know what it is.eg. Headline of a news, movie trailer
2) **Returns to scale.**
   - Information typically has a high fixed cost of production but a low marginal cost of reproduction.

3) Public goods

- Information goods are typically non-rival
- Non Exclusive in nature

The Economics of Attention

- Wealth of information *creates a poverty of attention* – *Information overload, something disliked by the common people*
- Selling attention: – *Decisions Based on*
- *Which form of media contains a large pool of audience already*
- *Customized feeding of information grabs attention*
- By gathering better information about what particular customers want, the information provider can design products that are more highly customized and hence more valuabl

Technology

- Infrastructure is to information as a bottle is to wine
- Content providers cannot operate without infrastructure suppliers
- The infrastructure that makes it possible to store, search, retrieve, copy, filter, manipulate, view, transmit, and receive information
- Improved information infrastructure has vastly increased our ability to store, retrieve, sort, filter, and distribute information, thereby greatly enhancing the value of the underlying information itself.

Systems Competition

- Systems show up everywhere in information technology:
  - operating systems
  - applications software,
  - CPUs
  - memory chips
  - disk drives
  - controller cards,
  - video cassette recorders
  - videotapes

Systems Competition

- one firm cannot hope to offer all the pieces
- Different components are made by different manufacturers using very different production
- In the information economy, companies selling complementary components, *are equally important*

Systems Competition

- Firms must focus not only on their competitors but also on their collaborators

- Forming alliances, cultivating partners, and ensuring compatibility

- Microsoft Intel Partnership
  - Microsoft focused almost exclusively on software, while Intel focused almost exclusively on hardware.

– They each made numerous strategic alliances and acquisitions that built on their strengths

Lock-In and Switching Costs

- Switching Cost
  – Cost incurred by the consumer while switching from one system to another or from one brand to another for a same purpose
- E.g. from typewriter to computer in an office • From NTC ADSL to World Link's Fiber Optics
  – Initially high, but lower in regular operation
- From Windows OS to Linux based OS
  – Initially low, but high in regular operation

- Higher switching cost towards our product and lower switching cost towards competitor’s product is unfavorable
  - » and vice versa
- Lock-In
  - Tendency to stick to a certain technology or a certain provider of goods/service despite existence of other alternatives
    - E.g. we are locked in to MS-Windows O.S. for desktop computing
    - MS-Office for working with documents
    - Google for search engine
    - YouTube for video browsing online
    - Cassettes and CDs during late 1990s /early 2000s in Nepal

- Reason for lock-in
  - The product still offers better value and familiarity than substitutes

Positive Feedback

- As the Installed base of users grows,
  - More and more users find adoption worthwhile.
  - Eventually, the product achieves critical mass and takes over the market.
  - Eg. Before 1982 use of fax in office were limited but its demand increased from 1985 due to positive feedback

- Prime Example
  - Use and Growth of Internet

Network Externalities

- When the value of a product to one user depends on how many other users there are, economists say that this product exhibits *network externalities*

- When a network effect is present, the value of a product or service is dependent on the number of others using it

- Challenge
  - To obtain a mass market in the beginning

- *Eg. Telephone*
  - *Value to a user exists if other users of telephone exists*

- *E.g. Social Network Sites*

Standards

- Bringing in a completely new and incompatible technology / product with its own unique specifications

- Involves patent associated with new technology being offered

- Intended to give competition to existing products and even create a completely new market

- E.g. Introduction of CDs

Policy

- Laws imposed by government to promote fair market competition

- Generally policies restricts merger and acquisitions that hamper or restrict competition in the market

- Competition among sellers gives consumers lower prices, higher-quality products and services, more choice, and greater innovation.