IT 230: Economics of Information and Communications

Credits: 3
Lecture Hours: 48

Course Objective

This module aims to examine information as an economic commodity and a public good especially in relation to pricing, provision and regulation.

Course Description

Managerial Economics Basic, Markets for Information Goods, The Role of Information in an Economy, Strategies for Pricing Information, Rights Management, Market Strategies: Switching costs and Lock-in, Networks and Positive Feedback, Strategies for Information Industries, Antitrust and Information Policy, Thriving in a new economy, The knowledge-based new Economy, Information and communication Technologies in the Hollywood's global Primacy

Course Details

Unit 1: Managerial Economics Basic **LH 3**

1.1 Defining moments of economics: from Industrial revolution to Information revolution
1.2 Technological change in a global economy
1.3 Market failure, Externalities and Public goods

Unit 2: Markets for Information Goods **LH 4**

1.4 Foundations of the Information economy
1.5 Introduction to Information economy
  1.5.1 Definition of information good
  1.5.2 The cost of producing information
  1.5.3 Managing intellectual property
  1.5.4 Economic and public good
  1.5.5 The economics of attention
1.6 Technology
  1.6.1 Systems competition
  1.6.2 Lock-in and switching costs
  1.6.3 Positive feedback, network externalities, and standards
1.7 Policy

Unit 3: The Role of Information in an Economy **LH 4**

1.8 Transaction costs and Information costs
1.9 The economy of search
1.10 Information problems
  1.10.1 The moral hazard problem
  1.10.2 The Adverse-Selection Problem
1.11 Speculation and Risk Bearing

1.12 The Futures Market

Unit 4: Strategies for Pricing Information **LH 6**

1.13 Pricing Information Goods
 1.13.1 Cost of producing information
 1.13.2 Costs and competition
 1.13.3 Product Personalization
 1.13.4 Product pricing
 1.13.5 Personalized pricing
 1.13.6 Versioning
 1.13.7 Group pricing- Price sensitivity, Network effects, Lock-in, Sharing
1.14 Versioning Information
 1.14.1 Types of versioning
 1.14.2 Value-subtracted versions
 1.14.3 Avoiding pitfalls in versioning
 1.14.4 On-line and off-line versions
 1.14.5 Goldilocks pricing
 1.14.6 Customizing the browser
 1.14.7 Bundling
 1.14.8 Promotional pricing

Unit 5: Rights Management **LH 3**

1.15 Production and distribution costs
1.16 Lower distribution costs
1.17 Lower reproduction costs
1.18 Trusted systems
1.19 Historical examples - Growing the market
1.20 Choosing terms and conditions

Unit 6: Market Strategies: Switching costs and Lock-in **LH 5**

1.21 Recognizing Lock-In
 1.21.1 Examples of lock-in
 1.21.2 Valuing an installed base of customers
 1.21.3 Classification of lock-in
 1.21.4 Suppliers and partners face lock-in, too
 1.21.5 The lock-in cycle
1.22 Managing Lock-In
 1.22.1 Lock-in strategy for buyers
 1.22.2 Lock-in strategy for sellers
 1.22.3 Investing in an installed base
 1.22.4 Encouraging customer entrenchment
 1.22.5 Leveraging your installed base

Unit 7: Networks and Positive Feedback **LH 7**

1.23 Positive feedback
1.24 Demand-side economies of scale

1.25 Network externalities
1.26 Collective Switching Costs
1.27 Igniting positive feedback: performance vs. compatibility
1.28 Revolution: offer compelling performance
1.29 Igniting positive feedback: openness vs. control
1.30 Generic strategies in network markets
1.31 Historical examples of positive feedback- Telephone networks and interconnection

Unit 8: Strategies for Information Industries **LH 4**

1.32 Cooperation and Compatibility
- 1.32.1 How standards change the game
- 1.32.2 Winners and Loser from standards
- 1.32.3 Tactics in formal standard-setting
- 1.32.4 Managing open standards
    - 1.32.4.1 Case Study- Linux Adoption in the Public Sector: An Economic Analysis

1.33 Waging a Standards War
- 1.33.1 Classification of standards wars
- 1.33.2 Information-age standards wars
- 1.33.3 Key assets in network markets
- 1.33.4 Two basic tactics in standards wars
- 1.33.5 Capstone case: Microsoft vs. Netscape,

Unit 9: Antitrust and Information Policy **LH 2**

1.34 Policy overview
1.35 Price differentiation
1.36 Competition policy
1.37 Telecommunications regulation and policy in brief (Nepalese context)

Unit 10: Thriving in a new economy **LH 2**

1.38 The components of Digital Economics
1.39 Twelve theme of the new economy
1.40 The ten technology shift
1.41 The Internet Economy and its Indicators
1.42 E-commerce and Digital Economy

Unit 11: Information and communication Technologies in the Hollywood's global Primacy **LH 3**

- Hollywood, defined, Hollywood's economic leadership, Economic analysis of the Hollywood system
- Drivers of Hollywood's competitive Advantage
- The economic drivers of Hollywood's global
    - Competitive advantage
    - Factor conditions
    - Relating and supporting industries
    - Strategy, structure and rivalry
    - Demand conditions
    - The potential threats to Hollywood's global primacy in an evolving landscape

Unit 12: The effects of continual disruption: technological resources supporting resilience in regions of conflict **LH 2**

- Technologies to aid resilient behavior
- Research setting
- Technologies resources supporting resilience

Information systems in crisis

- Introduction
- Exploring key information resources
- Fundamental components of an information environment

References

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H. Craig Petersen and W. Cris Lewsi. ***Managerial economics***. (ISBN: 81-203-0963-4)

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Roy J. Ruffin and Paul R. Gregory: ***Principles of economics***. 7th edition, Addison Wiley Pub, 2000.

Don Tapscott. ***The digital economy: Promise and peril in the age of networked intelligence***. McGraw-Hill. (ISBN : 0-07-063342-8)

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Efraim Turban, Jae Lee, David King, H. Michael Chung. ***Electronic Commerce- A managerial Perspective***. Pearson Education. (ISBN: 81-7808-362-0)

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