Chapter 8 – The Global Knowledge Economy

- **Knowledge economy**
  - The buying and selling of knowledge
  - Different from an information economy
  - Knowledge is learned over time and enables action
- Knowledge cannot simply be purchased
- For a knowledge economy to succeed it is important to invest in research and education
- Global knowledge economy arose from the convergence of 3 developments:
  - Ubiquity of new media and globally networked ICTs
  - Ongoing and complex process of globalization
  - Growing use of knowledge as a tool for wealth creation
- New media are central to globalization because they constitute the borderless technological and service-delivery platforms streaming the images, information, finance, and communication that make up a globalized world
- New media industries push corporations to expand and integrate globally
- New media provide informational content and images of the world through which people make sense of events in distant places
- New media plays a role as communication technologies that enable the international distribution of messages and meanings but also from their perceived role in weakening the cultural bonds that tie people to nation-states and national communities (Flew 2007)
- Radio and TV, even comic books criticized for their roles in cultural assimilation and cultural imperialism
- What caused the recent acceleration of knowledge production?
  - Growing diversity of sources from which new knowledge is accessed (eg users as a source of innovation)
  - Networked ICTs accelerating the diffusion of new knowledge and the possibilities for collaboration
  - The ways in which ICTs enable new forms of codification of once-tacit knowledge through knowledge-management systems
  - The importance of knowledge sharing through cross-institutional and cross-sectoral knowledge communities (open-source software)

Electronic Commerce (e-commerce)

- Online transactions including consumer (buying via the web) and business to business (B2B; ordering new stock from a supplier)
- Applies to both physical and virtual goods
- For a growing number of industries, a fully electronic model is becoming the norm, even for goods that are consumed (eg Apple's iTunes Store)

Information and knowledge

- **Digital goods** – items that an be digitized and sold (or given away) through electronic networks
  - Eg music, movies, books, house plans, images, even dress patterns
  - Non-rivalrous, infinitely and perfectly copyable
  - Can exist in many places at once
  - Can be recombined to form new digital goods
- **Endogenous growth**

    - A theory from economics that recognizes the importance of innovation in the growth of an economy and, importantly, that it is not outside the economy (exogenous) but a part of it
- **Explicit knowledge**
    - Knowledge that is codified (eg written or recorded in some form as data) that can be formally taught and learned
- **Tacit knowledge**
    - Knowledge derived from direct experience and the processes through which it is acquired are often intuitive, habitual and reflexive
    - Learned by practicing
    - Trial-and-error
    - Eg playing an instrument, art
- **Incremental knowledge**
    - Knowledge that is embodied in organizations
    - Those who become part of the organization are inducted into this embodied knowledge and gradually add to it
- **Radical knowledge**
    - Based on extensive experimentation and testing
    - Explicit recognition of the likelihood of ideas failing

Innovation and the Innovator's Dilemma

- **Disruptive technologies**
    - Technologies or services that undermine or overwhelm the value proposition of an existing product or service thereby hastening its demise in the market
- **Innovator's dilemma**
    - A choice that confronts those who develop new technologies of whether or not to work on new (replacement) technologies even while the existing ones are doing well in the marketplace
- **Diffusion of innovation**
    - The spread of innovation within a society or market