Introduction

- Goal
  - to assess the impact of electronic commerce on businesses and markets
  - to assess the impact of market structure on electronic commerce
Introduction

The firm perspective:

- Transaction Processes
- Other business Processes

The market perspective:

- Transaction Structure
- Market Structure

Transaction Preparation:
- Advertising
- Catalogues and Stock Lists
- Information Services
- Negotiation

Transaction Completion:
- Ordering
- Billing and payment
- Finance
- Delivery

Production Support:
- Information Capture
- Information Management
- Market Analysis
- Market Development
The firm perspective: effects on transactions

• Efficiency gains
  • Reduce costs
  • Increase transaction speed
  • Improve reliability/accuracy
  • Improve management

• Effectivity gains
  • Better management of customer relations
  • Develop and/or improve collaboration capabilities
  • Create interdependencies
  • Create more added value
The firm perspective: effects on business processes

- **Three Main Categories**
  - *Product Innovation*
    - diversification
    - product-service bundling
    - customisation
  - *Process Innovation*
    - process integration
    - process co-ordination
    - enterprise integration
  - *Relational Innovation*
    - reach
    - selectivity
    - loyalty

- **Product Innovation**
  - *Diversification* (often in collaboration with related industries)

  - *Product-Service Bundling* (mostly information services, also after-sales/maintenance services)

  - *Customisation* (major differences between SMEs and large corporations)
The firm perspective: effects on business processes

- **Relational Innovation**
  - *Reach* (greater geographical penetration, logistical costs are bottleneck for SMEs)
  - *Selectivity* (greater ability to target customers, particularly in the consumer market, but effects throughout value system)
  - *Loyalty* (through better service, but often lock-in: technical, product codes...)

- **Process Innovation**
  - *Process Integration* (improve internal production and management processes, mostly by large firms)
  - *Process Co-ordination* (collaborative adjustment of processes, particularly ordering and logistics)
  - *Enterprise Integration* (collaborative adjustment of both internal and external processes)
The firm perspective: integration

The firm perspective: emerging trends
The market perspective: changes in the transaction system

- Main trends
  - Outsourcing
  - Integration
- Motives for outsourcing
  - Concentrate on high-value activities
  - Benefit from competition between suppliers/customers
- Motives for integration
  - Control critical activities
  - Reduce transaction costs

The market perspective: the value system

Market System: organization of (the linkages between) suppliers and customers operating in the same marketplace
The market perspective: market systems

- Integrated Market System
  - Extensively Internalised Transaction System
  - Disintermediation

- Distributed Market System
  - Partially Externalised Transaction System
  - Re-intermediation

- Partially Internalised Transaction System

- Consolidated Market System
- Nuclear Market System

High co-ordination costs
Low search costs
High search costs
Low co-ordination costs
The market perspective: market systems

- **Integrated Market System**
- **Distributed Market System**
- **Consolidated Market System**
- **Nuclear Market System**

**Dominant Firms**
- Few Firms
- Re-intermediation

**Equal Firms**
- Many Firms
- Disintermediation

**Conclusion**

- **Dominant trend: linkages**
  - **Lock-in**
    - Into integrated systems (high switching costs - high dependency)
    - Into marketplaces (high switching costs - high competitive pressure)
  - **Higher levels of co-ordination**
    - Related industries (horizontally co-ordinated market systems)
    - Interdependent industries (vertically co-ordinated market systems)
Conclusions

- Value Network: NA
  - Physical hierarchy
  - Power hierarchy
    (pivotal firms)

- Future trend: hierarchies with network characteristics