Governance Structures

406.306 Management Information Systems

Jonghun Park

jonghun@snu.ac.kr

Dept. of Industrial Engineering

Seoul National University

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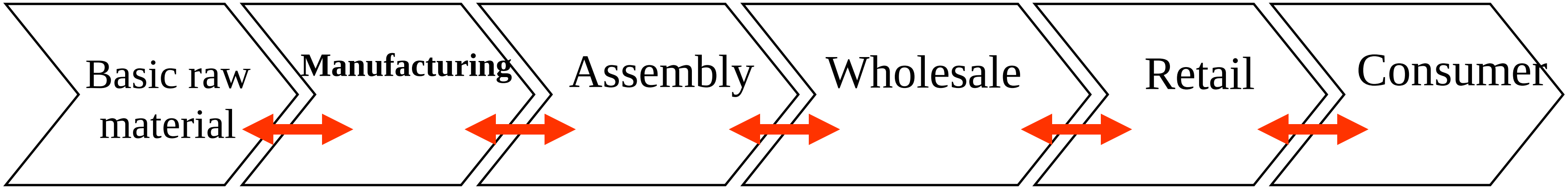
governance structure

- describes the **organisational form**, the **rules**, **institutions**, which structure a certain value exchange
- specifies **which parties** are involved in a transaction, and what **co-ordination mechanisms** are used

coordination of flow of goods and services

- markets
  - **supply and demand forces** regulate the external transactions of material and immaterial goods between individuals and companies, determining design, price, quantity, and delivery schedules
- hierarchies
  - **in house production** of products and services
  - production, availability, and delivery are controlled and directed by managerial decisions
- networks
  - coordination is achieved through **joint (inter-firm) planning** and **longer-term agreements**
  - consists of legally and economically **independent orgs** that have agreed to give up their autonomy w.r.t. a particular value exchange
  - neither based strictly on the price nor on hierarchical decision making



goverence structure: market or hierarchy?

market

- outsourcing
- information exchange
- supply and demand forces
- price discovery
- change of ownership

hierarchy

- internalize
- planning
- management decisions: costs, quality, delivery schedule
- within one firm

networks

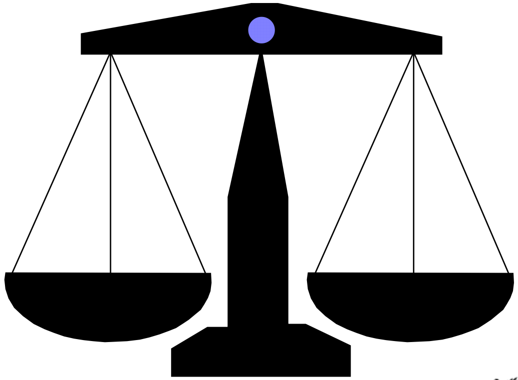
- inter-company networks: **complex arrays of relationships between companies**, who establish these relationships by interacting with each other
- competing becomes a matter of **positioning** one's company in the **network** rather than of attacking the env
- **strategic** networks: **long-term, purposeful arrangements** among distinct but related profit-oriented organizations that allow their participants to gain or sustain competitive advantages over their competitors outside the network

transaction costs economics

- transaction: the fundamental unit of analysis
  - exchanges of goods and services between economic actors inside or outside the org
  - take place **across markets** or **within hierarchies**
  - market transaction (outsourcing) vs. hierarchy transaction (insourcing)
- transaction cost types
  - **production** costs: physical and other primary processes needed to create and distribute the goods and services being produced
  - **transaction** (or coordination) costs: the transaction costs of all information processing needed to coordinate the work of people and machines that perform the primary processes
- the choice for the governance form is a matter of **cost minimization**

transaction cost theory (TCE): market or hierarchy?

governance form	production cost	coordination cost
market	low	high
hiearchy	high	low



transaction aspects

- 3 transaction aspects influence whether a transaction will be carried out in a market or in a hierarchy
- asset specificity
  - is a transaction supported by assets that are specific to the transaction?
  - site specificity, physical asset specificity, human capital specificity, time specificity
  - **highly specific assets** are more likely to be acquired through **hiearachical coordination** than through a market process
- product complexity
  - determines how much information buyers need to select a product
  - high product complexity → hierarchical coordination
- frequency
  - frequency of transactions
  - low frequency → market procurement

behavioral assumptions

- bounded rationality
  - limited capacity of human beings to solve complex problems
  - bounded rationality in conjunction with uncertainty and complexity is likely to increase the transaction costs involved
- opportunistic behavior
  - trying to exploit a situation to one's own advantage
  - very small # of trading partners -> increased transaction costs

resource based view

- the extent to which competitive advantage is sustainable depends on **how difficult or costly** it is for other companies to **obtain the same assets**
  - views intangible resources as a source of competitive advantage
  - resources: financial, equipment, patents, management staffs, ...
- **outsource** only the processes that do not belong to the unique core competence
- resources for competitive advantage must be
  - difficult to buy
  - difficult to replicate
  - difficult to be substituted by another asset
  - advantage yield by the resource must not have been competed away

effects of IT on relationships

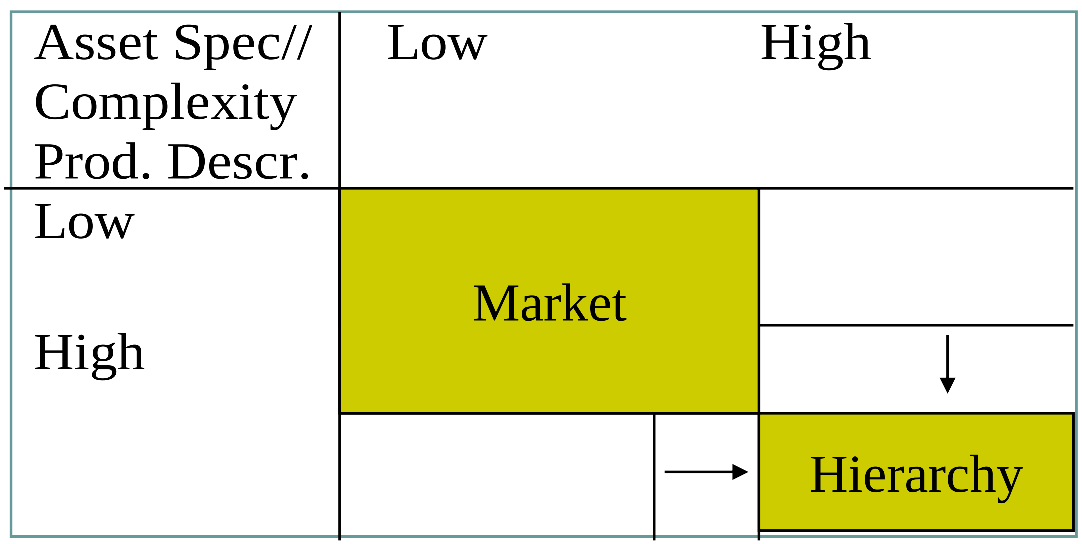
- electronic communication effect
  - IT may allow more information to be communicated in the same amount of time and dramatically decrease costs of communication
- electronic integration effect
  - IT changes and leads to tighter coupling between processes
  - e.g., CAD/CAM, JIT, EAI, web services
- electronic brokerage effect
  - increase **number of alternatives** considered in the trading process, increase the **quality** of the alternative selected, and decrease the **cost** of product selection process
- electronic strategic networking effect
  - design and deployment of linkages among cooperating firms to achieve joint strategic goals

how does IT affect governance structures?

- electronic market hypothesis
- move to the middle hypothesis
- supply chain perspective

electronic market hypothesis

- proposed by Malone, Yates and Benjamin in **1987**
- electronic market: aggregates and disseminates demand and supply information thus matching buyers and sellers
- **electronic markets would become the favored mechanisms** for coordinating material and information flows among orgs in the presence of electronic communication technologies
  - because IT would make electronic communication, brokerage, and integration a realistic possibility
  - IT help making complex product descriptions simple and reducing degree of asset specificity

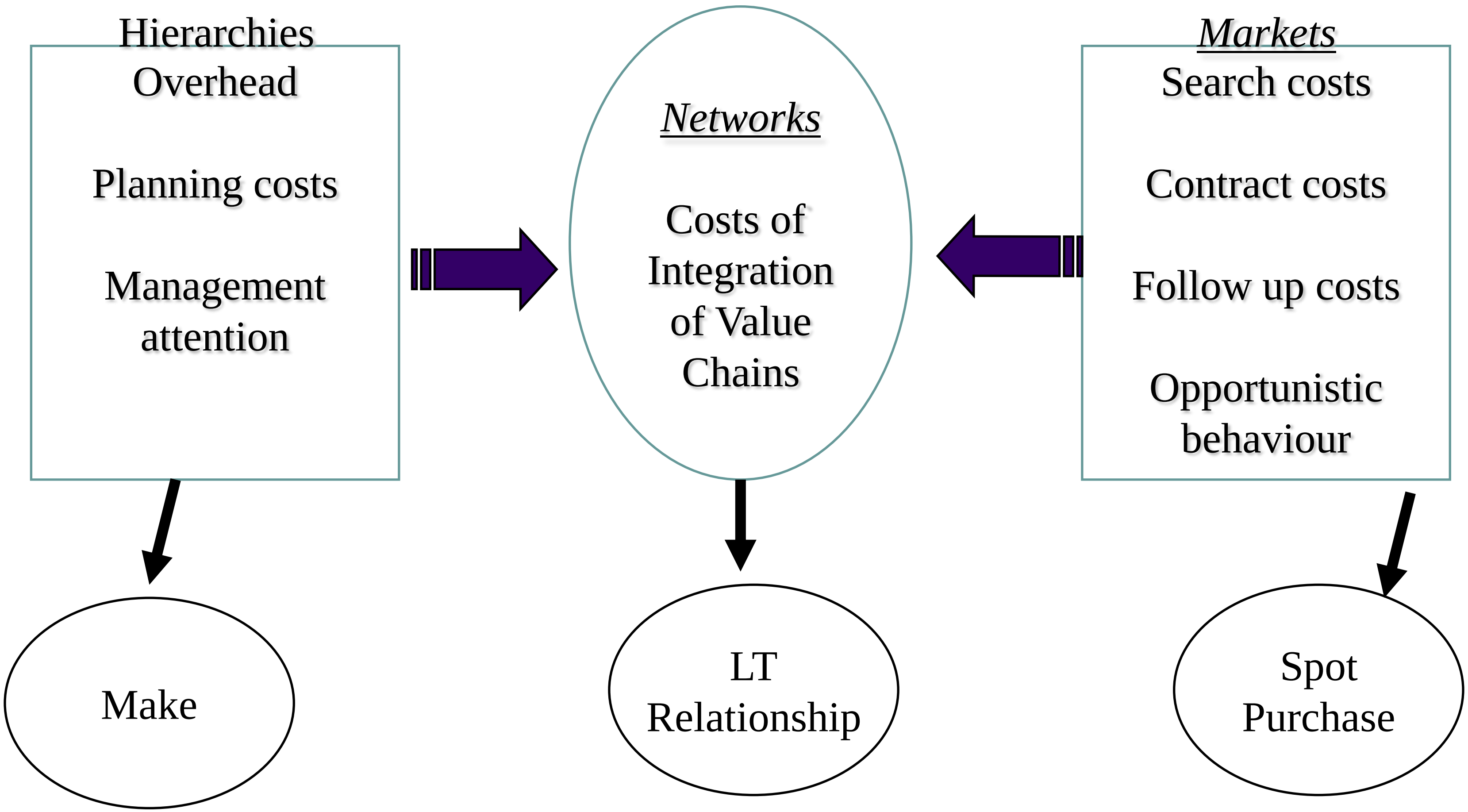


development of elec. markets under EM hypothesis

- biased market
  - favor certain buyers or sellers
- unbiased market
  - due to the competitive and legal forces
  - open to all parties but favoring none
- personalized market
  - overwhelmed by the alternatives offered
  - develop personalized decision aids
- reverse market
  - buyers publish their requirements for goods and services through the electronic market medium; suppliers must then bid to win their business

move to the middle hypothesis

- greater degree of outsourcing will take place (a move away from hierarchies)
- firm will rely on **fewer suppliers** with whom it will have close and **long term relationships** and will coordinate closely (a move away from the market)



supply chain perspective

- based on the impact of inter-organizational IS on the structure and management of supply chains
- **increased interdependence** and **expanded coordination** between participating organizations **enabled by IT**
- eventually the **virtual hierarchies** will emerge
  - **product group supply chains** consisting of business processes across organizational boundaries
  - cooperation between the individual orgnizations cause supply chains to behave as single units