Strategic IT management - 37E00200

Outsourcing

Esko Penttinen
Associate Professor, Information Systems Science, Aalto University School of Business
Chairman, XBRL Finland
Director, Real-Time Economy Competence Center

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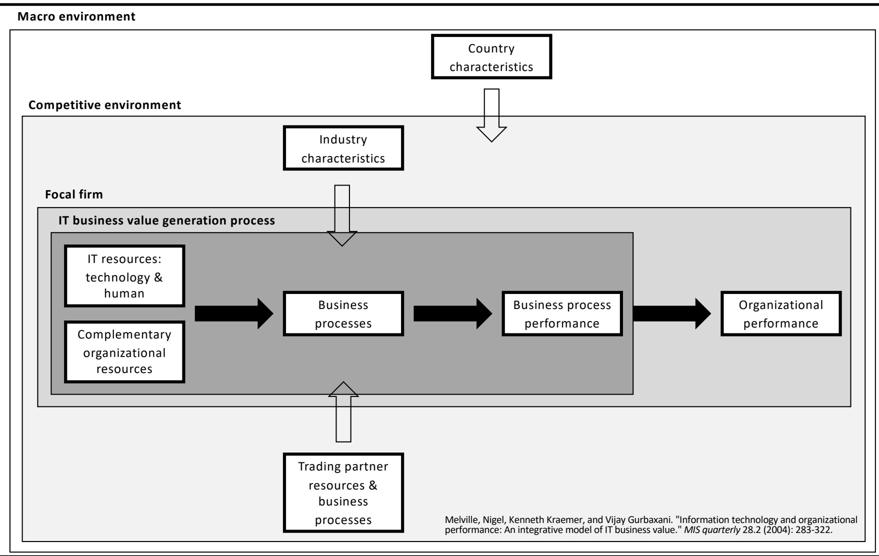

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Outline

- Transaction Cost Economics
  - IT & transaction costs
  - "Move to the middle" – hypothesis
- Recent literature on outsourcing
  - Business process outsourcing (BPO)
  - Information Technology outsourcing (ITO)

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Transaction cost economics (TCE)

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Transaction Cost Economics (TCE)

- Ronald Coase
  - The nature of the firm (1937)

decrease as the firm gets larger. Inventions which tend to bring factors of production nearer together, by lessening spatial distribution, tend to increase the size of the firm.[2] Changes like the telephone and the telegraph which tend to reduce the cost of organising spatially will tend to increase the size of the firm. All changes which improve managerial technique will tend to increase the size of the firm.[3-4]

[3] It should be noted that most inventions will change both the costs of organising and the costs of using the price mechanism. In such cases, whether the invention tends to make firms larger or smaller will depend on the relative effect on these two sets of costs. For instance, if the telephone reduces the costs of using the price mechanism more than it reduces the costs of organising, then it will have the effect of reducing the size of the firm.

- Oliver Williamson
  - The economic institutions of capitalism (1985)

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Theory of transaction costs

- Transaction
  - A whole exchange process and its legal and contract environment; a transaction between parties and the contract covering it
- Transaction costs
  - Friction of the economic system – costs related to performing the transaction, other than production costs
- Goal
  - A structure of industries and companies where the sum of the transaction and production costs is minimized

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Basic concepts of the transaction cost approach

- How to efficiently source products and services?
  - Make or buy?
  - Market, hierarchy or something in between?
- Company/hierarchy
  - A supplement to the market mechanism that has been created to minimize transaction costs

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Hierarchy or markets?

- Coordination can take place either through markets or through hierarchies
  - Hierarchy (make)
    - Product characteristics and prices are decided inside the organization
  - Markets (buy)
    - Prices are settled on the market
    - Without transaction costs all economic activities could be performed through markets

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Underlying concepts of TCE

- Bounded rationality
  - Cognitive assumption on which TCE relies
  - Economic actors are assumed to be ”intendedly rational, but only limitedly so”
- Opportunism
  - Self-interest seeking with guile
  - Both ex ante and ex post types of opportunism are included in TCE

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Main dimensions of transactions

- Key dimensions in TCE
  - Uncertainty
    - Without uncertainty, external sourcing would be easy (buy)
  - Asset specificity
    - Specific investments that are hard to take into alternative uses or to sell
  - Frequency
    - Frequency of transactions

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Specificity types

- Site specificity
  - Geographic location of a resource
- Physical specificity
  - For example building a production line for a specific customer
- Human asset specificity
  - Intellectual capital, personalized knowledge
- Dedicated assets specificity
  - For example many information systems

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Organizing of transactions

- Ex ante transaction costs (Coase 1937, pp. 390-391)
  - Finding a market price
  - Negotiation
  - Making a contract
  - Length of contract
- A company is there to lower transaction costs

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Environmental and human factors

- Williamson (1975)
  - Bounded rationality
  - Uncertainty
  - Small numbers exchange condition
  - Opportunism
- Ex post costs
  - monitoring

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Coordination through hierarchy vs. market

- Hierarchy: internal coordination costs
  - Agency costs
    - Monitoring costs
    - Bonding costs
    - Residual costs
  - Decision information costs
    - Information processing costs
      - Communication
      - Documentation
    - Opportunity costs due to poor information
- Market: external coordination costs or market transaction costs
  - Operational
    - Search costs
    - Transportation costs
    - Inventory holding costs
    - Communications costs
  - Contractual
    - Costs of writing contracts
    - Costs of enforcing constracts

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Governance structures and transaction costs

	Asset specificity	
Frequency	Non-specific	Specific
Occasional	Market governance	Bilateral or trilateral governance
Recurrent	Market governance	Hierarchy

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IT and transactions

- Role of IT
  - Operations
  - Transactions processing
  - Controlling and assessment of result
  - Documentation and communication
  - Decision support

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Role of IT

- Increases the quality of data for decision making
  - Reduces uncertainty
- Flexibility often associated with modern information systems reduces specificity
  - Possibilities to use market expand

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Effect of IT

- IT and decision making
  - Decision rights should be located where the sum of agency costs and decision information costs are minimized
  - IT makes decision making more efficient
    - Centralization of decision making (example centralized purchasing processes)
  - IT makes controlling more easy and lowers agency costs
    - Decentralization of decision making

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IT and the size of the company

- Transaction costs have an effect on the horizontal and vertical size of a company
  - Lowering external coordination costs…
    - Markets overtake the role of internal hierarchy resulting in smaller firms
  - Lowering internal coordination costs…
    - A possibility for bigger organizations
  - Operational scale advantages
- IT has an effect to the optimal size of the firm depending on the effects to external/internal coordination costs

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Summary

- Information processing and acquisition has a deep effect on cost structure of any company
  - These costs can be lowered through IT
- A company can grow because of lower internal transaction costs
- On the other hand, IT can lower market transaction costs

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“Move to the middle”

- Clemons et al. 1993
  - Explanation on why
    - Companies outsource even more and
    - Rely on fewer suppliers
  - Total costs = production costs + transaction costs
  - Transaction costs = coordination costs + transactions risk

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Production and transaction costs

- Production costs
  - Costs of producing the goods or the service
- Coordination costs
  - Costs of exchanging product and demand information
  - Actions to reduce uncertainty in the information
- Transactions risk
  - Possibility that suppliers underperform the contractual responsibilities (incomplete contracts or information asymmetries)
  - Sum of asset specificity, small number bargaining, and loss of resource control

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Clemons et al. 1993 a

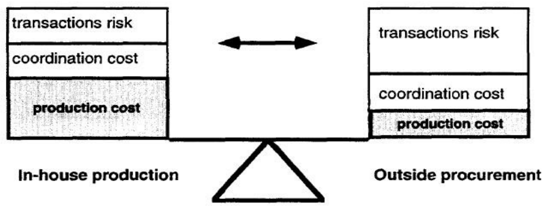

Figure 1A. The Balance between In-house Production and Outside Procurement

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Clemons et al. 1993 b

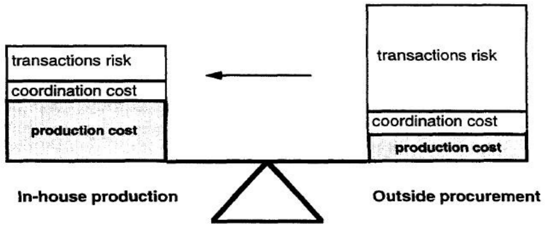

Figure 1B. Traditional Investments to Reduce Coordination Cost Increased Transactions Risk. Firms preferred to Make Such Investments In-house.

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Clemons et al. 1993 c

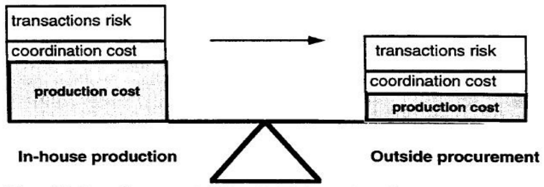

Figure 1C. Current Investments in Information Technology May Not Increase Transactions Risk. Firms Can Now Safely Outsource.

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Move to the middle hypothesis

- Scale advantages of outsourcing
- Transactional scale advantages, many costs are lowered
  - Fixed cost of setting up a relationship
  - Search costs
  - Supplier-specific investments

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Outsourcing

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Outsourcing models

- Domestic outsourcing refers to contracting with a third party who is situated in the same country as the client organization for the completion of a certain amount of work, for a specified length of time, and at a certain cost and level of service.
- Offshore outsourcing, on the other hand, refers to outsourcing arrangements with vendors who are situated in a different country from the client organization.
- Captive models refer to the strategic choice to locate organizational activities within a wholly owned subsidiary in another country.

Oshri, Kotlarsky, Willcocks (2011) The handbook of global outsourcing and offshoring

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Outsourcing arrangements

- Total outsourcing
- More than 80% of the process is outsourced to an external party.

- Selective outsourcing
- 20% to 80% of the process is outsourced to an external party.

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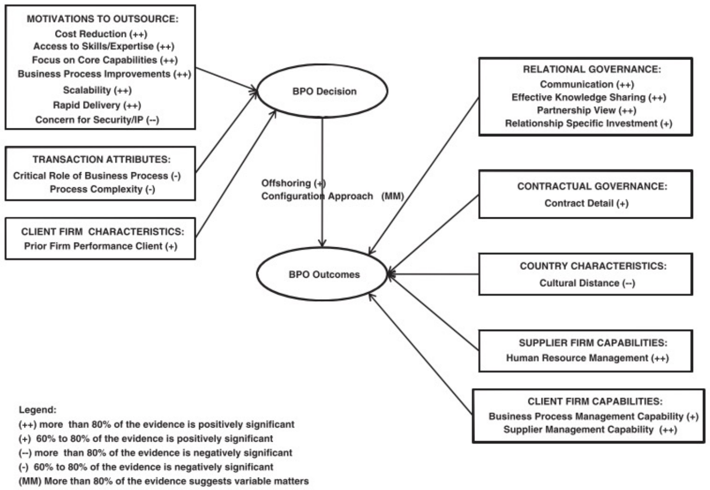
BPO =
Business
Process
Outsourcing



Lacity, M., Solomon, S., Yan, A. and Willcocks, L. (2011). Business process outsourcing studies: a critical review and research directions, *Journal of Information Technology* 26(4): 221–258.

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ITO =
Information
Technology
Outsourcing

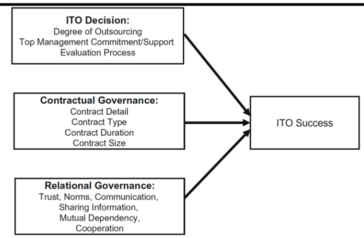
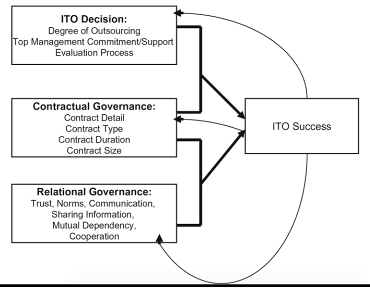


Fig. 1. Three main categories of determinants of ITO success.



Lacity, Khan, and Willcocks. "A review of the IT outsourcing literature: Insights for practice." *The journal of strategic information systems* 18.3 (2009): 130-146.

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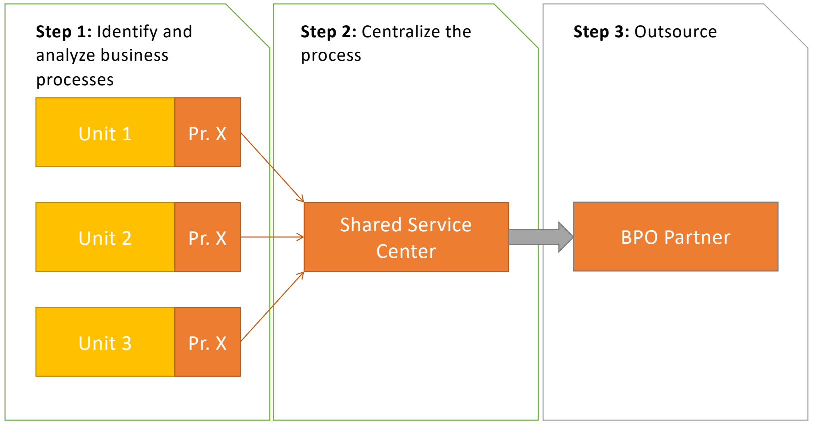
BPO in large companies



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BPO in SMEs

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