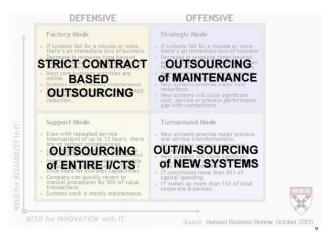# HC8 ICTSM

- Never outsource a problem, always outsource a solution!
- Transaction Cost (slide 5):
  - **Bounded rationality** is the idea that when individuals make decisions, their rationality is limited by the available information, the tractability of the decision problem, the cognitive limitations of their minds, and the time available to make the decision.
  - **Asset specificity** is a term related to the inter-party relationships of a transaction. It is usually defined as the extent to which the investments made to support a particular transaction have a higher value to that transaction than they would have if they were redeployed for any other purpose.

- Slide 6
  - **Vendor selection cost**: Selecting a technology vendor is probably one of the most important tasks that an IT leader will undertake
  - **Transition management cost: ,** in the financial sense, is a service usually offered by sell side institutions to help buy side firms transition a portfolio of securities. Various events including acquisitions and management changes can cause the need for a portfolio to be transitioned
  - **knowledge transfer** is the practical problem of transferring knowledge from one part of the organization to another

- Activities that cannot be outsourced (slide8)
  - **Partnership/Contract management**
    - An informed CIO who actively plans and deals with the broad issues is critical to ensuring that this input is part of the alliance so it can continuously adapt to change.
  - **Architecture planning (!! Planning is niet hetzelfde als design!!)**
    - A CIO's staff must visualize and coordinate the long – term approach to interconnectivity.
  - **Emerging technologies**
    - company must develop a clear understanding of emerging technologies and their potential applications
  - **Continues learning**
    - firm should create an internal IT learning environment to bring users up to speed so they are comfortable in a climate of continues IT change.

- **Strategic Grid Mc Farlan** (slide 9)

  - o Misunderstanding:
    - Does not say you SHOULD outsource
    - 'ideal idea to get rid of IT department' → wrong: lots of things cannot be outsourced (outsourcing contracts is also never forever so problem may occur) → stronger CIO function needed when outsourcing
    - Type of outsourcing depends on the role of ICT
- Slide 11 Gartner competence vs differentiation
  - o We categorize sourcing deals under three broad types
    - Efficiency: focuses on efficiency of operations primarily in the form of cost reduction or cost control.
    - Enhancement: optimizes a service or process to give an organization a tangible advantage or a new degree of functionality that did not previously exist
    - Transformation: directly fulfils business strategy → a high level of risk for both parties and is generally formed as a partnership of equals between the recipient and the provider, with the goal of transforming the organization through a significant change in its business model and the creation of new revenues or improved profitability.
- **Slide 12** :
  - o Vroeger: LT contracten
  - o Nu: LT contracten
  - o EU outsourcing is different from America & Asia
  - o Business Process Outsourcing (BPO) increases (17%)
  - o IT Outsourcing (ITO) decreases (21%)
  - o US has absorbed the financial crisis better than the EU
- **Slide 13**:
  - o Overall decreasing in outsourcing
- REALITIES OF OFFSHORE REENGINEERING (Slide 19):
  - o Time difference can have added value
  - o Labor pool can be larger and cheaper when outsourcing

- o Work habits at outsourcing company are usually stricter and more productive.
- o Training is sometimes needed at the outsourcing company
- o **Key points when considering reengineering**:
  - Prepare the contract carefully
  - Have a clear idea of how to approach the technical problems
  - Consider a dedicated communications link to shorten project time.
  - Establish a spirit of mutual respect and cooperation.
  - Encourage talk about problems and constraints on both sides.
  - Have project managers from both sides communicate at regular intervals.
  - Be prepared to travel
  - General enhancements to the existing system. This might include removing all assembly
  - language; adding documentation or error handling, or adding a more attractive front end.
  - Standardization efforts(changing interface to system etc)
- Slide 20:
  - o **5 large pitfalls for offshoring software development:**
    - **Impact of HR value on the costs of offshoring projects**
      - salary difference with offshore countries = savings
      - because wages are lower ➔ companies train employees to become technology specific experts. This way higher quality of staff in specific technologies
      - companies are no longer offshoring to replace ICT staff, but to handle backlogs (which current ICT head count cannot handle).
      - Value restructuring: companies offshore less motivating tasks such as maintenance of ICT so that internal ICT personnel can have higher value (i.e. lower pressure on maintenance = time for other ICT aspects such as improvements)
      - However: demand for offshore employees is quickly outgrowing supply
      - increasing educational investment necessary in offshore countries AND US & Europe
      - cooperation of students with offshore student (May increase wages, but limited to 30% of US wages)
    - **Different Time Zones**
      - Ideally: tandem effect = minimal time overlap (=small, for business briefings. Optimal overlap depends on:
        - o Type of projects: software development (minimal) vs. hulpdesk support (larger overlap)
        - o Location of Client organization: Europe (e.d. to Philippines, Australia) vs. US (e.d. to India)
    - **Errors and Testing**
      - Testing should happen in offshore country: the longer testing is postponed, the larger additional costs get. new software system is

delivered, implemented and accepted after some basic test → solving errors becomes costly because development knowledge is offshore
- diversified set of testing procedures before offshore-developed software is accepted

- **Cultures**
  - Differences in culture when replacing client organization's developers:
    - Offshore developers may not easily make suggestions
    - Recognition& action upon emerging conflicts may differ
    - Logging all activities may be an issue
    - Common language, common religion
    - Hierarchical ordering may have impact on flexibility and changes in projects
  - May be solved by:
    - P2P project mgnt responsible in client + in offshore organization
    - Frequent briefings & face-to-face interaction
    - Share risks & benefits in contract
    - Involve mutual academic expertize (if present)

- **Learning curve payment structure**
  - Different types of contracts:
    - time-and-material contract: pay for material used + significant payment upfront
    - if results fail, too late
    - no-cure-no-pay: contract objectives, milestones & intended results + fixed payment
    - fixed payment may still be too high (because of lower wages, payment will be sufficient to pay for project)

⇨ Learning curve structure: i.e. low initial payment + additional payments when certain milestones are reached

- <mark>Slide 25 Multisourcing Paradigm</mark>:
  - Multisourcing is the disciplined provisioning and blending of business and IT services from the optimal set of internal and external providers in the pursuit of business goals. Multisourcing is not: a) Doing a lot of outsourcing, b) Using a lot of providers, c) Offshoring, d) All the above.
  - Multisourcing is considered a primary instrument to reduce behavioural and environmental uncertainty.
  - Only parts of the organization that have clearly defined interfaces can be transferred to outsourcing supplier organizations.
  - To manage the interdependencies of sourcing supplier organizations, an integrator with deep skills in enterprise architecture is necessary.
  - Core competences : communication , coordination (= structure & role interfaces) & integration

- <mark>The resource based view approach</mark> (slide 26)
  - A RBV of the business-ICT alignment issues require a precise distinction between resources, competencies and capabilities.
    - **Resources**: stocks of available factors owned/controlled by the organization. The framework by Maes considers three types of resources: business, I/C and technological resources. Examples are data, information, knowledge, systems, technology, …
    - **Competencies**: an organization's capacity to effectively deploy (bundles of) resources in an organized process to accomplish given tasks.
    - **Capability**: strategic application of competencies through focused investments to accomplish given organizational goals.
  - Resources are leveraged and transformed into competencies through processes, structures and roles. The success of the outsourcing decision is dependent on building collaborative relationships and internalizing external expertise.
  - The RBV on the firm has a natural linkage to the integrative framework for information management
  - The RBV adds additional arguments to the TCT (in particular regarding asset specificity).
  - Most studies suggest that outsourcing doesn't make sense in the case of strategic resources. It is shown how scenarios may exist where outsourcing still makes sense in the case of strategic resources.

- <mark>Specific assets vs Strategic Resources</mark> (silde 27) **VERSCHIL GOED KENNEN TUSSEN SPECIFIC ASSETS vs STRATEGIC RESOURCES**

Specific Assets versus Strategic Resources

Watjatrakul 2005

		Strategic resources	
		Nonexistent	**Existent**
Specific assets	**High**	High-specificity, non-strategic resources (HSNR)	High-specificity, strategic resources (HSSR)
	Low	Low-specificity, non-strategic resources (LSNR)	Low-specificity, strategic resources (LSSR)

Relationships between specific assets and strategic resources.

  - **Asset specificity**: This is the extent to which investments made to support a particular transaction have a higher value to that particular type of transaction in contrast with the value when these investments are used for another purpose. It is very risky for a client organization to outsource its highly specific assets, because in this way the supplier company gains control and power over the client organization (mainly due to switching

costs). Transactions with high asset specificity will typically drive insourcing, as organizations attempt to protect their resources themselves. Transactions with low asset specificity may lead to outsourcing. Furthermore, outsourcing supplier firms can lower their costs by pooling demand across multiple customers and services, and by utilizing excess capacity in a more efficient way. That gives them an advantage when client organizations are looking for the least costly market options.

- o **Strategic resources** yield — by definition — sustainable competitive advantage to organizations. Strategic resources exploit market opportunities (imperfections) and try to neutralize competitive forces. **Nonstrategic resources** are operational resources, which are more oriented toward day-to-day continuity of the operations, without giving sustained competitive advantage. The two characteristics should not be confused: even strategic resources may be nonspecific, for example, if they are strategic in many scenarios. Combining these two characteristics (specific and strategic) leads to the following resource classification:
    - **Low-specific nonstrategic resources (LSNR):** Examples are generic (nonspecific) operational management skills.
    - **High-specific nonstrategic resources (HSNR):** Examples are highly technical customized skills (e.g., to administer an internal groupware system tailored to the specific needs of the organization).
    - **Low-specific strategic resources (LSSR):** Examples are generic collaboration skills that can make a management team a strategic asset for sustainable value.
    - **High-specific strategic resources (HSSR):** Examples are highly specialized software teams that create sustainable strategic advantage, which is difficult to imitate (due to, e.g., dependency on specific data of the organization and its customers).

- Sourcing decisions based on TCT (transaction cost theory) & RBV (slide 28) **EXAMEN!! VERGELIJKEN MET MCFARLAN!!**
    - o **TCT : Transaction costs** influence sourcing decisions. Organizations try to minimize transaction costs. When these costs are low, the organization will try to take advantage of economies of scale and/or scope. When these costs are high, the organization will prefer internal sourcing. TCT considers two factors having an influence on sourcing decision: asset specificity and uncertainty.
        - **Uncertainty**: Higher (external) uncertainty implies higher outsourcing costs, which drives towards insourcing. There is behavioural uncertainty and environmental uncertainty. When there is behavioural uncertainty, the outsourcing supplier firm's strategic behaviour is unsure, which leads to higher contract enforcement and monitoring costs. When there is environmental uncertainty, the client organization is unsure about future outcomes. To anticipate opportunistic behaviour or outsourcing supplier firms, the client organization needs to write more complete contracts, which implies higher transaction costs.
    - o Vergelijking McFarlan volgens mij :
        - **LSNR:** support

- **LSSR:** turnaround? -> moet strategisch zijn maar niet noodzakelijk low specifity -> past niet perfect
- **HSNR:** factory? -> moet low specifity zijn en niet strategisch volgens mij ; dus spreekt tegen
- **HSSR:** Strategic