Knowledge & the Boundaries of the Firm: Implications for the Construction Industry

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Firms often know more than they do.

When multiple technologies or processes are involved, to create a manageable system there may be a need to know about technologies and processes that are actually completed by other firms.
Virtual organisations allow us to outsource and sub-contract almost all aspects of an organisation's operations.

Knowledge needs to be retained in the case of systemic innovations or changes and when different processes integrate.
Boundaries of the Firm

• Classic organisational theory
  – Organisational design, technology of the firm theories

• Transaction Cost Economics
  – Markets, Hierarchies and Networks

• Agency Theory

• Limitations of traditional explanations
Knowledge Based View

How is value created?
Where do the boundaries lie?
How do firms compete?

Firm’s economic boundaries

Firm’s knowledge boundaries

Potential need for an alliance

Potential provider of knowledge via an alliance
Methodology

- Case study as process of enquiry and product of enquiry
- Methodology recognises complexity of organisations and knowledge processes
- Unstructured, qualitative interviews
- Single case provides richness, but also highlights potential issues on a broader scale
Case Study - Main Roads WA

- Main Roads WA established in 1926
- Net assets $22.5 billion
- Operations cover 2.5 million square kilometres
- Contracting guidelines – three categories
- History of alliancing started in late 2003
- Focus on innovation, problem solving and flexibility
Overview of Findings

• Knowledge processes prevalent in all parts of the organisations but at differing levels of:
  – Maturity
  – Sophistication
  – Coordination

• Successful knowledge management processes are:
  – Leadership driven
  – Embedded in and driven by organisational culture

• Relationships and trust integral to improving knowledge flow internally and externally
Overview of Findings cont.

- Links between contractual arrangements & knowledge flows
- The nature of the knowledge boundary, ie permeability is far more important than the position of the boundary
- Knowledge transfer from one project to another problematic
- Alliances support best knowledge transfer
  - Reduces conflict
  - Building problem solving skills
  - May impact on internal resourcing
- Experience should not be confused with knowledge – linked to the concept of organisational memory & the ability to unlearn
Alliances - Knowledge Builders

- **Intent**: a shared commitment to knowledge transfer and learning
- **Transparency**: alliance team culture and development supported by alliance facilitator and the alliance as common space and collaborative membrane
- **Receptivity**: Boundary spanning activities and the value of lessons learned
Permeability of Boundaries

- Outsourced to suppliers
- Partnerships
- ORGANISATIONAL BOUNDARIES
- INTRAORGANISATIONAL BOUNDARIES

Organisation
Group/project
Individual
Implications

• Building capacity and social capital rather than competing for knowledge & resources

• Public organisation as central firm

• Knowledge as a competence to engage successfully in practice

• Need for a review on the theory