



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

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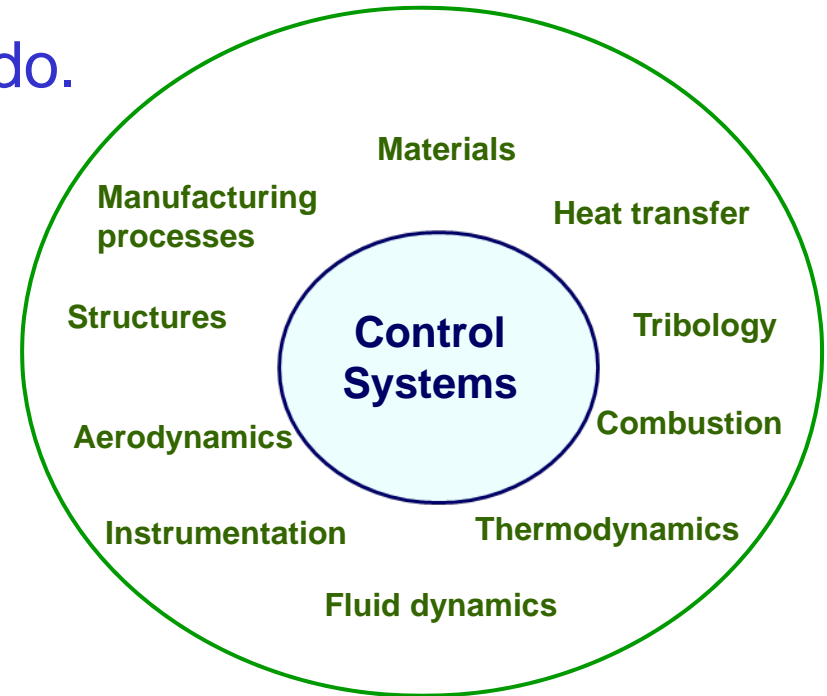
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What are we interested in?

Firms often know more than they do.

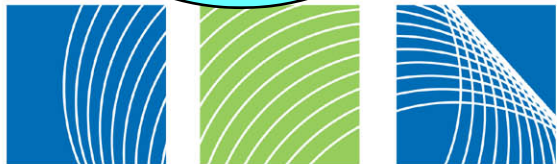
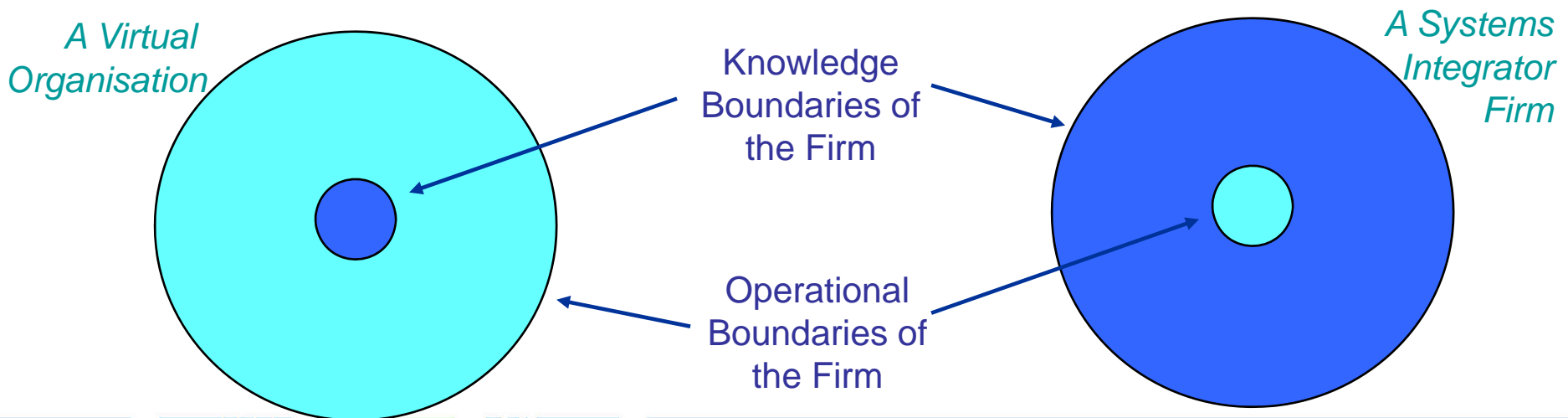
When multiple technologies or processes are involved, to create a manageable system there may be a need to know about technologies and processes that are actually completed by other firms.



Boundaries & Knowledge

Virtual organisations allow us to outsource and sub-contract almost all aspects of an organisations 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

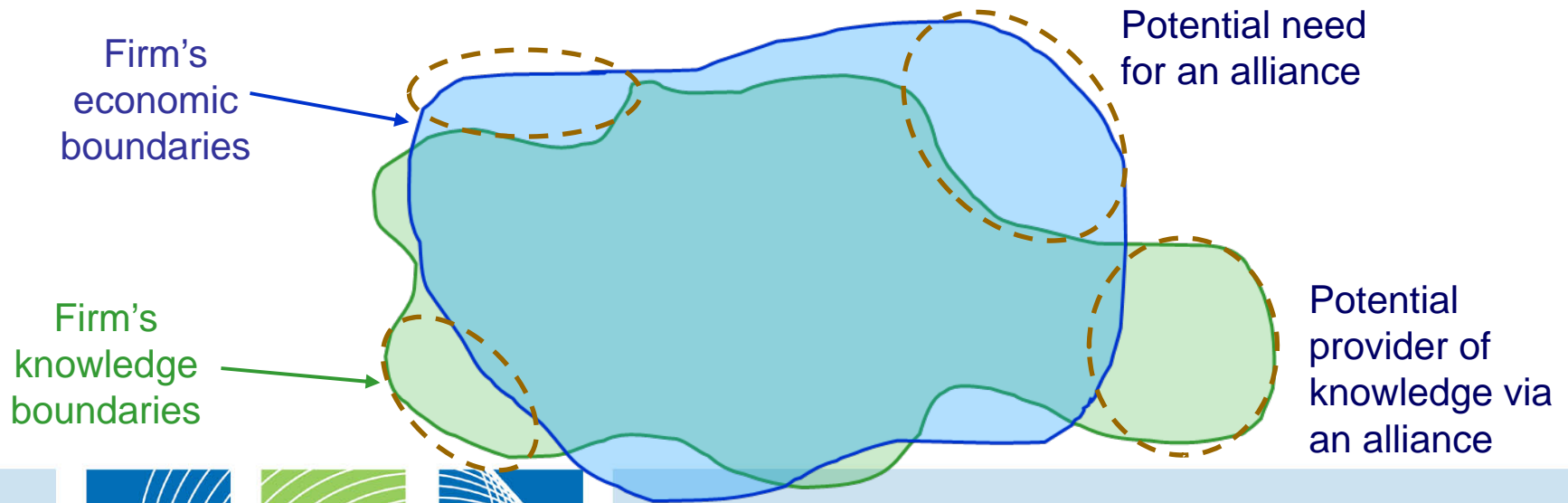


Knowledge Based View

How is value created?

Where do the boundaries lie?

How do firms compete?



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

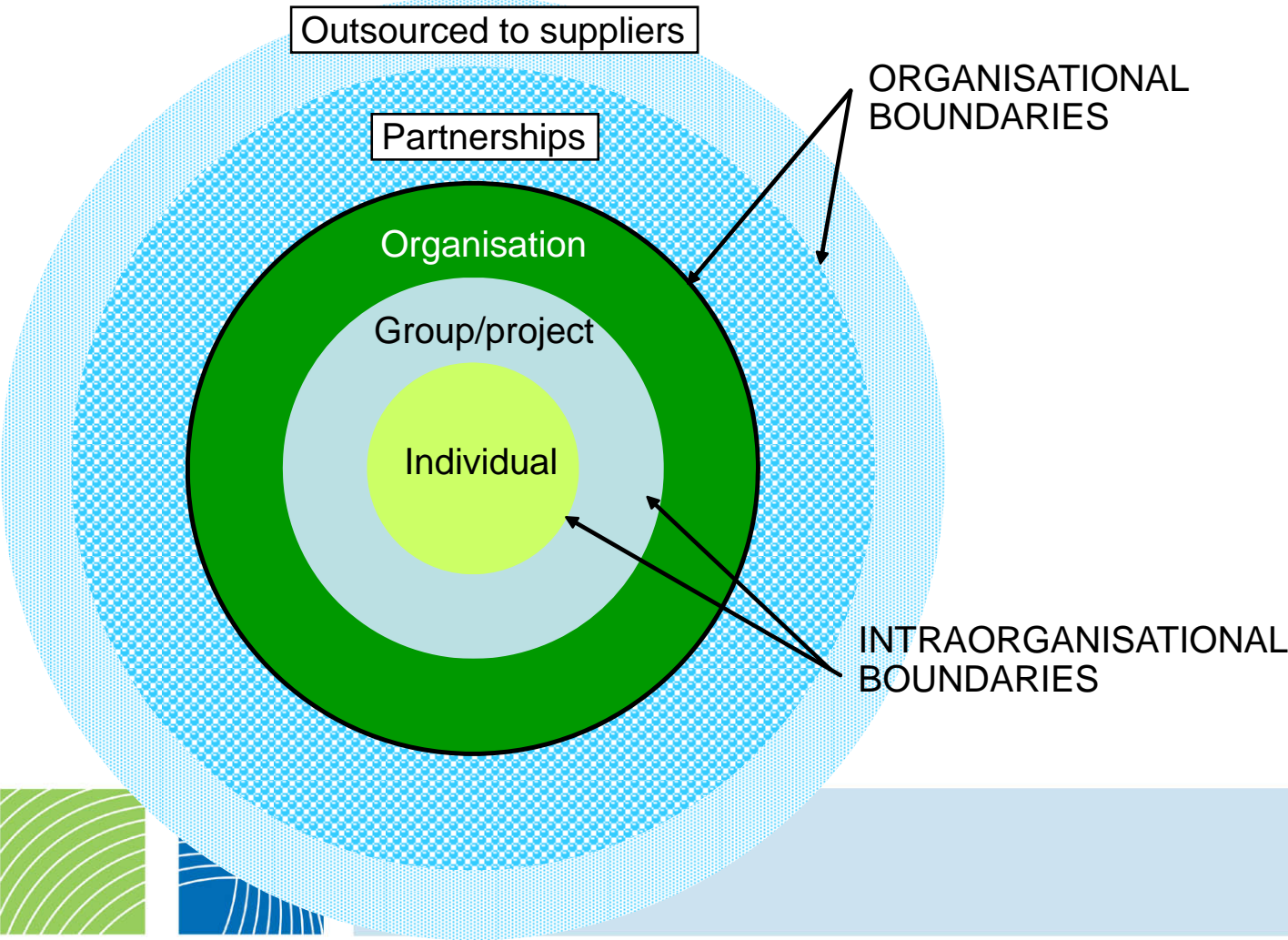


Alliances - Knowledge Builders

- **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



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

