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# The Variable Nature of Trust in Sustainable Collaborative Ventures

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# Competition or Collaboration?

# Porter's Five Forces Model of Competition

#### Threat of New Entrants

Barriers to entry

- Economies of scale
- Product differentiation
- Captial requirements
- Switching cost to buyers
- Access to distribution channels
- Other cost advantages
- Governement policies

Incumbants' defense of market share Industry growth rate



## Determinants of Supplier Power

Supplier concentration
Availability of substitute inputs
Importance of suppliers' input to buyer
Suppliers' product differentiation
Importance of industry to suppliers
Buyers' switching cost to other input
Suppliers' threat of forward integration
Buyers' threat of backward integration



## Rivalry Among Existing Firms

Number of competitors (concentration)
Relative size of competitors (balance)
Industry growth rate
Fixed costs vs. variable costs
Product differentiation
Capacity augmented in large increments
Buyers' switching costs
Diversity of competitors
Exit barriers
Strategic stakes



#### Determinants of Buyer Power

Number of buyers relative to sellers
Product differentiation
Switching costs to use other product
Buyers' profit margins
Buyers' use of multiple sources
Buyers' threat of backward integration
Sellers' threat of forward integration
Importance of product to the buyer
Buyers' volume



## Threat of Substitute Products

Relative price of substitute Relative quality of substitute Switching costs to buyers

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# **ICT & Collaboration**

Increases in collaboration

+

Increases in use of ICT

=

eCollaboration

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New ways of doing business

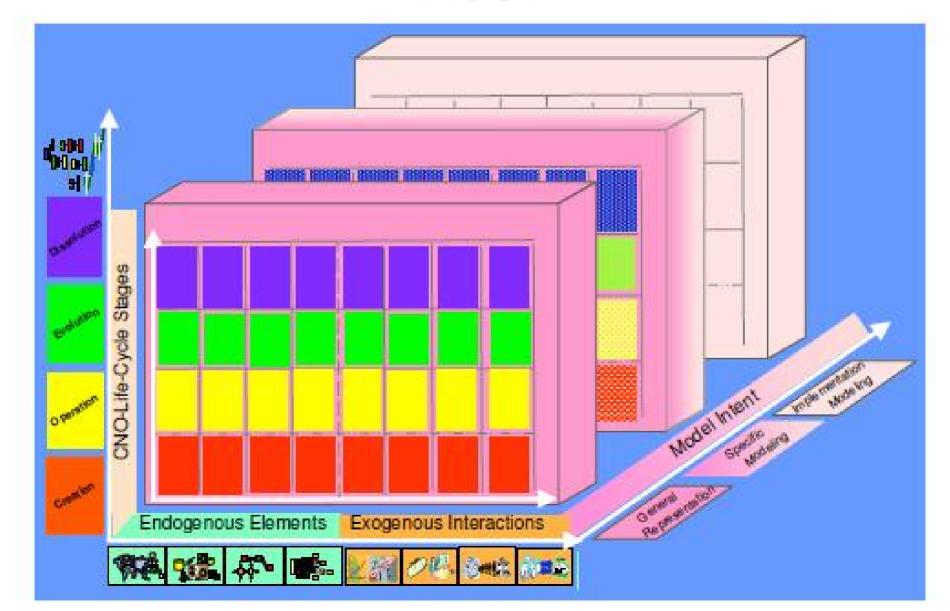
## Trust

- This new ways of doing business places a larger burden on TRUST:
  - -trust in the product,
  - -trust in the enterprise,
  - -trust in the people,
  - -trust in ICT

# Our Study

- We examine the context of trust among a number of case studies – our own and others.
- Our findings are reference against a well developed virtual enterprise reference model: ARCON.
- We discuss its utility from this perspective

- Provides a framework to capture the multi-dimensional complexity of a Collaborative Networked Organization (CNO). It models:
  - Social and technological networks
  - life-cycle stages, environment characteristics and modelling intents
  - endogenous and exogenous environment interactions



- Put simply. The ARCON model:
  - Identifies how CNOs work from a variety of perspectives across all levels of business, its relationships, its life cycle and its operational nature.
  - We are concerned with its more general conceptual levels and its examination of trust.

Trust in Cooperative Marketing



competency-basedtrust – Austmine &Nepean IT

– economic trust – TIFAAerospace

- Trust in Supply Chain
  - commitment-based trust
    - Nielsen et al
  - information-based trust
    - Nielsen et al



- Goodwill-based trust TAAG, Miyamoto et al
- Contractual trust Miyamoto et al



- Trust in Inter-organisation Innovation
  - Normative trust Kilpatrick and Bell
  - Affective trust Burnett & McMurray, Aerospace

Design

- Calculative trust
  - Aerospace Design
- IP-based trust
  - Aerospace Design
- Contractual trust
  - Aerospace Design
- Goodwill-based trust Aerospace Design



- Trust in e-collaboration
- Interpersonal trust
  - DefenceNet, IT Cluster
- Calculative trust
  - DefenceNet, Marine Ind
- System trust
  - DefenceNet, Aust Tourism
- Technology trust
  - DefenceNet, IT Cluster



 Looking at the ARCON model we confirm its suitability by finding similar trust elements proposed by the model.

## **Endogenous** Interactions in relation to trust were seen as:

- Relationship trust between actors (goodwill)
- Knowledge resources profile and competency (competency)
- Network management, operational competencies and approach (competency)
- Functional processes trust management (goodwill)
- Functional processes risk management (contract/competency/goodwill)
- Prescriptive behaviour general principles (contract)
- Contract/Agreement constraints and conditions (contract)

## **Exogenous** Interactions in relation to trust were seen as:

- Market Network identity references and testimonials, interaction parties: customers and suppliers (contract and competency), Interactions: advertising and customer/supplier-oriented transactions (goodwill)
- Support Network identity: social aspect e.g. not-for-profit (goodwill), Interaction parties: certification entities, coaching entities and training entities (competency),
- Societal Network identity: values and principles (goodwill)
- Constituency Network identity: inclusiveness of external members (goodwill)

# An integrated perspective

- Based on our findings and on analysis from the ARCON model we find:
  - There are elements of trust within the network and elements related to trust of the network
  - Some exist in both domains: contract trust and competence trust

# Conclusion

- We selected items within ARCON that we thought could impact on the assignment or development of trust. All of these items were found at least somewhere in our case study set, implying that the ARCON framework can be used in a variety of circumstances.
- Some of the cases illustrate that trust developed in one context does not necessarily translate to the same level of trust in another context.

# Conclusion

- The ARCON framework presents some internal and external views of collaboration.
  - Endogenous elements we identified were relationship structures, competencies, some functional processes (e.g. trust management) and contract-driven behaviour.
  - This presented as a structural view, whereas much of the literature on trust takes an agency view.
  - We find that contrary to ARCON framework trust is represented internally and externally.