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Relationship initiation between universities and manufacturing: a new perspective

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Relationship initiation between universities and manufacturing: a new perspective

Abstract
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Relationship Initiation between Universities and Manufacturing: A New Perspective

- Additive Manufacturing
  - More is possible
- Barriers for Manufacturers
- The Innovation Challenge
  - Academic engagement
  - Relationship Marketing
  - Convergence of Models
  - Relationship Benefits

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Additive Manufacturing

- Cost effective over small production runs,
- IP not held by large multi-national companies,
- Enabler for “mass customisation”,
- SME’s and individuals can participate.
Stats reveal real story of small biz barriers

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Stories about big ideas and starting up more than the macro economic situation is the primary determinant of the situation. If you went back to the eighties and nineties, the health of the sector was such that there was a fairly ready takeover of new technology because companies had the margin to invest in it and have the motivation to. This decade is totally different and so that would be the primary determinant I would suggest.”
What creates the most value?
What do I need to talk about?
Who do I need to talk to?
When is the best time to talk to them?
How do best communicate to them?

... but in the current decade, this latest additive manufacturing technology is only really going into universities and not into industry.”

Academic Engagement literature explains successful commercial output needs to address individual, organisational and institutional factors (Perkmann et al., 2013).

Financial:
Industry resources low

What is missing is:

Relationship Marketing
Barriers for Manufacturers

- Financial
  - Project viability
  - Industry resources

- Relational
  - Communication
  - Disruptions
  - New participants
  - Previous experience
  - Resistance to change
  - Right people for roles
  - Trust

- Technical
  - Design
  - Equipment
  - Materials
Relationship Basics

Enduring Relationships

- Communication
- Co-operation
- Collaboration

Trust

Esprit d’corps: morale and trust have a positive impact on collaboration performance.

(Jassawalla and Sashittal, 1998)
Convergence of Worlds

(Adapted from Gupta et al. (1986), Plewa et al. (2013) and Perkmann et al. (2013))
## Relationship Marketing Lens

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Manufacturers may not have engaged with universities or Manufacturers may have good or bad experiences from the past

“I’m still learning what the Universities capabilities really entails so it’s a learning for us to see what capabilities they have that would complement what we see in industry”

“I wish they would open the Illawarra Airport again. But outside that, it’s a very good relationship.”

“You know I’ve got to the point now that I avoid having anything to do with them. They are so hard to deal with, they have an unrealistic sense of value.”
Relationship Marketing Benefits

'Relationship Marketing' is relevant to early stage 'Academic Engagement'

Analytical framework

Pre Establishment

Relationship Management

Establishment Delivery Advancement Maintenance

Commercial output

Barriers

- Communication
- Trust
- Prior experience memory
  - No prior experience
  - Bad prior experience

‘Relationship Marketing’ is relevant to early stage ‘Academic Engagement’