The Role of Sustainability in Strategic Thinking in Norwegian Shipbuilding Industry

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Scope of the paper

- Literature Review
- Case Study
- Deductions and Suggestions
The Norwegian Shipbuilding Industry

• Highly competent and technically advanced (Reve, 2012)
• Bulk share of the present orders come from the offshore service vessels category (Norwegian Shipowners Association, 2015)
• Mostly Engineer to Order vessels (Semini et. al 2014)
• Environmental friendliness and sustainability issues have been in the limelight for a good amount of time
• Stiff competition from low cost countries
• Increasing prominence of Arctic shipping and environmental regulations (IMO)
Research Questions

• What is the strategic thinking process in the Norwegian shipbuilding industry?
• How has the focus on sustainability issues affected the strategic thinking in the industry?
• What practical step can augment the sustainability efforts of the Norwegian shipbuilding industry?
Strategic Thinking

• Strategy and strategic thinking

Strategy : Process, Content, Context
(Adapted from Wit and Meyer (2010))
Strategic Thinking

• a specific management activity whose aim is “to discover novel, imaginative strategies which can rewrite the rules of the competitive game; and to envision potential futures significantly different from the present” (Heracleous, 1998)

• Two major views
  – Michael H. Porter – a more analytical process
  – Mintzberg – a synthesis of ideas around strategy making process
Sustainability in Strategy

• Investments in sustainability initiatives translate to economical benefits for companies (Porter and Kramer 2011)

• Judicious environmental regulations would stimulate technical innovation and strategic changes in businesses (Porter and van der Linde 1995)

• Such innovations and changes have been recognized to be "Pay-to-be-green" strategies (Berchicci and King, 2007)
Strategic Thinking and Sustainability

Insights from literature reviewed:

• Strategic thinking in business, distinct from strategic planning (Heracleous, 1998)

• A strong linkage is missing between the two concepts of strategic thinking and sustainability

• Two major theories in literature that link sustainability with strategic thinking
  – Shared Value Creation - Porter and Kramer (2011)
Natural Resource Based View (NRBV)

• Proposed by Hart in 1995
• Relevant for any company working in close interaction with the environment, such as shipping
• Companies capabilities to tackle the environmental challenges will translate to competitive advantage
• Three dimensions to NRBV framework :
  – Pollution prevention
  – Product stewardship
  – Sustainable development
Sustainability issues focussed upon
Case companies for interviews

**Company A**
- Over 100 years of organizational history
- Size: 800 - 1000
- Design and manufacturing customized OSVs
- New build and design

**Company B**
- Over 100 years of organizational history
- Size: 200 - 300
- Alternate fuel and hybrid vessels - ferries and fishing vessels
- New build and repair
# Interview - overview

<table>
<thead>
<tr>
<th>Type of Interview</th>
<th>Respondent position in the organization</th>
<th>Number of formal interviews</th>
<th>Number of Informal interviews</th>
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</thead>
<tbody>
<tr>
<td><strong>Case Company A</strong></td>
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<td></td>
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</tr>
<tr>
<td>Face to Face</td>
<td>Deputy Managing Director</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Face to Face</td>
<td>Manager Planning Department</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Face to Face</td>
<td>Senior Business Analyst</td>
<td>1</td>
<td>2</td>
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<tr>
<td><strong>Case Company B</strong></td>
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<tr>
<td>Face to Face</td>
<td>CEO</td>
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<td>1</td>
</tr>
<tr>
<td>Telephonic</td>
<td>Sales Director</td>
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</tbody>
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Major Findings

- Strategic thinking tools – Porter’s 5 forces, PESTEL
- Resource capability determine success of tools
- Sustainability missing focus in such tools
- Practical steps driven primarily by economic benefits
Major Findings

• Sustainability initiatives implemented in the case companies included lean production, alternate production technologies and so on.

• Lean was found to be a feasible concept in the shipyards
  – both economical and waste reducing
  – streamlined operations
  – increased efficiency
Remanufacturing

• An alternate production concept that we found will be applicable in the industry
Remanufacturing and the shipbuilding industry

- Already in practice is minor scale in one of the case companies, though commonly known as refitting
- An innovative production concept adding value to products in end of life cycle
- Developing a decision making framework on aiding companies remanufacture a vessel will make it more attractive
Future Work

- Developing the reman concept in the industry
- Document the environmental performance
- Strategic decision making tools to aid it
- Real Industrial testing and validation
Questions?
THANK YOU

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