How to ‘Disrupt’ the ‘Disruptors’?
Strategic intents of incumbents after the introduction of radical innovations: the case of “low cost” satellites and launchers

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Purpose

• «Hi everyone, my name is Elon Musk, I am the founder of SpaceX. You are all dead in five years.» (Elon MUSK, 2006, Washington, [Challenges, 2013])

• Study the strategic intents of existing producers after the recent introduction of radical innovations by new entrants
  – Diversity of intents
  – Construction of intents

• Ex ante analysis = uncertainty
  – Radical innovation have not yet produced the results expected by new entrants
  – Incumbents did not yet
    • implement a new strategy
    • get the results of the new strategy
Literature review

**strategic intents**

- The realized strategy results from a process starting with the strategic intents.
- The strategic intents are between the strategic diagnosis and realized strategy observed later.
- Strategic intents may relate to technological choices, mergers and acquisitions, internationalization, etc.
  - We focus on technological choices.
- Strategic intents are visible in the speech of companies.

Source: Mintzberg (1994)
Literature review

Strategy construction

• Existing firms build their strategy by analyzing if the new technology is a substitute of the existing technology (Gambardella, 2004)

• Producers look at the interest of customers for the new technology to determine if it is a substitute of the existing technology (Christensen, 1996)
## Our conceptual framework

### Strategy construction

<table>
<thead>
<tr>
<th>Is the new technology a substitute?</th>
<th>Strategic intents in technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Improvement of the existing technology A</td>
</tr>
<tr>
<td>Yes</td>
<td>Imitation of the new radical technology B</td>
</tr>
<tr>
<td>No</td>
<td>Technological leap by using a different technology C</td>
</tr>
<tr>
<td>No</td>
<td>No reaction and keep using technology A</td>
</tr>
</tbody>
</table>

### Interest of customers for the radical innovation
Methodology

• Qualitative methodology
• Study of the speech of senior managers after the introduction of a radical innovation
• Period: 2005-2017
• Units of analysis
  – Actors
    • Existing producers
    • Existing customers
  – Market
    • Satellites
    • Launchers
  – Radical innovations
    • « Low cost » satellites and launchers
• Sources: specialized and general press
  – e.g. Aviation Week & Space Technology, Lockheed Martin Press release, SpaceNews, Air et Cosmos, l’Usine Nouvelle, etc.
Preliminary results
Satellites: Producers

- Diversity of strategic intents after the introduction of the radical innovation (i.e. « low cost » satellites)
- Multiple strategic intents by the same company: imitation and technological leap
  - (e.g. Sodern, Thales Alenia Space, Airbus)
- Contradiction: imitation and technological leap combined with no reaction and improvement of existing technology
  - (e.g. Airbus: commercial satellites and scientific satellites)
Satellites: Customers

• Diversity of speeches
  – Institutional customers and new commercial customers: “low cost” satellites are substitutes
    – (e.g. U.S. Air Force Research Laboratory, OneWeb)
  • They lead producers to react
  – Existing commercial customers: “low cost” are not substitutes
    – (e.g. AsiaSat, Iridium Communications, Arabsat)
  • They lead producers to not react
Launchers: Producers

• Diversity of strategic intents after the introduction of the radical innovation (i.e. «low cost» launchers)

• Multiple strategic intents by the same company: imitation and technological improvement
  • (e.g. ULA Engineering, ATK)

• Contradiction: imitation and technological improvement combined with no reaction
  • (e.g. Arianespace)
Launchers: Customers

• Diversity of speeches
• Commercial customers and US institutional customers
  – At short term “Low cost” launchers are considered as imperfect substitutes but they could become substitutes at long term
    – (e.g. AsiaSat, SES, Eutelsat, Airforce Space)
  – Lead producers to react
• European institutional customers
  – “Low cost” launchers are considered both as substitutes and as no substitutes
    – (e.g. CNES, French Ministry of higher education and research, French Air Force General)
  • Lead producers to adopt contradictory strategic intents: reaction and no reaction
Preliminary conclusions

• Diversity of strategic intents for the same radical innovation (“low cost”)
  – 4 possible intents
    • Several intents at the same time
    • Contradictory intents
• Strategic intents of existing producers to face the same radical innovation is influenced by
  – their market position
  – the interest of customers on the radical innovation
    • consistency between on the one hand the strategic intents of existing producers and on the other hand the customers interest on the radical innovation
• Diversity is explained by the complexity of the strategic position of incumbents
  – Not by irrationality
  – Impossible to say that strategic intents are dangerous
• Thank you for your attention!