Collaborating in an Imperfect World:
Understanding Category Captain Arrangements

Or

Thinking Strategically About Category Captain Arrangements

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University of Texas at Dallas
Some (Broad) Definitions

• **Category Management (CM):** Managing retail stores using product category as a business unit

• **Category Captain (CC):** aka “Lead Supplier”, “Category Advisor”, “Lead Advisor”
  > Designated by the retailer to assist in CM
  > Has more influence than other suppliers over store environment
  > Influence extends to rival suppliers’ brands
Overview of Today’s Talk

• Model-based framework to understand CC arrangements
  – Focusing on strategic aspects of competition and collaboration

• Why is this useful?
  – Identify drivers of value for CC supplier, retailer, non-CC suppliers
  – Identify means to improve the value from CM
  – Bridge disconnect between managers and legal authorities
Managers are from Mars
Legal Authorities are from Venus

Collaboration = Joint Growth

Collaboration = Diverging Interests

• CM collaboration is widespread and taken for granted
• Typical question: How do I get the most from collaboration?

• Suspicious every time they encounter such collaboration
• Typical question: Should collaboration be allowed?
Thomas B. Leary, FTC Commissioner (2003)

I first became aware of “category management” and designated “category captains” about six years ago, when I was in private practice.

I was aware that consultation on these subjects with a retailer can be delicate, even when you are talking only about your own brands.

The idea that a manufacturer would provide advice about the pricing and promotion of competitive brands, as well, set off every antitrust alarm.
Intuitively, the category captain relationship is like the fox guarding the henhouse...

After all, the manufacturer is concerned primarily with its own brands and has a vested interest in seeing competing products fail...

There is a fundamental difference between the interest of the manufacturer and those of the retailer it serves.

Participant at UC Berkeley Research Conference (2009)

Now that Obama is President, the FTC will outlaw this practice!!!
How do we bridge this divide?

Collaboration = Joint Growth

Collaboration = Diverging Interests

Our Approach: Develop a **formal economic model**
of how collaboration works in an imperfect world

- Collaboration = Joint Growth + Diverging Interests
- Legal authorities: Find economic theories compelling
- Managers: A framework to improve CM decisions
Our Model... in (Gory) Math

Latest issue of Management Science

Not available at your local newsstand!!!
Our Model... in (Nice) Pictures

A Tale of One Product Category at One Retailer

Supplier A  Supplier B

Retailer

create your future www.utdallas.edu

create your future www.utdallas.edu
Our Model... in (Nice) Pictures

Retailer designates one supplier as the CC

Supplier A

Supplier B

Retailer
Our Model... in (Nice) Pictures

CC can be **objective** → Grow the entire category

Supplier A

Supplier B

Retailer

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Our Model... in (Nice) Pictures

CC can be biased → Increase only own market share

Supplier A

Supplier B

Retailer

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Key Operating Assumptions

1. CC can be objective or biased (or somewhere in between) in its initiatives

2. Retailers and suppliers each act in their own interests

Let’s pause here and look at a simple example…
An Illustrative Example

Suppose as a supplier you have 3 options:

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
<th>Option C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No CC</td>
<td>Be a biased CC</td>
<td>Be an objective CC</td>
</tr>
<tr>
<td>Your Demand</td>
<td>10 units</td>
<td>15 units ↑</td>
<td>15 units ↑</td>
</tr>
<tr>
<td>Rival’s Demand</td>
<td>10 units</td>
<td>5 units ↓</td>
<td>15 units ↑</td>
</tr>
</tbody>
</table>

Which option should you choose to maximize your profits?
## An Illustrative Example

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<td>15 units</td>
<td>$\uparrow$</td>
</tr>
<tr>
<td><strong>Rival’s Demand</strong></td>
<td>10 units</td>
<td>5 units</td>
<td>$\downarrow$</td>
</tr>
</tbody>
</table>

| **Your Price**        | $1.99    | $2.09  | $\uparrow$ | $2.19    | $\uparrow$ |
| **Rival’s Price**     | $1.99    | $1.89  | $\downarrow$ | $2.19    | $\uparrow$ |

- **Biased CC** => Rival prices more aggressively
- **Objective CC** => Rival prices less aggressively
  => Your margin is higher when objective than when biased
An Illustrative Example

Being objective can lead to higher profits!!!

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<tr>
<td>Your Profits</td>
<td>$10</td>
<td>$16.5       ↑</td>
<td>$18.0 ↑</td>
</tr>
<tr>
<td>Rival’s Profits</td>
<td>$10</td>
<td>$4.50       ↓</td>
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Note: cost per unit sold = $0.99
Key Operating Assumptions

1. CC can be objective or biased (or somewhere in between) in its initiatives

2. Retailers and suppliers each act in their own interests

Not sufficient to argue that supplier is interested in its own profits... CC can still be objective!!!
Key Operating Assumptions (Continued)

1. CC can be objective or biased (or somewhere in between) in its initiatives

2. Retailers and suppliers each act in their own interests

3. Initiatives that benefit all brands take more resources than initiatives that benefit only CC’s own brand
   ⇒ Costlier for a CC to be objective
   ⇒ Leads to misalignment in supplier and retailer interests

4. Manufacturers compete for CC position

5. Retailer decides whether to use CC, when to hire / fire one
Thinking Strategically: Supplier’s Perspective

• Two levels of competition affect value from collaboration
  1. Competition for consumers (based on wholesale prices)
  2. Competition to become CC (based on investment in CM)

• Biased CC faces a more aggressive rival at both levels

=> Lower value from being a CC
### Illustrative Example Recap

<table>
<thead>
<tr>
<th></th>
<th>Option 1 No CC</th>
<th>Option 2 CC + biased CM</th>
<th>Option 3 CC + objective CM</th>
</tr>
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Note: cost per unit sold = $0.99

Biased CC => Hurts rival supplier’s profits

=> Rival competes more aggressively to become CC
Thinking Strategically: Supplier’s Perspective

• Two levels of competition affect value from collaboration
  1. Competition for consumers (based on wholesale prices)
  2. Competition to become CC (based on investment in CM)

• Biased CC faces a more aggressive rival at both levels

⇒ Lower value from being a CC

• Competition to become CC can lead to “bidding war” in certain categories
Supplier’s Value from Collaboration

Supplier Brand
Differentiation

<table>
<thead>
<tr>
<th></th>
<th>Lo</th>
<th>Hi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lo</td>
<td>Low</td>
<td>Very Low</td>
</tr>
<tr>
<td>Hi</td>
<td>Medium</td>
<td>High</td>
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Bidding war leaves CC worse off than before CM

Low growth potential => CC is more biased => Lower value

Relationship with brand differentiation is more complex
Thinking Strategically: Retailer’s Perspective

- CC is never 100% objective, but retailer benefits

- Two levers to drive value from collaboration
  1. Stimulate competition for category captaincy
  2. Support / share cost of category expanding initiatives
     - Taps natural tendency for CC to be objective

- Collaborating with one vs. more suppliers in CM
  - Exclusive relationship can drive higher CM investment
    - One supplier (CC): Higher investment in CM + Some bias
    - More suppliers: Lower investment in CM + No bias
Retailer’s Value From Collaboration

<table>
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<th>Supplier Brand Differentiation</th>
<th>Low</th>
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Low brand differentiation $\Rightarrow$ Lower value from collaboration

Relationship with growth potential is more complex

Engage multiple suppliers in CM

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Does the CC Arrangement Benefit or Hurt Non-CC Suppliers?

<table>
<thead>
<tr>
<th>Supplier Brand Differentiation</th>
<th>Category</th>
<th>Growth Potential</th>
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</thead>
<tbody>
<tr>
<td>Low (Lo)</td>
<td>Low (Lo)</td>
<td>Benefits</td>
</tr>
<tr>
<td>High (Hi)</td>
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<td>Competition for CC position keeps CC “honest”</td>
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CC is never 100% objective, but non-CC suppliers can still benefit.

=> Crucial to invest in CM capabilities even if not the CC.
Key Lessons: CC Supplier

• Two levels of competition affect value from collaboration
  – Biased CM leads to more competition at both levels, lowers value
  – Certain categories may witness “bidding war” for category captaincy
    • Work with retailer to share cost of category expanding initiatives

• Include strategic dimensions in measuring RoI of CM
  – Tactical: How will an extra $ in CM affect my sales at this account?
  – Strategic (Level 1): …affect how my rival competes for consumers?
  – Strategic (Level 2): …affect how my rival competes for CC position?
  – Strategic (Level 3): …affect whether I win / lose the CC position?
Key Lessons: Retailer

• Two levers to drive value from collaboration
  1. Keep category captaincy position competitive
  2. Support / share cost of category expanding initiatives
     • Tap natural tendency for CC to be objective

• Working with one vs. multiple suppliers: Less can be more
  – Exclusive relationship can drive higher CM investment

• Smaller manufacturer can be better CC
  – May “work harder” (invest more in CM + be more objective)
Key Lessons:
Non-CC Suppliers, Legal Authorities

• Non-CC Suppliers
  – Can do well even if not the CC, but...
  – … must invest in CM capabilities even if not the CC

• Legal Authorities
  – Suppliers have natural tendency to be objective
  – Competition for CC position + retailer’s prerogative to hire / fire
    further minimize scope for adverse outcomes
  – Consumer demand and welfare are higher (despite higher prices)
  – Even rival suppliers can benefit
Important Disclaimer

• Our model is not a justification for abuse of the CC role

• We assume that CCs are acting within the law
  – Not sensible for a reputed firm to break the law
  – *Examples of illegal behavior*: Sabotaging rival suppliers,
    Colluding with retailer, Sharing one retailer’s plans with another

• We analyze whether a law-abiding but potentially biased CC can improve supply chain performance