A product category is defined as a group of products that consumers perceive to be interrelated and/or substitutable. Soft drinks, oral care products, and frozen vegetables are some examples of retail categories. Categories can be viewed as the smallest strategic business unit within a retailer. Thus, retailers have refocused their efforts on managing entire product categories as a single business unit, a practice called category management. The goal is to improve business performance through focusing on delivering consumer value. In particular, retail category management involves decisions such as merchandizing product assortment, determining retail prices, and allocating shelfspace to each product on the basis of category goals. Unlike in the traditional approach where retailers managed their product portfolio on a brand-by-brand or SKU-by-SKU basis, category management emphasizes the management of product categories as a whole and allows the retailers to capture the synergies that may arise as a result of grouping the products together. Various synergies such as promotion coordination, store traffic driving strategies, and substitution patterns can be captured by grouping the products together. However, category management requires that a lot of resources be dedicated to understanding the consumer response to the assortment, pricing and shelf placement decisions of products within a category.

Recently, a new trend has emerged: Retailers have started to outsource retail category management to a chosen supplier on whom they rely for strategic recommendations and insights, a practice often referred to as category captainship. Factors such as the increase in the number of product categories offered at the retailers, combined with the scarcity of the resources required to manage each category effectively have given rise to this new trend. In a typical category captain arrangement, the retailer shares all relevant information such as sales data, pricing, turnover, and shelf placement of the brands with the category captain. The category captain, in return, carries analysis about the category and provides the retailer with a detailed plan that includes recommendations about which brands to include in the category, where to locate each brand on the shelf, how to display the products, how much space to allocate to each brand, which new brands to include and which old brands to exclude from the category, and how to price the products in the category. The retailer is free to accept or reject any of the recommendations provided by the category captain. Category captainship practices vary depending on the retailer, resulting in a continuum of practices. At one end of the spectrum, some retailers implement the category captain’s recommendations as they are; at the other end, some retailers filter the recommendations provided by the category captain and verify their appropriateness before deciding on the implementation.

Many retailers and manufacturers practice category captainship and report positive benefits. To give but one example, Carrefour and Colgate partner in the oral care category. Based on a number of consumer studies, Colgate suggested that Carrefour restructure the display in the oral care category so as to merchandise toothbrush products above toothpaste products, as opposed to merchandising them next to each other. As a result of the restructuring, Carrefour reported 6-16% sales increase in the oral care categories in its retail markets. Colgate also benefited from this
sales increase. For more examples of successful category captainship implementations, see ‘the category captain of the year contest’ in *Progressive Grocer*. These examples demonstrate that by working together, retailers can considerably benefit from their manufacturers’ expertise in managing their categories and delivering consumer value through supply chain collaboration.

At the same time, conflict of interest between the retailer and the category captain or between competing manufacturers could be an issue. In particular, the category captain may take advantage of its position and disadvantage competitor manufacturers. It is not surprising that there is an emerging debate on whether or not category captainship poses some antitrust challenges. According to this point of view, category captainship may lead to “competitive exclusion,” where the category captain takes advantage of its position to disadvantage other manufacturers.

In the US, the Antitrust Institute has also voice reservations about category captainship. The Antitrust and Category Captains Roundtable Discussion held in 2003 examined antitrust issues around category captainship. Various advantages and disadvantages of category captainship were discussed, among them increased efficiencies and better consumer service on one hand, and higher prices, smaller customer selection and competitive exclusion, on the other hand. The consensus was that existing research is inconclusive about the consumer impact of category captainship, and that some best-practice guidelines need to be developed to guide category captainship implementations.

In Europe, ECR has taken the lead to ensure that category captainship is implemented in compliance with EU competition rules. For example, the Demand Side Projects EU Competition Law Guidelines developed by ECR Europe stipulate the following:

The retailer remains free to follow or not to follow the manufacturer's recommendation. The retailer should not enter into any agreement or understanding with the manufacturer concerning the setting of retail prices in the category, the selection of products for a category, or conditions on the retail shelf.

While concerns about category captainship have not materialized in practice for the most part, one example where some antitrust issues have been important is the United States Tobacco Co vs. Conwood Co. case. United States Tobacco Co. (UST), the biggest company in the smokeless-tobacco category, was recently condemned to pay a $1.05 billion antitrust award to Conwood, the second biggest competitor in the category. Conwood had sued UST, the category captain, and had claimed that UST used its position as category captain to exclude competition and provide advantage to its own brands. The court ruled that UST's practices resulted in unlawful monopolization, harming competition, and consequently, the consumers. Similarly, many other category captainship arrangements in the tortillas, cranberries, and carbonated soft drinks categories are before the court regarding category captainship misconduct.

Motivated by these conflicting observations, our research investigates the following questions and aims to develop best-practice guidelines.

1. What is the impact of category captainship on the non-captain manufacturers?
2. What is the impact of category captainship on consumers?
3. What is the impact of category captainship on the retailer’s long-term performance?

To answer these questions, we develop a game theoretic model that captures the basic tradeoffs in using category captains for category management. We consider two scenarios which are in line with traditional retail category management and category captainship. In the first scenario, the retailer is responsible for managing the category and decides retail prices, shelfspace allocations
and retail assortment. The manufacturers, on the other hand, compete for the limited shelfspace at the retailer. In the second scenario, we assume that the retailer delegates all retail category management decisions to one of its manufacturers and implements the recommendations as they are in return for a target category profit. Our results are based on a comparison of two scenarios.

**The Impact of Category Captainship on Non-captain Manufacturers**

We define competitive exclusion as the situation where the category captain allocates no shelfspace to a non-captain brand. Our results suggest that in some cases, the category captain prefers to exclude some of the non-captain manufacturers’ brands from the category. The UST vs. Conwood case is a good example of a high level of competitive exclusion. In practice, competitive exclusion may take many different forms, most of them less extreme than completely excluding competitors. For example, displaying the non-captain manufacturers’ brands at the bottom of the shelfspace allocated to the category, or promoting two non-captain manufacturers’ brands at the same time would be some less obvious forms of competitive exclusion.

We identify a number of factors that would play a role on the likelihood of exclusion. First, as the brand differential between the captain brand and another brand in the category increases, it is more likely that the captain manufacturer excludes that brand from the category. Second, if in addition to brand differential, the captain manufacturer has a cost advantage over the non-captain brand, then exclusion is much easier. Finally, we show that as the level of product differentiation between captain and non-captain brands increases, exclusion is more likely. The implication of our results is that competitive exclusion of some brands is more likely in categories where there is a clear market leader or in categories where the retailer offers a wide range of products from various suppliers.

A natural question to ask is: What measures can the retailer take to avoid competitive exclusion? One obvious solution would be for the retailer to mandate that the category captain not exclude any of the brands in the category. However, as we mentioned already, exclusion may take many different and non-obvious forms, which may make it difficult for the retailer to monitor the exclusion of the non-captain brands from the category. A second measure is for the retailer to filter the category captain’s recommendations before implementing them. This would avoid the more blatant forms of exclusion. Of course, for the same reason as before, it may not be easy for the retailer to detect biased recommendations when they are subtle. In both cases, having a mechanism for soliciting input from other suppliers would be helpful.

In practice, retailers tend to assign their leader manufacturers as category captains because of their resource availability and their expertise in the categories they compete in. Our results suggest that the retailer can decrease the likelihood of competitive exclusion by assigning a non-leader manufacturer as category captain. Retailers have to make a tradeoff between assigning a leading manufacturer who may exclude other brands and effectively decrease product variety, and assigning a non-leading manufacturer who may not have as much expertise as the leading brand. This concern should be minimal in categories where the two top competitors are both large, established firms who invest in consumer research.

**The Impact of Category Captainship on Consumers**

Our results suggest that category captainship may lead to lower average prices in the category, which benefits consumers. This is one of the desirable outcomes of manufacturer-retailer collaboration. For example, Wal-Mart’s general philosophy concerning supply chain collaboration is to benefit from the expertise of the manufacturers to deliver consumer value through a reduction in retail prices.

Our results also suggest that consumers are better off under the category captain’s assortment selection as opposed to the retailer’s assortment selection. The reason is that the category captain
prefers to offer highly differentiated products in the category as opposed to the retailer’s preferences that are in favor of less differentiated products. The intuition behind this result is that the retailer benefits from higher competition between manufacturers and is able to extract more profit when the products in the category are less differentiated, whereas the captain manufacturer benefits from competing with a brand that is clearly differentiated from its own brand. As a result, consumers are better off under category captainship because they get higher utility from having access to differentiated products.

However, on the negative side, category captainship may result in competitive exclusion, and as a result, a decrease in the number of variants offered to consumers. Where consumers value the flexibility of having access to a number of brands, this may result in a decrease in customer satisfaction. In addition, effective monopolization in the category (as in the UST example) can provide the captain manufacturer with significant power over the retailer, which would over time lead to increases in wholesale, and consequently, retail prices.

To summarize, category captainship may reduce the average retail price and offer more differentiated products in the short-run, increasing customer satisfaction. However, category captainship has the potential of harming consumers through competitive exclusion, leading to a smaller selection and future price hikes. Thus, the retailer should be more vigilant about competitive exclusion in categories where consumers value high variety, and in cases where the leading brand is very powerful.

The Long-term Impact of Category Captainship on Retailers

Retailers should adopt a strategic perspective in deciding how and where to implement category captainship, rather than jump at short-term benefits. There are several reasons for our recommendation.

First, any retailer’s long-term success is closely related to its consumers’ satisfaction. As we discussed, category captainship may lead to a reduction in the average retail price for a given product assortment, which has a positive consumer impact. However, category captainship may also lead to a decrease in the level of product variety offered to consumers, leading to short-term dissatisfaction, and long-term price hikes due to effective monopolization. Both are detrimental in the highly competitive retail environment.

Second, retailers should be aware that what is in the best interest of the category captain may not be the best for them. In particular, if the assortment decision is left to the category captain, the level of differentiation in the category may increase, undercutting the retailer’s power over the manufacturers, and leading to lower margins. Therefore, relying on the category captains for recommendations on assortment planning may not be the best approach for the retailer. One example from practice is in line with our view: Carrefour and Kraft Foods are involved in a partnership in the candy bars category where Carrefour mostly relies on Kraft for recommendations related to shelfspace management and product pricing, but keeps the assortment decisions internal.

Third, category captainship requires that the retailer share a lot of strategic information with its category captain. In practice, a leading manufacturer serves as a category captain for many retailers that are competing for the same consumers. A potential danger that a retailer sharing strategic information faces is the leakage of strategic information to other competing retailers.

Finally, a point that is worth considering is the long-term impact of depending on the manufacturer for category management. It may be tempting to say “It doesn’t really matter, the retailer can always terminate a category captainship agreement and return to managing its own categories.” But category management requires a thorough understanding of consumer
preferences and purchase patterns, a knowledge base that is hard to build once that expertise is lost.

Traditionally, manufacturers such as Procter&Gamble and Unilever were the main players in the fast-moving consumer goods industry and retailers were just a means of reaching consumers. The early nineties saw an increase in the number of high quality new product introductions and the emergence of other strong manufacturers, which led to higher competition for shelfspace. This, combined with the retailers’ awareness of the importance to be in contact with end consumers, provided the basis for a shift in power from manufacturers to retailers. Many retailers such as Wal-Mart, Carrefour, and Metro owe their rapid growth to these developments. As Cortjens and Corstjens describe in their influential book *Store Wars*, ‘... the giant retailers, now, stand as an obstacle between the manufacturers and the end consumers, about as welcome as a row of high-rise hotels between the manufacturer’s villa and the beach.’ It is therefore no surprise that manufacturers would advocate any initiative that can increase their influence over retail decisions, and category captainship is such a practice. But by outsourcing retail category management to their leading manufacturers, retailers may in the long-run lose their capabilities in managing their product categories and their knowledge about consumers. This loss of capability may prepare the basis for a shift of power back from the retailers to the manufacturers. Retailer beware!

**Note to Editor: The following can be put into the article as 1 insert or 3 different inserts:**

**Best Practice Guidelines:**

To avoid competitive exclusion:
1. Create opportunities for non-captain suppliers to provide input into category decisions.
2. Consider assigning category captainship to non-leading brands that have sufficient knowledge and resources.
3. Maintain enough control over the process to be able to filter manufacturer recommendations.

To avoid consumer dissatisfaction:
1. Avoid competitive exclusion.
2. Implement category captainship in categories where high variety is not crucial to consumer satisfaction.

To avoid long-term negative retailer impact:
1. Avoid sharing strategic information with category captains.
2. Avoid relying on category captains for assortment decisions.
3. Avoid relying on category captains in strategically important categories (e.g., store traffic driving categories).

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