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AN ANALYTICAL SOLUTION TO THE CATEGORY MANAGEMENT: THE EFFECT OF CATEGORY CAPTAIN ON CATEGORY PROFITS

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Abstract

In today's highly competitive markets retailers evaluate all oppurtunities and posibilities to present the right product at the right price with the right promotional support in the right place.But this is getting more and more difficult by day by because of consumers'sophisticated.To make it easier "Category Management" can be recommended to the retailers as one of the best way.Category Management is a process that involves managing product categories as business units and customizing them on a store by store basis to satisfy consumer needs.

In this paper, category management is defined in regards to retailers, and category captain and then the role of the category captain within the category is studied. After that, an analytical method which will maximixe the category profit is established. It is shown how category profit changes after several brands become category captain and how to select the category captain, and then the results and proposals are listed.

Keywords: Category management, category captain, pricing

1.INTRODUCTION

The retailing industry is under going substantive changes and retailers face new challenging issues in today's highly competitive markets. Only meeting consumer needs is not sufficient to win competitive advantage.Success for retailer is to keep their consumers satisfied by providing more value and fulfilling their needs better than the retailer's competitors can (Laukkanen, 2003). Category Management will help retailers to keep their consumers satisfied. Category management involves treating sets of complementary and/or competing brands as strategic business units and allocating resources within these categories to maximize planned outcomes (Morgan et al.,2007). Category management has been described as a major

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innovation in retailing and has been promoted as a mechanism to achieve closer working relations between suppliers and retailers. The need to achieve these closer working relations is due to changes in the retail environment which has shifted power from manufacturers to retailers (Sheridan et al.,2006). The objectives of category management are increasing profitability by taking into account all the factors that influence it on the shop floor and focusing on products with a high circulation,creating regular customers by focusing the product supply to target consumers and developing in-store marketing through space management and well instructed product display (Unhola,2001).Consumer value and satisfaction are fundamental to build consumer loyalty and shopper loyalty and to increase sales and category profitibility;a powerful way to create value and satisfaction is to keep shelves fully ranged (Colacchio et al.,2003). Changes in the consumers, increased competition, economic and profitability aspects and developments in the field of information technology explain the growing popularity of category management (Unhola,2001).

The second part of the study defines the category management and theoretical framework of the subject. In the third part, category captain is studied in detail. The fourth part offers a model which will maximize the category profit. The model is applied to the four brands sold in cleaning department. By using the wholesale and retail sale prices of these four brands, the category profit is established, and joint profits are calculated both before and after applying category management. Category profitability changes with the category captain. Therefore, it is shown in the model how to select the most appropriate captain. In the last part, some proposals related to the determination of category profitability are made for retailers.

2.CATEGORY MANAGEMENT

Category Management is defined as a process that involves managing product categories as business units and customizing them on a store by store basis to satisfy consumer needs (Wang,2002). Since the early 1990s retailers,most notably grocers and suppliers alike have increasingly embraced a new process strategy-category management-which shifts the manager's focus from individual brands to the overall performance of a product category. Supporting this new strategy,academic researchers have modeled and predicted increased profits.This predictions are being realized in the industry where significant dollar sales growth is attributed to its adoption-an average of 16 percent for retailers and 10 percent for suppliers (Desrochers,Nelson,2006). Who work with category management believe that it improves turnover, profitability, market share,inventory levels,trading relationships and consumer understanding. Moreover, it is generally considered to yield benefits for all partners within the supply chain,including adding value for consumers through improved category benefits and reduced marketing and distribution costs (Lindblom,Olkkonen,2007).

Category management generates some major effects on the shop floor level that are visible to customers.These are 1-more logical and clear shelf presentation, 2-assortment that beter fulfills consumers'needs, 3-lower prices, 4-broadening actual choice possibilities, 5-

quicker shopping within the categories and 6-improved marketing communication (Laukkanen,2003). To implement the category management process there are some fundamental factors that must be in effect. These are management support,willingness to change the company's organistion and culture,an organisation in which products are or can be led as strategic business units,information systems that effectively support operations and possible partners willing and able to participate in category management (Unhola,2001). While basic category learning and the identification of current trends are important parts of the category management process, the real value of category management is in analyzing the overall profitability and productivity of the category, identifying best practice solutions and applying micro-marketing approaches to those solutions (Dusek,1999).Effective category management requires that retailers understand where to allocate scarce marketing resources in order to get the biggest bang for the buck (Dhar et al.,2001).

Category management based on the concept of a business partnership between two naturally adversarial groups-specifically, retailers and suppliers.Asserts category management partnerships remain rare-even those companies who have taken the greatest steps towards strategic,integrated and exclusive relationships with their retailers still avoid certain areas of joint development of new products (Kippenberger,1997). Cooperation between the retailer and the supplier in order to achieve efficiency and profitability in the product category by fullfilling the consumers' needs effectively is achieved by the systematic and goal directed management of the product categories (Unhola,2001).They both can serve consumers better,more quickly and more cheaply by working together with trading partners (Lindblom,Olkkonen,2007).

Managers need to make sure that the implemantation of such strategy takes into account the fact that each store caters to a different market with different needs and responses to marketing programs.Moreover, the retail chain manager must consider not only how the promotion of a brand affects competing brands and total category sales,but also how it could affect sales in other categories (Kamakura,Kang,2006). Also tremendous retailer and manufacturer interest in the process of category management and its rapid adoption in the industry, much uncertainty exists about the consequences of category management for channel members. (Basuroy et al.,2001).

3.CATEGORY CAPTAIN

One or more suppliers to a category often have greater resources and stronger capabilities required for effective category management than the retailer.To leverage these resources and capabilities to implement effective category management that will both reduce retailer costs and provide a basis for differentiaiton (Morgan et al.,2007). Retailers have access to more market information than ever,but often don't have the resources to analyze and identify significant consumer and category trends. So many retailers rely on suppliers for expertise and guidance in this regard (Kurtuluş,2004). Category captain arrangements,in which a supplier,often the category leader takes on a significant role in the retail management of the category,including the brands of competing suppliers (Desrochers,et al.,2003). It is common for retailers to choose a supplier as the captain for a particular category and then to rely on that supplier for category insights and strategic recommendations that can boost volume and profitability.The main reason for the retailers to incorporate suppliers' expertise into category planning and increase profitability.On the other hand reason of the willingness of the suppliers to be category captain;have access to information on competitor's products and be able to influence category decisions (Kurtuluş,2004). A category captain has responsibility for ;category development and growth,providing information on product trends and recommending prices and shelf-space allocations for both its own products and those of its competitors.In short category captain's role is to provide input to retailers about management of all category brands.Category captain arrangements are capable of yielding benefits to competition,they may also enable a category captain to take advantage of its role in ways that restrict competition and harm consumers (Desrochers,et al.,2003).Because of this, retailers fear that being dependent on a focal supplier will lead to greater supplier opportunism are largely unfounded,while supplier dependence on the retailer is also unrelated to focal supplier opportunism (Morgan,et al.,2007). Comprehensive assortment plans, which is prepared by category captains, can be quite detailed,including a planogram for each of the retailer's stores,specifying which brands should be located where,the linear feet of space to be allocated to each brand,which new brands to include,which old brands to reduce or terminate, and recommended pricing and promotional schedules (Lindblom,Olkkonen,2006).

Some retailers implement the category captain's recommendations in full,whereas some retailers filter the recommendations provided by the category captain and verify their appropriateness before deciding whether to implement them (Lindblom,Olkkonen,2006).The retailer remains free to follow or not to follow the supplier's recommendation (Kurtuluş,2004).

4.CATEGORY MANAGEMENT: AN ANALYTICAL PERSPECTIVE

Most retailers nowadays face challenges such as how to respond consumer's ever changing demands and how to adopt themselves to keen competition in dynamic market. In the face of such trends category management helps retailers to improve their decision making(Chen,Lin,2007).

Category management should be viewed as a comprehensive concept that can be addressed from many angles such as pricing,feature,advertising and shelf space allocation (Wang,2002).

Our first aim in this paper is explaining differences on profits before category management process and after category management process.Second aim is investigating the issue of which manufacturer is the ideal category captain for the retailer.We consider a market consisting of k ($k \geq 2$) competing national brands, NB1, NB2,..NBk produced by manufacturers M1, M2,…Mk respectively. k brands belong to a mature product category in cleaning department.All brands are available to consumers in a common retail outlet.Competition among retailers is not modeled.The focus of this model is on manufacture-level competition and retailer-manufacturer interactions.We rule out the retail-level competition as an alternative rationale for introducing category management.

The retailer's objective is to maximize the total profits from selling the k brands to consumers. This model focuses on product category level (Wang,2002).

4.1. Profit Maximization Problems

Conditional on the wholesale prices w1,w2,…,wk, the retailer chooses the retail prices p1,p2,…,pk to maximize the category profits where r represents the retailer, and b represents before category management (Wang,2002).

$$\Pi_r^b = \sum_{i=1}^{k}(p_i - w_i)q_i, \qquad (1)$$

Table 1.Profits before category management

Category	pi	wi	qi	Πi
NB1	1,95	1,78	954	162,18
NB2	1,95	1,58	273	101,01
NB3	2,49	1,93	993	556,08
NB4	1,15	1,04	1455	160,05
TOTAL				979,32

4.2. After Category Management

Without loss of generality, M1 or NB1 is assumed to be the category captain.The category captain is responsible for choosing the retail prices of the k national brands.The two-stage game is as follows.In the first stage,M2,…,Mk choose the wholesale price of NB2,…,NBk,respectively,to maximize own profit,taking into account the response functions of the category captain.In the second stage,given the wholesale price of NB2,…,NBk, the category captain chooses the retail prices for NB1,NB2,…,NBk to maximize the category profits.

Demand and cost structures are assumed to be the same as before category management.In a mature market,demand and cost structures usually are quite stable.This assumption rules out the impact of structural nonstationarity in demand and cost on pricing decisions.After category management,the category captain chooses retail prices p1,p2,…pk to maximize joint profits of the product category (Wang,2002).This formula is applied for all brands under the assumption of they are category captain.

$$\Pi_{\text{joint}}^a = p_1 q_1 + \sum_{i=2}^{k}(p_i - w_i)q_i, \qquad (2)$$

Table 2.Profits after category management

Category Captain	Π1	Π2	Π3	Π4	Πtotal
NB1	1860,3	101,01	556,08	160,05	2677,44
NB2	162,18	532,35	556,08	160,05	1410,66
NB3	162,18	101,01	2472,57	160,05	2895,81
NB4	162,18	101,01	556,08	1673,25	2492,52

4.3. Who Is The Ideal Category Captain?

If brands in the product category are not identical, it is important for the retailer to decide which manufacturer should become the category captain. The optimal policy is obtained by comparing the joint profit gains under different category captains. Since the profit of a manufacturer excluded from the category alliance is lower than the profit level before category management, the outside option for this manufacturer may be assumed to be the profit level after category management.If the retailer has the full bargaining power,the ideal category captain is NB3 under the condition which is shown in the (3) (Wang,2002).

$$\Pi_{\text{joint}}^{captain1} - \Pi_{1}^{captain2} > \Pi_{\text{joint}}^{captain2} - \Pi_{2}^{captain1} \quad (3)$$

Captain 1=NB3 Captain 2=NB4,
∏3=Profits of NB3 ∏4=Profits of NB4

Table 3. Choosing of Category Captain

	Category Captain 1-NB3	Category Captain 2-NB4
Πtotal	2895,81	2492,52
Π3	2472,57	556,08
Π4	160,05	1673,25
Decision	2895,81-556,08=2339.73	2492,52-160,05=2332,47

5.SUMMARY AND CONCLUSION

Growing importance of competitive advantage in the retailing industry forced retailers to look for different strategies and business process. Category management is one of the best response to gain competitive advantage.

In this study, category profitability is studied regarding the category management. The results clearly show how the category profitability increases following the applying the category management. Both before and after category management, an increase in favour of category management is observed in joint profits. This profitability takes different values as category captain becomes different brands. In this respect, this study shows the most appropriate category captain among the others. Profitability becomes maximum together with the most appropriate captain. This study may be accepted as a guide for the category management to the retailers. By using this study in a number of different brands, retailers can select the category captain which will maximize their profits, and create competitive advantage.

АНАЛИТИЧКО РЕШЕЊЕ КАТЕГОРИЈСКОГ МЕНАЏМЕНТА: УТИЦАЈ КАТЕГОРИСЈОГ ВОЂСТВА НА ПРОФИТЕ ПО КЕТЕГОРИЈАМА

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Извод

На савременом високо конкурентном тржишту, малопродајне мреже процењују све могућности и шансе да понуде прави производ са правом ценом и са правом промоционом подршком.. Ипак, ово постаје све теже јер и купци све више постају захтевни. Да би се овај посао олакшао користи се "Категорисјки менаджмент" као један од бољих начина. категоријски менаџмент је процес који укључује управљање производима по категоријама као пословним јединицама и њиховим прилагођавањем од малопродајног објекта до објекта, према захтевима купца.

У овом раду, категоријски менаџмент је дефинисан независно од дистрибутера, при чему је проучавана улога вође категорије. након тога, установљен је аналитички метод који ће максимизирати профит по категоријама. Показано је како се профит мења када неколико различитих брендова постају вође категорија и како изабрати правокатегоријско вођство.

Кључне речи: Категорисјкименаџмент, вођа категорије, цене

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