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Accounting Profits Versus Marketing Profits: A Relevant Metric for Category Management

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Abstract

Retailers have long recognized that some categories are more important than others in consumers' store choice decisions. The overall profitability of a store requires careful category-level merchandising decisions to draw the most desirable consumers into the store. However, the traditional accounting measure of category profits offers imperfect help making these decisions since it does not take into account the effect of merchandising one category on the profits of other categories in the store. A profit measure which takes into account these important cross-effects is the most relevant performance metric for category management. We call this new construct *marketing profits*, as it focuses on consumers and their store choice behavior, and is particularly pertinent to the calculus of marketing decision making.

Despite its practical importance, the total impact of merchandising a specific product category on a store's profitability is difficult to measure, and in practice managers can only rely on intuitive calibration of marketing profits in making many retailing decisions. The difficulty arises from the fact that to directly observe the marketing profits of a category, one has to know how consumer store shopping behavior would change and hence what a store's profit would be if the category were to disappear from the consumers' store choice decision. Furthermore, it is difficult to devise a demand structure that is rich enough to capture bundled purchases on the part of consumers in a reasonable manner, but is simple enough to allow estimation on the basis of commonly observed variables. These two technical difficulties explain the conspicuous lack of research that systematically examines how to quantify what we call marketing profits.

This paper builds a formal model of marketing profits. We start by formalizing shopper types, and then establish the implied relationship between accounting profits and marketing profits by examining shelf space allocations by a retailer. On the consumer side, we assume that some consumers pay attention to the assortments offered by different

retailers when making their store choice decisions. This assumption allows us to establish the demand-side linkage between accounting profits and marketing profits. Consumer store choice decisions put pressure on the retailer to carry wide assortments in categories which are particularly critical to the store choice decisions of the most desirable consumers. Thus, the allocation of shelf space gives rise to the supply-side linkage between accounting profits and marketing profits. By examining the outcome of the supermarket's shelf space decision, we can merge these two linkages and determine the exact relationship between the accounting and marketing profits.

Central to our theoretical structure is our assumption on retailers' shelf space allocation decisions. Because of the well-documented pressure that retailers face in making shelf space allocation decisions, we assume that they are acting in a reasonably close-to-optimal fashion by using either an automated planogram or simply by trial-and-error. Optimization requires that returns on shelf space allocated to any category in the store must be identical on the margin and equate to the shadow price of shelf space. It is this outcome of shelf-space allocation that allows us to uncover the implied relationship between accounting and marketing profits.

This theoretical structure allows us to construct a measure of marketing profits which can be estimated with data commonly available to retailers. We demonstrate this measurement technique by using publicly available data, provided by Marsh Supermarkets, and show how marketing profits can improve merchandising decisions. In our particular application, we find many categories where the marketing profits of a category are very different from the traditional accounting profits. Further, we find that using this new marketing profits metric to make category-level feature advertising space decisions significantly improves the profitability of the retailer. The paper concludes by discussing how our measure of marketing profits might be improved by additional research, particularly if the researcher has data across many stores.

(Category Management; Retailing; Management Decision Models)