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Commercial Use of UPC Scanner Data: Industry and Academic Perspectives

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Abstract

The authors report the findings from an exploratory investigation of the use of UPC scanner data in the consumer packaged goods industry in the U.S. The study examines the practitioner community's view of the use of scanner data and compares these views with academic research. Forty-one executives from ten data suppliers, packaged goods manufacturers, and consulting firms participated in wide-ranging, in-person, interviews conducted by the authors. The interviews sought to uncover key questions practitioners would like to answer with scanner data, how scanner data is applied to these questions, and the industry's perspective regarding the success that the use of scanner data has had in each area.

The authors then compare and contrast practitioners' views regarding the resolution of each issue with academic research. This produces a 2×2 classification of each question as "resolved" or "unresolved" from the perspectives of industry and academia. Along the diagonal of the 2×2 , issues viewed as unresolved by both groups are important topics for future research. Issues deemed resolved by both groups are, correspondingly, of lower priority. In the off-diagonal cells, industry and academics disagree. These topics should be given priority for discussion, information exchange, and possible further research.

Practitioners reported that scanner data analysis has had the most success and been most widely adopted for decision making in consumer promotions (i.e., coupons), trade promotions, and pricing. For example, logit and regression models applied to scanner data have revealed very low average consumer response to coupons which has directly led to reduced couponing activity. Managers also reported high levels of comfort with and impact from analyses of trade promotions and price elasticities. While industry views most of the issues in these areas to be resolved, academic research

raises concerns about a number of practices in common commercial use. These include price threshold analysis and trade promotion evaluation using baseline and incremental sales.

In product strategy, advertising, and distribution management, practitioners reported that the use of scanner data has had more limited development, success, and impact. In the case of new product decisions, scanner data use has been slow to develop due to the inherent limitations of historical data for these decisions and a heavy reliance on traditional primary research methods. In advertising, scanner data is widely analyzed with models, but confusion among practitioners is very high due to controversies about methods (e.g., what level of data aggregation is best) and conflicting results. In distribution and retail management, scanner data use has tremendous potential but a mixed track record to date. Thus, practitioners view the use of scanner data as unresolved for most issues in product strategy, advertising, and distribution. This view is largely, though not entirely, consistent with academic research, which has only begun to address many of the key questions raised by practitioners.

In light of the large number of unresolved issues and mixed record of scanner data use to date, the authors offer a series of specific recommendations for immediate and long-term research priorities that are likely to have the greatest impact on commercial utilization of UPC scanner data. Topics of immediate priority include price thresholds and gaps, baseline and incremental sales, base price elasticity, competitive reactions, measurement of advertising effects, management of brand equity, rationalization of product assortments, and category management. Long-term priorities include a greater emphasis on profitability versus sales or market share, developing prescriptive models versus descriptive models, and the need for industry standards.

(Scanner Data; Marketing Research; Marketing Models; Research Priorities)