Division of Research
Graduate School of Business Administration
The University of Michigan

February, 1980

A STUDY OF MARKETING RESEARCH COMMITMENT BY MAJOR RETAILERS

Working Paper No. 207

Nancy J. Nighswonger

Claude R. Martin, Jr.

The University of Michigan

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INTRODUCTION

> Only in recent years have retailers begun to recognize the importance of marketing research. The use of the marketing concept, which stresses the satisfaction of consumers at a profit, has increased the need for retailers to observe changing consumer demands. Marketing research can assist the retailer in observing consumers and making intelligent decisions.[1]

If the above statement has validity, then there should be evidence of a more important role for marketing research in the retail management process. Therefore, the overall objective of the research reported here was to examine the validity of the statement above, particularly as it pertains to the use and effectiveness of marketing research by retailers. More specifically we had as a goal to document the increased usage of retail marketing research, to detail the types of research being used, and to relate that usage to sales/profit performance.

Rather than use the more restrictive consumer behavior definition of marketing research above, we embraced the broader definition from our colleagues, Thomas Kinnear and James R. Taylor:

> Marketing research is defined as the systematic and objective approach to the development and provision of information for the marketing management decision-making process.[2]

While the focal point of this paper was to report on types of research undertaken by retailers, there was also a specific hypothesis to be tested that

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[1] Marquardt, Raymond A., James C. Makens and Robert G. Roe; Retail Management (Illinois: Dryden Press, 1979), p. 531.

[2] Kinnear, Thomas C. and James R. Taylor; Marketing Research: An Applied Approach; (McGraw Hill, 1979), p. 20.

predicted a positive relationship between commitment to marketing research and operating performance by a retailer.

RESEARCH PLAN

Readily available and reliable operating performance data was a prerequisite for this study. This type of financial data was available in the Harris Bank 26th Annual Retail Study.[3] This is an annual report of the performance of the leading non-food retailing organizations in the United States by the Chicago-based Harris Trust and Savings Bank. From the latest available edition, 1979 Report on 1978 Fiscals, we selected the department store chains and other general merchandise organizations that had appeared in the annual study for at least two years. In all there were 21 retailing organizations selected. While this is a small sample size, nevertheless the selectees represent a substantive proportion of total retail sales in the country. The 21 stores had sales in 1978 of 59 billion, 656.4 million dollars. This can be compared to total department store sales of 79 billion, 194.5 million dollars. The retailing organizations selected included the following:

Federated Department Stores
Dayton Hudson Corporation
May Department Stores Company
Carter Hawley Hale Stores, Inc.
Allied Stores Corporation
R. H. Macy & Company, Inc.
Associated Dry Goods Corporation
Gimbel Brothers, Inc.
Mercantile Stores Company, Inc.
Carson, Pirie Scott & Company
Garfinkel, Brooks Brothers, Miller & Rhoads, Inc.
Strawbridge & Clothier
Woodward & Lathrop, Inc.
Wieboldt Stores, Inc.
Sears Roebuck and Company

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[3] Harris Trust and Savings Bank; Harris Bank 26th Annual Retail Study: Major Department Stores and Other Leading Merchandisers; 1979 Edition of 1978 Fiscals; (Chicago, 1979).

K Mart Corporation
J. C. Penney Company, Inc.
F. W. Woolworth Co.
Montgomery Ward & Co., Inc.
Gamble-Skogmo, Inc.

The next step was development of a questionnaire. Useful in this process were several recent retail marketing management textbooks[4] and the 1973 Survey of Marketing Research conducted by the American Marketing Association.[5] From these and interviews with retail researchers came a more precise definition of the term "commitment" to marketing research along three dimensions: money spend, research personnel, and time of initiation of the research process. Thus, the initial parts of the questionnaire asked for: (1) the dollars spent during the last fiscal year on marketing research, including payroll, overhead, and other expenses; (2) the number of employees currently assigned to the marketing research function; and (3) the date when the organization began their corporate marketing research department.

The second hypothesis that we wished to test concerns itself with the nature of the research being undertaken. There were 21 different types of specific research identified, which we grouped into 7 major categories: (1) Store location and trade area; (2) In-store traffic patterns; (3) Consumer profile and attitude analysis; (4) Promotion and advertising; (5) Business economics and corporate research; (6) Product; and (7) Personnel.

The questionnaire was mailed to each organization's Chief Executive Officer with the provision that the responses would be confidential and that the

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[4]Marquardt, Makens, and Roe, op. cit. Duncan, Delbert J., Charles F. Phillips, and Stanley C. Hollander; Modern Retailing Management, 8th Edition, (Homewood, Illinois: Richard D. Irwin Inc., 1972). Mason, Joseph Barry and Morris Lehman Mayer; Modern Retailing: Theory and Practice; (Dallas Texas: Business Publications, Inc., 1978).

[5]Twedt, D. W.; 1973 Survey of Marketing Research; (Chicago: American Marketing Association, 1973).

research activity of an individual organization would not be revealed. This was consistent with the study's overall objectives: to learn in the aggregate the depth and type of research being used by retailers, and to relate them to operating performance.

RESPONSE

Sixteen organizations responded to the survey, but unfortunately three of those reported they had no formal research function. However, a recheck with management of the three revealed they do indeed have a marketing research staff, but the response was tantamount to refusal to cooperate in the study. The three, plus the other five non-respondents, confirmed that corporate policy dictated that such operating information would not be revealed, principally because of competitive pressure.

There were thirteen of the firms that responded with detailed information. We felt satisfied that this was a viable sample, since it represented 43 billion, 248.6 million dollars in retail sales in 1978 or approximately 77.5% of the original sample's sales. Furthermore we felt that such data would be a valid indicator of the commitment and allocation of that commitment to research by major non-food retailers.

RESULTS TYPES OF RESEARCH

Table 1 gives the simple tabulation of types of research undertaken by the respondents. All of the organizations reported they did store location and trade area research, with the fewest number (69%) doing product research.

In addition to knowing the kinds of research these retailers engaged in, the existence of concurrent activities is important. The combinations of research show the emphasis on types of information being fed into the decision-making process, and this analysis of relationships paints a research picture

Table 1

Type of Research Conducted by Thirteen Firms

Research Type	% of all Firms
Store Location & Trade Area Research	100
Consumer Profile & Attitude Analysis	92
Promotion & Advertising Research	92
Personnel Research	85
Business Economics & Corporate Research	92
In-Store Traffic Patterns	77
Product Research	69

for retailing. Figure 1 illustrates the relationships within research category types; e.g., of those firms doing promotion and advertising research, all of them do research of advertising effectiveness and copy research, while 75% of them do media research.

Figure 2 illustrates the research relationships that transcend category types. This data reveal that firms who are involved in business economics and corporate research also engage in promotion and advertising research, while those who conduct personnel research also engage in long range forecasting, research of business trends, and evaluation of personal selling effectiveness.

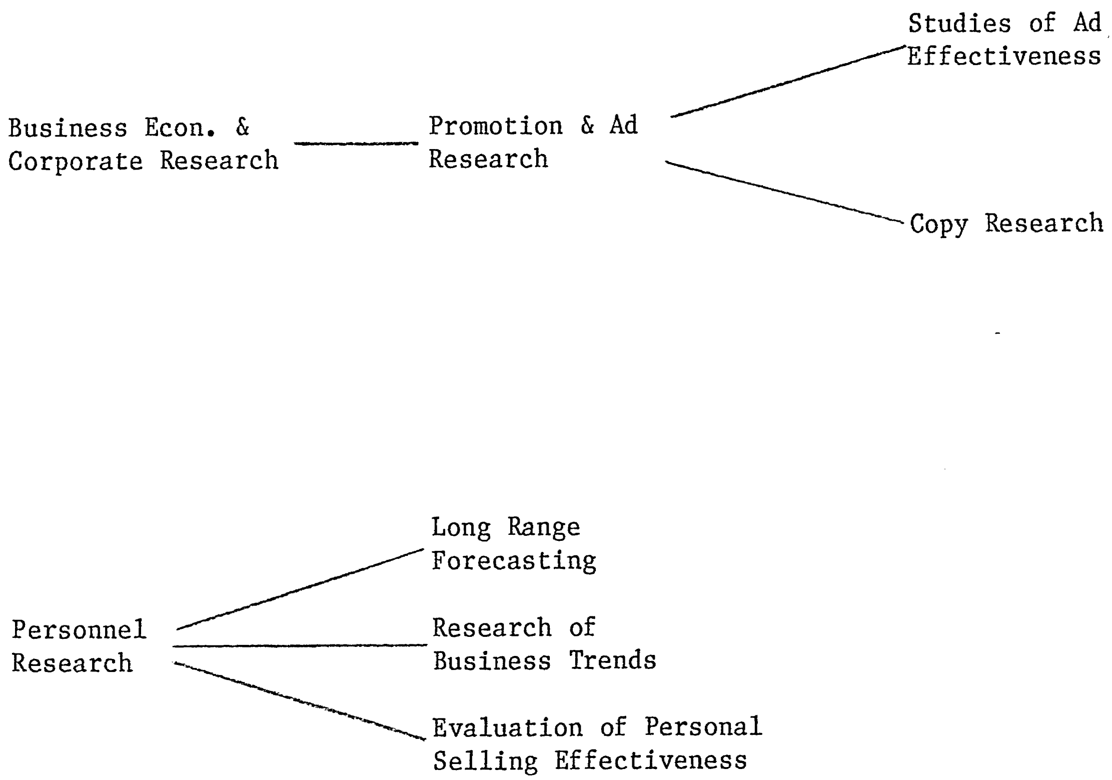
The data in Table 1 and Figures 1 and 2 clearly show that these major retailers are not concentrating on one type of research, but they have a broad perspective of types of research, and there is an association among those types. Particularly insightful is the fact that all the retailers who engaged in the more long-range type of business economics and corporate research (92% of the organizations) also undertook the more short-range promotion and advertising research, concentrating on copy and effectiveness research projects.

Figure 1

Research Relationships

% of all firms		
Store Location and Trade Area Research 100%	100%	Market potential for existing stores
	100%	Market potential for proposed stores
	92%	Market share analysis
	100%	Market characteristics
	85%	Store audits
Consumer Profile & Attitude Analysis 92%	84%	Identification of customer characteristics
	100%	Consumer attitudes towards store characteristics
Promotion and Advertising Research 92%	100%	Studies of advertising effectiveness
	75%	Media research
	100%	Copy research
Personnel Research 85%	100%	Evaluation of personal selling effectiveness
	91%	Selection of employees
	91%	Motivation of employees
Business Econ. & Corporate Research 92%	91%	Short range forecasting
	91%	Long range forecasting
	91%	Research of business trends
	66%	Pricing studies
In-Store Traffic Patterns 77%	100%	Effect store layout has on sales
Product Research 69%	88%	New product of brand acceptance & potential
	100%	Competitor's product study
	100%	Testing of existing products

Figure 2


Studies of Ad Effectiveness
Business Econ. & Corporate Research
Promotion & Ad Research
Copy Research
Long Range Forecasting
Personnel Research
Research of Business Trends
Evaluation of Personal Selling Effectiveness

RESEARCH COMMITMENT/OPERATING PERFORMANCE

Analysis

From the data provided by the Harris Bank Study, financial ratios were generated to be used as performance measures of the organizations. Three efficiency measures were used: (1) Sales to square feet of floor space, (2) Sales to Inventories, and (3) Net income to total assets. These three were selected because (1) illustrates the use of store space in generating sales, (2) shows the movement of merchandise, and (3) is indicative of the efficiency of assets in generating profits.[6]

As discussed earlier, testing that there is a positive relationship between the firm's performance and commitment to marketing research necessitated operationalizing the concept of "research commitment." Thus, three surrogate indicators of commitment were used for each firm: employees, dollars, and year of initiation. Each of these was rank-ordered and compared to a similar ranking of the three performance measures. The dollars spent on research and number of employees were ranked from the largest to smallest amounts. The elapsed time that a marketing research department has existed for a firm was calculated and these were ranked from shortest to longest period of time.

A Spearman rank-order correlation coefficient was calculated for each of the possible combinations of performance measures and measures of commitment to marketing research. The rationale for using rank order correlation analysis is two-fold. First, the technique does not force the assumption that scores under analysis are drawn from a normally distributed population,[7] and second, the

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[6] Source: Moody's Industrial Manual, Vol. 1, 1978; (New York: Moody's Investors Service, 1978), p. vii.

[7] Seigel, Sidney; Nonparametric Statistics for the Behavioral Sciences, (New York: McGraw Hill, 1956), p. 196.

technique is especially useful with small samples.[8] The second point is especially applicable in this project. Although our N = 13 represents a substantive portion of non-retailing sales in the United States, statistically it is a small sample. The specific Spearman method was chosen for this study because it is the best known, most widely used method of testing such rank order correlations.[9] The efficiency of the Spearman method compared to the most powerful parametric correlation, the Pearson r, is 91%.[10]

Results

The data show an aggregate expenditure on marketing research of $12,720,000, or .03% of sales. The number of employees assigned to marketing research totaled 148 persons.

We hypothesized a positive relationship between commitment to marketing research and operating performance. Using a decision rule of a .10 level of significance, there is an association between commitment to research, measured in dollars and personnel, to the various measures of sales and profit performance (Table 2). The implication is that commitment to research is significantly associated with operating efficiency of the firms, i.e. their ability to generate sales and profits.

Another measure of the firm's commitment to marketing research has to do with the amount of time the firm has been involved in marketing research activities. The number of years that the marketing research function has been in existence correlated significantly with the ratio of net income to total assets (r = -.494), but not to the sales per square feet of store space. To examine

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[8]Ibid, p. 196.

[9]Ibid, p. 202.

[10]As discussed in Seigel, op. cit., p. 213.

Table 2

Rank Correlation of Research Commitment to Operating Ratios

Research Commitment	Operating Ratio	Spearman r	Significance
Years Engaged in Marketing Research:	Net Income to Total Assets	-.494	.043
	Sales to Square Feet of Store Space	-.283	.174
	Sales to Inventories	-.254	.201
Dollars Spent on Marketing Research in 1978:	Net Income to Total Assets	+.635	.010
	Sales to Square Feet of Store Space	+.551	.025
	Sales to Inventories	-.170	.290
Number of Marketing Research Employees:	Net Income to Total Assets	+.632	.010
	Sales to Square Feet of Store Space	+.422	.075
	Sales to Inventories	+.200	.256

this more rigidly we also calculated the ratio of net sales to total assets. This ratio is more indicative of long run performance as it measures the usefulness of the firm's assets to the volume of transactions. Once again the years engaged in marketing research is significantly associated ($r = -.383$). Thus we conclude that the more years the firm has been engaged in marketing research activities, the better are its asset ratios. This seems to support the concept that marketing research is an investment that should provide increasing benefits over time. As efficiencies are developed in the marketing research function, the department should begin to "pay for itself" in terms of better information available for use in making presumably better (i.e., more profitable) decisions. The commitment to research, then, should be considered an investment which, over time, will provide a tangible return to the firm.

The reader may notice that the ratio of sales to inventories did not show a significant relationship with any of the measures of marketing research commitment. Although this is a commonly used performance measure (especially in the case of retailers), inventory control, and, accordingly, inventory turnover, was found to be a redundant measure of two components in our study, one dependent and one independent.

First, the inventory turnover ratio involves the notion of efficient and effective use of store space. This efficiency of the use of store space variable has already been measured through the ratio, sales to square feet of store space. Second, the retailer must determine through research the customer service level best suited to it by balancing the cost of holding additional safety stock versus the cost of stockouts.[11] In other words, some idea of the service level desired by customers must be obtained. The idea of "service level

[11]Stern, Louis W. and Adel I. El-Ansary; Marketing Channels, (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979), p. 177.

desired by customers" is captured in the independent variable "whether or not the firm engaged in Consumer Profile and Attitude Analysis," or, more specifically, whether or not the firm engaged in research to identify characteristics and attitudes of customers. It was found that the inventory turnover ratio was, in fact, significantly correlated (at the .05 level) with whether or not a firm reported doing research to identify customer characteristics.

Summary and Conclusions

While this research has shown a positive relationship between a commitment to marketing research and operating performance, nothing has been said thus far about marketing research as an explanatory component of the variance of operating performance measures across retailers.

Building a multiple regression model from the available data was considered in our analysis. The theoretical plausibility of a regression model applied in this context, however, is questionable. In this study, a research commitment over time was measured, and the effects of this commitment on 1978 fiscal year's operating performance measures were observed. In order to build a predictive model relating past marketing research activities to future operating performance, however, much more information would be needed. "Last year's" research activities will most likely affect performance measures several years from now, given a time lag in obtaining information, applying it in strategic planning, and feeling the effects in the market's reaction. This is consistent with the view of marketing research activities as an investment to the firm.

In summary we did find that major retailers, representing a substantive proportion of non-food sales dollars, engaged in marketing research. Furthermore, this participation is diverse in nature, but the aggregate dollar and manpower commitment is somewhat small (.03% of sales dollars and a total of 148 persons). Nevertheless the participation seems to support a modest embracing of the marketing concept by these retailers. More importantly the resource commitment of dollars and employees is related positively to short run operating performance. These specifically are in terms of more efficient use of store space to generate sales, and as an efficient use of equity to generate profits. Conversely, time commitment to research can be considered a long term investment with the benefits being improved use of assets to generate sales, and improved use of equity to generate long run profits.

However, it should be noted that marketing research, by itself, has no inherent benefits. Generating information for the sake of generating information adds nothing to a firm's ability to perform and compete in the marketplace. Marketing research does, however, have an impact (albeit an indirect impact) on competitive performance when the information generated is used as input for better management decision making. Where marketing research information is improperly gathered it may be misleading and, in fact, harmful to the firm's competitive position. Where operating executives resist or ignore research information, the research can be of no benefit to the company. It is clear, then, that marketing research activities in and of themselves would not be able to explain variations in competitive performance among firms.

It is critical to emphasize that the value of marketing research can only be extracted if the information is used to enhance retail management decisions. The commitment to research is essential since there must be an on-going flow of information, and an information system must be developed that can effectively tell executives what they need to know. The effects of marketing research therefore, are indirect effects, and the value of research to retailers is only as high as the increase in the effectiveness of management decisions as a result of the added information.