the existing system, the carts presented a slight advantage in this area. There was no decrease in the quality of received product.

A very distinct advantage in cart delivery was product rotation at store level. By the old methods, product was removed from the display fixture bag by bag - then reloaded bag by bag on top of the new product. Through cart delivery, product rotation is simplified and encouraged. All the product is removed in one motion as the old cart is pulled from the display area and then the product is reloaded bag by bag.

There are other benefits of the cart delivery system. The time during which the potato area is congested and unavailable for sales is reduced. This becomes especially significant during peak selling hours when there are many customers in the sales area. Cleaning is made easier since the cart can be rolled out and the floor swept quickly while a permanent fixture can only be cleaned when empty.

In conclusion, a cart delivery system for potatoes has many advantages. With the rising cost of pallets, bins, and master containers, the economic trade-off between metal and wood becomes more significant. The rising cost of labor makes the productivity increases at store level more attractive. In short, the inflationary economy we now face can only improve the potential of this system.

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ESTIMATING FINANCIAL STATEMENTS OF THE ENTIRE SUPERMARKET INDUSTRY - PHASE 1

by
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Introduction

The very nature of the supermarket industry, selling the end result of the food production, processing and distribution system, puts it in continuous contact with the consuming public. No other sector of the food industry is so vulnerable to public, media, and political reaction. Any such reaction is often the result of factors the supermarkets cannot control (e.g., escalating raw commodity prices, rising processing costs, etc.). This crucial industry is very sensitive to economic and political factors. There is a great need for reliable data on the economic performance of the industry.

There are several sources of data on supermarket industry performance. Some examples are Progressive Grocer's Annual Report of the Grocery Industry, Cornell University's Operating Results of Food Chains, The Fortune 500 Annual Report, and Super Market Institute's Industry Speaks. These reports are all good sources of performance data for the industry, but there is no single source of financial data for the entire supermarket industry.

Objective

The overall purpose of this project is to provide timely and accurate data on supermarket industry performance, based
on financial measures, for public information and education, and for internal use by members of the industry. The specific objective of the program is to develop a Balance Sheet and Income Statement for the supermarket industry.

The specific objective of Phase I of this project was to determine if this type of information could, in fact, be developed.

**Procedures: Phase I**

**Defining the Population**

To make estimates of industry financial data, the population must be defined. We first look at published sources. Progressive Grocer's Annual Report seemed most promising, however, their published data on number of stores and sales do not provide enough information for stratification of the population, either by geographical regions, or by more than three sales categories. Special tabulations of unpublished Progressive Grocer data are very costly.

Next, we looked at published sources of the U.S. Census Bureau, in the Census of Business and the Current Business Reports. The problem with these sources was that a retail store was not classified as a food store unless at least 50 percent of the store's sales were food items. However, the Census Bureau does provide special tabulations of unpublished Census of Business data, at cost. The special tabulations include, by several geographical breakdowns, number of stores, average sales, and merchandise lines as a percent of sales.

**Sources of Data**

Collecting financial information from Super Market Institute members, via a mail survey, would be relatively simple. However, in making industry estimates, having financial information on the largest companies was considered essential. We needed to insure that we would have financial data for the largest firms, even if they did not respond to a mail survey. The public chains are required to file quarterly and annual (10Q and 10K) reports with the Securities and Exchange Commission.

**Sample Size**

How many stores would have to be included in the sample to provide reliable industry estimates? A random sample was considered infeasible. However, to have some idea of the number of stores needed in the sample we estimated sample size assuming a random sample. A sample size of 6,400 stores would provide an estimate of average sales per store with a 95 percent probability of being within $100,000 of the true mean. Of course, the size of the sample needed will vary depending on which variable is being estimated. In a recent study conducted by SMI, 340 companies participated. These firms operated a total of 11,366 stores.

**Results of Phase I**

Based on the research done in Phase I, we have concluded that the overall objective of this project can be accomplished. Some more specific results of Phase I research are:

1. In order to insure availability of financial data on the largest firms, SMI has contracted Disclosure, Inc. to supply microfiche copies of the Security and Exchange Commission 10Q and 10K forms filed by public supermarket chains.

2. We are now preparing specifications for the Census Bureau to use in developing special tabulations from unpublished data files of the 1972 Census of Business.

3. A mail survey questionnaire has been developed and is now being field tested.

We expect to publish our first annual industry financial statements in the spring of 1975.