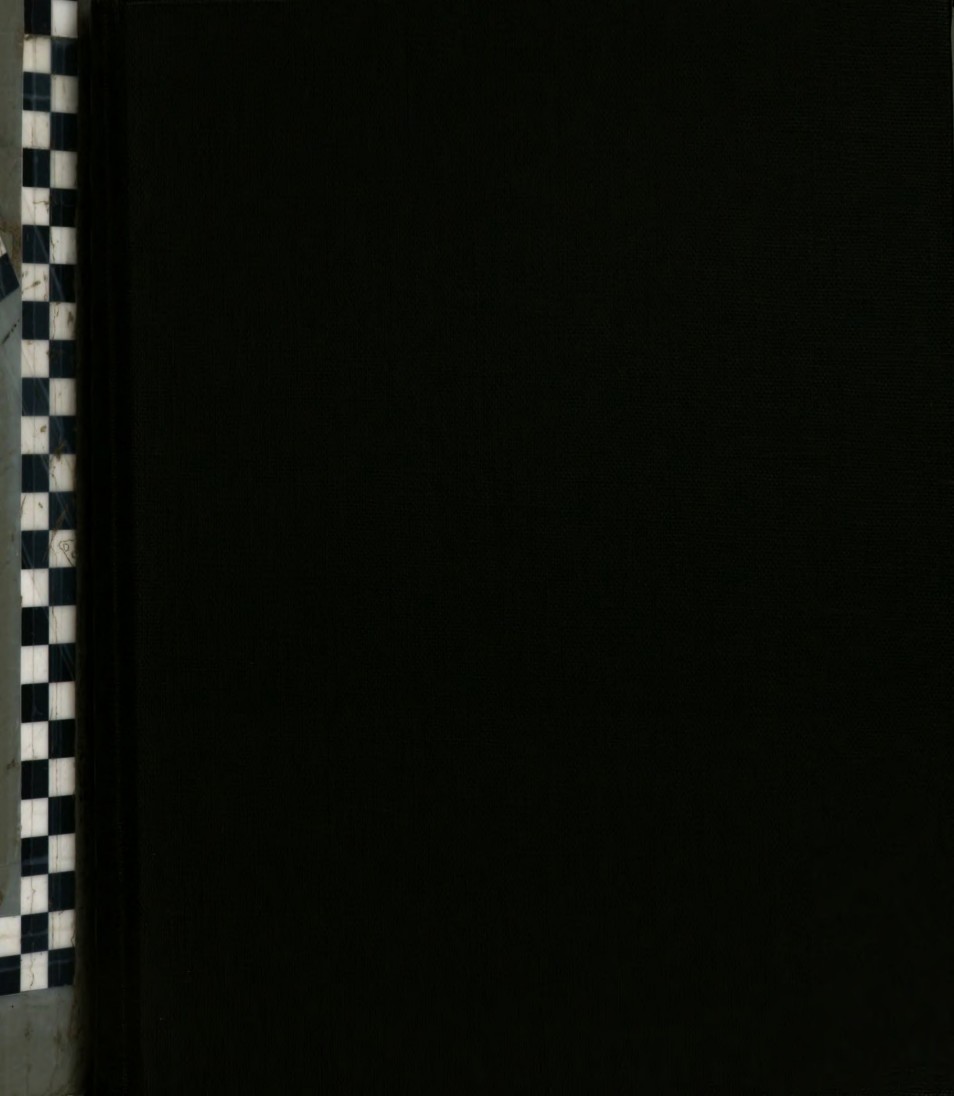
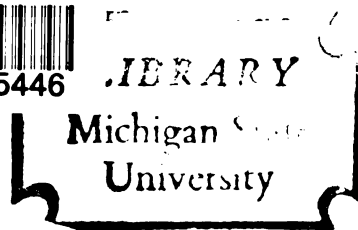






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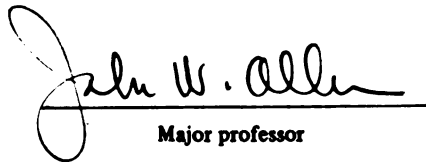
THE FUTURE OF THE GROCERY RETAILING INDUSTRY:
A FORECAST FOR THE 1980's

presented by

James L. Brock

has been accepted towards fulfillment
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By

James L. Brock

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ABSTRACT

THE FUTURE OF THE GROCERY RETAILING INDUSTRY: A FORECAST FOR THE 1980's

By

James L. Brock

The decade of the 1980's promises unprecedented uncertainty for the grocery retailing industry. Corporate strategy planning efforts for supermarket chains and independent operators must contend with increased competition from fast-food restaurants and a proliferation of new store formats, in some markets stable and in others declining populations, increasingly price conscious yet convenience-seeking consumers, and vastly increased labor and energy costs. On the positive side, movement toward improved understanding of viable market segments, centralized meat processing operations, increased emphasis on higher margin non-food items, and particularly, the tremendous potential promised by UPC scanning technology, all represent major new opportunities for the industry to grow more efficient, better serve customers' needs, and prosper during the 1980's.

Planning under highly uncertain conditions can be aided considerably through the use of thorough and up-to-date industry forecasts. The objective of this research was to construct such a forecast through a three-round Delphi study involving 80 industry experts. In the summer of 1979, Progressive Grocer magazine, a leading trade publication, conducted an extensive forecasting survey among experts from many segments of the grocery retailing industry. From that study, twenty-eight chief executive officers from supermarket chains and fifty-two

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academicians and governmental agency researchers recognized as experts in the industry were involved in two additional questionnaire iterations to provide the survey data for the research. These latter two questionnaires focused on fifteen possible industry events during the 1980's, and asked participants: (1) to estimate the likelihood of the events' occurrence, (2) to explain the logic they used to support their estimates, and (3) to suggest strategic implication which the events may have upon the industry. An 80 percent return rate in the third questionnaire iteration suggests that participants are extremely interested in the future of their industry.

The findings of the study indicate that the grocery retailing industry in the 1980's will witness a number of important evolutionary developments. Increased consumer price consciousness largely resulting from declining real incomes under economic inflation will encourage growth in areas which enable consumers to lower their total food expenses. Limited assortment stores, warehouse stores, generic brands, private labels, and generally an emphasis on low prices will be much in demand. This price consciousness will slow but it will not reverse, the growth of convenience stores and the food-away-from-home sector.

The technological "revolution" in the industry will see widespread use of UPC scanning equipment and data, and vastly more efficient operations. With the aid of computerized communications and better data chain management will tend toward greater centralization of decision making while simultaneously granting more authority to store managers for purposes of "tailoring" their stores' offerings to the needs of local markets. Lack of capital availability throughout the industry

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will encourage chains to expand through acquisitions more than through new store construction, particularly in areas of stable population growth.

Grocery retailers who adopt a true consumer orientation, and who are leaders in terms of efficiency, productivity, and cost control will prosper in the 1980's. Many retailers, however, will face continued and potential problems in part due to narrowly defining "the business they are in" and also by ignoring the growth of alternative store formats, underestimating the impact of generic brands, and failure to maintain strategic flexibility in responding to developments beyond their control such as high inflation rates or unforeseen regulations.

Retailers are encouraged to consider the supermarket as a store format and concept which is continually evolving. New ways will be found to improve cost efficiency and consumer satisfaction. Whether these improvements will emerge from within the industry as it is known today, or whether they will be introduced from outside, is largely dependent upon grocery retailers' foresight, financial ability, and initiative.



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No dissertation is the product of purely individual efforts by the author. Many people contributed to the effort represented here, some to the extent that special recognition is in order.

Professor John W. Allen, who served as chairman of the research committee, was a vital influence through all phases of the study and throughout the doctoral program. His encouragement, insightful observations, and professional thoroughness were significant contributions to the project.

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Finally, the author would like to express deep gratitude to his family, for their patience, understanding, and ability to amuse themselves while Daddy worked on this project.

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CHAPTER I

INTRODUCTION

The research reported in this document involves a forecast of the grocery retailing industry for the 1980's, based on the informed judgments of experts in all phases of the industry. A second aspect of the research is perhaps even more important: a probe of industry experts as to how grocery retailers might plan for, and cope with the likely developments impacting on the industry in the 1980's.

The report is divided into five chapters. This introduction identifies the basic purposes of the research, and describes briefly the research method utilized, the problem areas addressed, the limitations of the study, and the benefits which may be derived from the study. Chapter II provides a review of published forecasts and other literature pertaining to the current and likely future states of the grocery retailing industry. Chapter III describes in depth the research methodology which directed the data generation and analysis phases of the study. Chapter IV reports the findings of the study. Finally, Chapter V analyzes and summarizes the findings, discusses their implications (particularly in a corporate strategy planning context) and provides suggestions for further research.

Growing Need for Good Forecasts

Industry forecasts can serve individual companies--and the industry to which they belong--as valuable tools in the strategic planning function. In an increasingly volatile business environment, properly disseminated forecasts can help alert an industry to existing and likely forthcoming problems; this early warning subsequently may result in more efficient resource allocation for the industry as a whole, and in increased competitive advantage for companies which utilize forecasts wisely in their planning process.

The beginning of a new decade can help serve as the motivation to focus attention on what the next ten years may hold in store for an industry. This represents an opportunity for industry members to step back from immediate operations and short-term planning, and to speculate on the general directions which a company, an industry, or an economy will assume in future years. The decade of the 1980's appears particularly difficult to forecast. Within the global environment, uncertainties seem to be at an unprecedented level, while the relative power of the United States to control its own destiny seems to be diminishing. Dependence on foreign energy supplies, the declining value of the dollar in overseas markets, increased anti-capitalist sentiment among the lesser-developed countries--all of these have contributed to an international situation in which, increasingly, the continued prosperity of the domestic economy is questionable. Furthermore, "one can no longer assume, as a good deal of planning still does, that yesterday's trends can be projected forward into the future. Discontinuity is a more probable assumption than continuity--in economics, in world

trade and world financing, in demographics, in technology, in politics, in markets."¹

The conditions of the general business setting underscore the need for more accurate assessments of what is likely to occur, internationally, domestically, and within particular industries. Flexible contingency plans based on sound forecasts can help organizations to face the future more confidently.

Focus on Grocery Retailing

Among the industries facing what may be a less than idyllic future is that of grocery retailing. This industry contributes significantly in the American economy; expenditures in food stores in 1977 represented approximately 22 percent of total U.S. retail sales.² Problems, some of which have been developing for many years, continue to confront the industry in a number of areas, such as:

- Stabilized population growth over the last several years, rapid expansion of store numbers and store sizes in recent years, and other factors, have produced slowing growth rates, and over-capacity of retail facilities ("overstoring") in many markets. This has tended to encourage intense--even desperate--price competition, the result of which has been bankruptcy of some competitors and a depressed capital position for many survivors. In other markets, some studied by universities and regulatory agencies, it is alleged that the concentration of market share

¹Peter F. Drucker, "Coping With Those Extra Burdens," The Wall Street Journal, (May 2, 1979), p. 18.

²"Annual Report," Chain Store Age, Supermarkets Edition, (October, 1978), p. 44.

among a few large chains has resulted in decreased competition and artificially high prices.³ Such allegations may result in constraints upon the industry in the future intended to intensify price competition among retailers for consumers' benefit.

- The industry is highly labor intensive in an era of rapidly increasing labor costs. At the same time, labor productivity in the industry has been constant or even slightly decreasing over the past several years. These and other factors resulted in price increases for food rising slightly faster than the overall Consumer Price Index during the 1970's.
- Food consumed away from home accounted for an estimated 37 percent of all food expenditures by 1979--largely the result of the rapid growth of "fast food" restaurants.

On the more positive side, significant technological developments hold great promise for improving industry performance. Electronic capture of Universal Product Code (UPC) information at the point of sale for innumerable applications to retail operations; and centralized and mechanized meat processing and distribution systems are but a few examples of breakthrough opportunities which were being utilized by the most progressive firms in the industry in the late 1970's. Similarly, a growing number of companies were experimenting successfully with modified store types--such as the "combination", "warehouse" and "limited assortment" stores--consciously designed to address the needs of particular, emerging market segments. These and other recent developments will be described in greater detail in the following chapters of

³c.f., e.g., Bruce W. Marion, et al., The Profit and Price Performance of Leading Food Chains, 1970-74, (Washington, D.C.: U.S. Government Printing Office, 1977).

this report. Their mention here is intended to demonstrate that the 1980's promise to be both eventful and critical in the evolution of the grocery retailing industry.

Of equal importance to a forecast is the reaction it produces among those for whom it has been prepared. It is one thing to learn the ten-year forecast for an industry. It is quite another to study the planning and coping strategies which will guide the industry, and individual member companies, through the decade of the 1980's. This study, drawn from the candid judgments of industry experts, ultimately assesses the preparedness of the industry to face the future and the manner in which individual companies might be most successful.

The need for retailers to examine the likely destiny of their industry in the 1980's has been emphasized by Norwood (1975):

So as to cope with the uncertainty of the economy, it's essential that food retailers give priority to researching the issues and determining adequate alternatives and acceptable solutions for improving productivity in their store supply system and in their individual store operations . . .⁴

Basic Forecasting Methods

There are a number of methods which may be used in the construction of a business forecast.⁵ The simplest approach involves a projection of past data into the future. These "trend projection", or time-series forecasts can be quite complex; for example, some utilize self-correcting

⁴ Lewis F. Norwood, "Food Distribution Research Priorities to Allow Major Improvements in Total Systems Productivity by 1985," Journal of Food Distribution Research, (July, 1975), 6:2, p. 10.

⁵ c.f., e.g., Spyros Makridakis and Steven C. Wheelwright, "Forecasting: Issues and Challenges for Marketing Management," Journal of Marketing, (October, 1977), 41:4, pp. 24-38.

"smoothing" mechanisms which compare short-term projections against actual data for the most recent time period, and make adjustments according to the difference between projected and observed data. "The most frequently used time-series methods of forecasting are based on the notion of assigning insights to recent observations of the item to be forecast (e.g., sales or shipments) and then using the weighted sum of those observed (actual) values as the forecast."⁶ Essentially time-series techniques assume that the future can best be forecasted by the extension of what has happened in the past.

Econometric forecasting models attempt to overcome two shortcomings of forecasts based on trend projections. First, they attempt to explain the causal aspects which lie behind a forecast by presenting a logically based, multi-faceted incorporation of the major influences on both the economy, as a whole, and on the industry. Thus, while trend projections may be made without regard for the logic which explains them, econometric forecasting methods begin with this logic and its quantification. Secondly, simple trend projections are incapable of identifying turning points in the forecasted behavior of data. Econometric methods, relying as they do on multiple causal relationships, possess the capability of forecasting these critical turning points.

The third, and more qualitative forecasting method, consists of pooling the judgments of recognized experts in a given subject area. This "jury of expert opinion" method is most useful where the complex interactions among causal variables are unclear and render their quantification highly speculative, or for preliminary forecasts where other

⁶Ibid., p. 28.

data are elusive. This method assumes that experts in a subject-- particularly a broad spectrum of experts representing different backgrounds--possess an understanding of the subject area being forecasted based on awareness of trends and causal factors, and extensive professional experience. The sum total of expert experience and knowledge is not usually quantifiable; however, it represents valuable insight into the future. Importantly, this method accommodates the forecasting of turning points and the examination of causality and logic which underlie the forecast. It has been suggested that "the opinion of experts can give important insights into the future, particularly in the identification of potential innovations likely to disturb the path of progress away from the expected trend."⁷

The current research utilized a forecast of this third type. A "jury of expert opinion" method was selected for the research largely because of shortcomings of the other two methods in addressing the grocery retailing industry. The inadequacies of trend projections lie in their inability to explain the logic which underlies a forecast and to identify turning points. Similarly, the construction of an accurate and inclusive econometric forecasting model of the industry is precluded--at least at this time--by the vast number of variables which influence the industry and the profound complexity of their interactions. More specifically, the current study utilized the Delphi method in generating the data from which the forecast was constructed. This method is explained at some length in Chapter III.

⁷John L. Gattorna, Innovative Developments in Distribution: The V.K. Grocery Industry, (Bradford, England: MCB Publications, 1977), p. 2.

Research Objectives and Basic Methodology

Specifically, the objectives of this research included:

- To construct a multi-faceted forecast for the grocery retailing industry in the 1980's, utilizing a formal Delphi technique,
- To develop an understanding of the ways in which both individual corporations and the industry as a whole are planning for the future, particularly with respect to the more critical and "pessimistic" aspects of the forecast, and
- To stimulate among the study's participants and others connected with the industry a renewed interest in the industry's future and a dedication of effort toward improvement in all facets of the industry.

The study elicited information from a broad spectrum of industry experts. Through interviews, questionnaire responses, and a Delphi process, these expert participants were asked to discuss and then estimate the likelihood of a large number of events which might occur in the 1980's. Pertaining mostly to the grocery retailing industry, these postulated events, 104 in all, may be grouped into nine categories, as follows:

- Industry Structure
- Store Formats
- Equipment
- Departments - Products - Packaging
- Employees
- Customers (Attitudes, Behavior, and Expenditures)
- Merchandising
- Supplier Relations
- Store Management

The populations from which samples were drawn included: (1) executive officers of wholesale and retail grocery chain organizations; (2) academicians and researchers in the field of food distribution; (3) executives from food manufacturing corporations; and (4) chain store managers and independent store owners.

Initially, a broad forecast of grocery retailing in the 1980's was constructed from the questionnaire responses of participants in each of the four samples. This first "round" provided an initial industry forecast representing a wide variety of perspectives. Two subsequent rounds of questionnaires were circulated to smaller sub-samples of the chain executive and academician samples. Round 2 questionnaires provided summaries of the responses to those items selected for inclusion from the first round, and asked the participants to vote again after examining the Round 1 distribution of answers from all participants. Round 3 summarized for participants the responses from Round 2 and asked for final responses and accompanying logic in light of this latest feedback information.

As will be explained in Chapter III, among the purposes of a Delphi study is the achievement of consensus about an issue. Typically, three iterations of a questionnaire attain a level of consensus which is only marginally improved upon when subsequent iterations are performed.⁸ A second purpose of both Rounds 2 and 3 was to investigate how individual companies (and to some extent, the industry as a whole) are, or might be planning for the future as forecasted by this and other studies.

⁸ Harold A. Linstone and Murray Turoff, eds., The Delphi Method, (Reading, Massachusetts: Addison Wesley, 1975), p. 227.

Definitions of Terms

Throughout this report, terms particular to the grocery manufacturing and retailing industries are defined as they are encountered. However, it is appropriate at this juncture to establish the parameters of the term "grocery retailing". This term is preferred to "food retailing" because an increasing proportion of grocery store sales are for non-food items such as health and beauty aids ("H&BA") and general merchandise. This term better describes the broadening product mix of a large proportion of the industry.

Similarly, the study frequently refers to the supermarket as the dominant grocery retailing store type. Supermarkets, whether members of a large chain or independently owned, accounted in 1978 for over 77 percent of all sales for foods requiring further (or home) preparation before consumption. In 1979, according to the Food Marketing Institute, a supermarket was a retail food store featuring dairy, meat, produce, and dry grocery departments, an emphasis on self-service, and which generated at least \$1 million in annual sales.

However, by 1979, new store types were capturing an increasing percentage of total food sales, largely at the expense of the traditional supermarket. For example, the convenience store type, characterized by its small size, long hours of operation, narrow product mix, and rapid turnover of merchandise, accounted in 1979 for about five percent of total food sales, up from less than two percent in 1965. In the other direction with respect to store size, it is often difficult to distinguish the supermarket from some of the larger, more diversified store formats which have emerged in the last several years. Terms such as "super store", "combination store", and "hypermarket" have been

coined to describe these new store types. In almost all respects, these are natural extensions of the supermarket concept, yet in others they represent unique and significant departures from the common notion of the supermarket. These new store formats are defined and discussed in Chapter II.

Benefits of the Study

The current study offers a number of contributions to both the industry and academic researchers in food distribution and marketing. A typical forecast is restricted to "what" is likely to happen. The use of the Delphi method, however, permitted an analysis of the logic and assumptions behind the predictions of individual participants. The insight afforded by such an analysis is helpful in determining the overriding concerns and priorities of chain executives and food distribution academicians for the 1980's.

In addition, the study of how industry members plan for current and potential problems revealed by the forecast is of value in assessing the overall preparedness of the industry to face the 1980's. It is also of value for identifying those areas where there may be shortcomings in the planning process.

Another significant benefit of the research emerges from the educational value of a Delphi study to its participants. Summaries of responses to questionnaire items, as well as explanations of the logic and assumptions behind the predictions of respondents, were provided to participants as feedback for their evaluation prior to completing a subsequent iteration of the questionnaire. Thus each participant shared his own judgments with the others, and in return received the judgments

of other experts in the field. While this sharing of ideas was intended to facilitate the achievement of consensus judgments, it perhaps also provided an educational benefit to participants, and ultimately may prove to have been of assistance in alerting industry members to hitherto unrecognized or underestimated problems and opportunities.

Limitations of the Study

Perhaps the greatest limitation of the study was that it could not examine every issue which confronts the industry, or which is likely to confront it during the 1980's. Questionnaire response rates are generally inversely related to the length of the questionnaires as well as the effort required to complete and return them. In order to encourage reasonable rates of return, many subject areas in which analysis would have been valuable had to be eliminated from the study. This difficulty was overcome to a degree by distributing first round questionnaires which addressed a wide spectrum of possible events--104 in all. Subsequent questionnaire rounds addressed fewer issues--the fifteen considered most important by the research team or by Round 1 participants. Each of the fifteen issues was then investigated in depth, soliciting multiple responses to each item.

Secondly, there were limitations associated with the use of the Delphi method. In the extreme, all "jury of expert opinion" forecasts have been called "pooled ignorance." Delphi studies, while recognized as valid when conducted properly, occasionally have been conducted under casual and non-rigorous circumstances. More properly, many causal research efforts have been called Delphi studies by the researchers. Thus the entire family of Delphi methodologies has been subjected to

criticisms that it is arbitrary, not standardized, and not rigorous. Certainly poor summarizing and failure to explore disagreements in the construction of subsequent questionnaire rounds can work to erode the value of the method. Further, although participants are unaware of each other's identities, it has been shown that "conformists" may capitulate to the norms as revealed by the summary feedback.⁹ In rare instances, group pressure from some forms of feedback may be so strong as to force participants to take (capitulative) positions which they do not actually hold. This leaves participants unsatisfied with the study and their participation in it, or they may simply leave the situation without having compromised their values at all.¹⁰ Other difficulties of the Delphi method will be discussed in Chapter III of this report, describing the research methodology of the study.

Conclusion

The literature review which follows in Chapter II discusses a number of forecasts which have been constructed previously for food or grocery retailing in the 1980's. These forecasts tend to be less comprehensive than the current research. The need for comprehensive and methodologically sound forecasts for the industry has been discussed above. Further, there appears to be very little published material which assesses the industry's preparedness to cope with forecasted events and conditions. This study addressed these two issues. The report turns now to the published literature in an effort to trace and describe the current state of the industry, and to discuss previous industry forecasts.

⁹Ibid., p. 262ff.

¹⁰Ibid., p. 233.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents secondary data which serves as groundwork for the construction of the forecast. It is divided into three major parts, as follows: The first part briefly traces the historical evolution of the dominant grocery retailing store type--the supermarket--and outlines the external conditions which fostered its growth. The second part constitutes a general assessment of the current state of the grocery retailing industry. The third part is a selective review of previously published forecasts and "futuristic" articles which pertain to grocery retailing in the 1980's. Finally, a summary discussion briefly assesses the industry and suggests directions for the current study.

The Evolution of Grocery Retailing: 1910-1979

The evolution of grocery retailing, and more specifically, of the supermarket, has been chronicled extensively by a number of researchers.¹¹ A brief historical review is presented only to provide a perspective from which to draw insight into the possible future directions of the industry.

¹¹c.f., e.g., Frank J. Charvat, Supermarketing, (New York: Macmillan, 1961); Godfrey M. Labhar, Chain Stores in America, 1859-1962, (New York: Chain Store Publishing Corporation, 1963); Rom J. Markin, The Supermarket: An Analysis of Growth, Development, and Change, rev. ed., (Pullman: Washington State University Press, 1968); Daniel I. Padberg, Economics of Food Retailing, (Ithaca, New York: Cornell University Food Distribution Program, 1968); or Theodore W. Leed and Gene A. German, Food Merchandising: Principles and Practices, 2nd ed., (New York: Lebhar-Friedman Books, 1979).

Growth of the supermarket concept is considered to have been the result of two distinct developments, the first of which propelled a nation of very small independent grocery retailers into vertically integrated, large-scale chain store organizations. The second involved these chains' conversion of older and smaller store operations to the supermarket format. Each of these developments is discussed in turn.

Chain Store Movement: 1910-1930

Although the retail grocery store itself remained basically unchanged in the 1910-1930 period, there was tremendous growth of chain organizations which vertically integrated retailing with wholesaling and manufacturing operations, and created centralized administrative control. This effectively reorganized the entire supply mechanism and resulted in major cost savings for the chains. It provided them with a significant competitive advantage over independent non-integrated store owners, with a number of consequences. For example, there had been but 2,000 chain stores in 1910, by 1930 this figure had grown to 80,000. Also, by 1930 chain stores were conducting one-third of the nation's retail food business.¹² Total market share of the four largest chains grew from about 6 percent in 1920 to 23 percent in 1930.

Concurrent with the rise of the chain stores in the 1920's was the growth of cooperative and voluntary wholesalers which provided independent operators with economies in buying, warehousing, and other services comparable to the chains.

Self-Service. The concept of customer self-service was introduced at Clarence Saunders' now famous Piggly Wiggly store in Memphis in

¹²Padberg, op. cit., pp. 11-31.

1916, but the general movement toward self-service did not escalate until the 1930's. On the West coast, particularly in the Los Angeles area, consumer mobility via the automobile, favorable climate, low land prices, and a "pioneer spirit" in the population provided enabling conditions for the development of large self-service food stores as early as 1916. The open front, drive-in "group of food stores in a one-story building located in neighborhood and outlying sections" appeared in Los Angeles in the late 1920's.¹³

Henry Ford's Store. In 1919, near Detroit, Henry Ford opened the first of several Ford Commissary Stores primarily for employees, but accessible by the public. Although not self-service, the stores combined extremely large volume (over \$7 million at one store in 1926), wide product assortment, private labels, and an order picking and assembly system characteristic of mass production to offer prices 30 percent or more below those of Detroit area grocery retailers. Threat of a boycott of Ford vehicles by large numbers of the grocery industry led Ford to close the stores in 1927.¹⁴ This particular store format never surfaced again, and aside from other isolated prototypes, the supermarket did not gain general popularity until the 1930's.

Conversion to Supermarkets: 1930-1965

In many respects the economic depression of the 1930's created a climate well suited to stores which emphasized a low-price appeal. Early supermarkets, most notoriously King Kullen Markets in New York

¹³ Charvat, op. cit., pp. 15, 16.

¹⁴ Stanely C. Hollander and Gary A. Marple, Henry Ford: Inventor of the Supermarket? (East Lansing: Bureau of Business Research, Michigan State University, 1960).

and Big Bear in New Jersey, featured interiors which "had no partitions, crude floors, bare ceilings, unpainted fixtures, glaring lights, gaudy signs, and merchandise piled everywhere. The units thrived in low-rent locations on the fringe of thickly populated sections."¹⁵ Large size, low overhead, self-service, and combined food product lines previously obtainable only through visits to several more specialized stores characterized the newly enlarged "mix" which supermarkets made available to consumers.

A number of environmental factors external to the industry sped the growth of the supermarkets in the 1930's. Severe economic depression created extreme price-consciousness among many consumers who were responsive to the lower prices of the supermarket. Later, the more prosperous post-war years saw the rapid growth of a middle-income class of consumers whose grocery needs seemed best served by the supermarkets. The development and growing use of technology such as the automobile, growth in commercial and home refrigeration facilities, and new food manufacturing and processing techniques including frozen foods, "instant" cake mixes, and extensive prepackaging, also created enabling conditions for supermarket growth. Populations shifted to suburban areas, where retailers quickly built larger stores with extensive parking areas. Consumers increasingly embraced the "one-stop shopping" concept, providing further impetus for retailers to expand their non-food lines.¹⁶

Thus, during the post-World War II years until about 1960, chains and independents alike underwent major conversions from the traditional

¹⁵ Charvat, op. cit., p. 18.

¹⁶ Ibid., p. 3.

grocery store format to the supermarket. Table 1 depicts the growth of supermarkets' share of all food store sales for selected years between 1935 and 1978.

Table 1. Supermarkets' Share of U.S. Food Store Sales

Year	Percent
1935	1.7
1940	18.3
1950	31.3
1958	56.9
1978*	77.0

Source: Charvat, op. cit., p. 3.

* Progressive Grocer, 46th Annual Report of the Grocery Industry, (April, 1979).

Growth Rates Slowing. Through the early 1960's, rapid population growth in most markets was the basis for expanding sales and general profitability of most grocery retail operations. However, as the post-war "baby boom" declined and population growth slowed, retailers found that large sales increases were no longer the norm. New business for a given firm required attracting customers away from its competition. Prior to the 1950's expanding sales had not been a problem, as supermarkets were competing largely against the vulnerable smaller, less-efficient, "mom-n-pop" stores. As the number of supermarkets grew in all market areas, they also grew in size. Each new store was designed to serve a larger market area. Competition in the 1960's and 1970's thus tended to pit large efficient supermarkets against one another. Competitive pressures have been the major factor in reduced operating profit, from 1.97 percent of sales in 1956 to .92 percent in 1971;

and reduced average return on net worth from 14.40 percent to 8.88 percent in the same time period.¹⁷

Six Dimensions in the Development of the Supermarket

Goldman suggested that the development of the supermarket may be characterized on the basis of six dimensions: (1) the number and composition of product lines (groceries, non-foods, produce, fresh meats); (2) breadth of products in each line; (3) type of store organization (counter service, partial or full self-service); (4) level of prices and margins; (5) size of the store's trading area; and (6) physical size of the establishment.¹⁸ From historical developments in each of these dimensions, Goldman posited that the supermarket in the U.S. "evolved from two origins: (1) the local (neighborhood) grocery store, and (2) the large food 'emporiums' of the 1930's, which emphasized huge volume sales, heavy advertising, and very low prices." Gradually from the 1930's, stores added to the mix of dry groceries the other departments necessary for designation as a supermarket--dairy, meat, and produce--and gradually phased self-service facilities into the meat and produce operations.

Goldman suggested that the evolution of the supermarket represents an attempt by retailers to address two fundamental questions: "(1) How to bring consumers to concentrate a larger proportion of their purchases in the store?; and (2) How to bring more customers to the store?"¹⁹

¹⁷Walter J. Salmon, Robert D. Buzzell and Stanton G. Cort, "Today the Shopping Center, Tomorrow the Superstore," Harvard Business Review, (January-February, 1974), pp. 89-98.

¹⁸Arien Goldman, "Stages in the Development of the Supermarket," Journal of Retailing, (Winter, 1975-76), 51:4, p. 52.

¹⁹Ibid., p. 62.

The recent answer to the first of these questions appears to be the trend of supermarkets toward extending product lines far beyond food and into many other convenience goods and general merchandise lines.

Current State of the Grocery Retailing Industry

The preceding discussion of the evolution of grocery retailing may now be brought into the focus of the late 1970's. A large number of developments both within and external to the industry have helped to shape its current status. Many of the issues and trends to be discussed in this section are central to the development of items for this study's questionnaires, which are described in Chapter III.

The external and internal environmental settings of the industry are discussed below in turn. This sort of environmental analysis is common at the outset of a corporate strategy planning mission, and is considered critical to the formulation of optimal marketing strategies because of the problems and opportunities which it may suggest.²⁰

External Environments

Developments in the external environments faced by the industry are those largely beyond the short-term control of firms within the industry. Also, the impacts of external environments are not restricted to the industry. They include general economic conditions; the political/legal sector, i.e., regulations; and consumer attitudes, behavior, and expenditures. Clearly, discussion of developments and trends in these areas could be far more thorough than the treatment

²⁰c.f., e.g., Thomas A. Staudt, Donald A. Taylor and Donald J. Bowersox, A Managerial Introduction to Marketing, 3rd ed., (Englewood Cliffs, New Jersey: Prentice-Hall, 1976), especially Chapter 4; or E. Jerome McCarthy, Basic Marketing: A Managerial Approach, 6th ed., (Homewood, Illinois: Richard D. Irwin, 1979).

which is afforded them here. It is not the purpose of this discussion to provide an exhaustive assessment of these environments, but rather to describe the general condition of the major factors affecting the industry and to describe some of the major trends which characterize the industry.

Economic Environment and Conditions. For the period 1967 to 1979, the Consumer Price Index (CPI) for all goods and services increased by 95 percent; the most significant increases were registered after 1972. The 1970's was a period characterized by general inflation throughout the total economy. During this time, food prices increased 111 percent, with the most prominent rises in 1973 and 1974. In 1973, for the first time, the index of food prices exceeded that of the overall CPI; the food index has remained higher since that time.²¹

Apparently, however, American consumers grew resigned in the late 1970's to higher prices and a high rate of inflation. Curtin concluded that the initial hesitation exhibited by consumers in the purchase of durables in the earlier days of high inflation was replaced by a feeling that prices will only continue to rise in the future, and that therefore it is wise not to postpone purchases in anticipation of softening prices.²²

Nonetheless, inflation almost certainly is responsible for altered consumer behavior in the supermarket. The growth in popularity of

²¹United States Department of Agriculture, "Food Prices in Perspective: A Summary Perspective," (1979), p. 1.

²²Timothy M. Hammonds and Mary Ellen Burris, "The Food Marketing Industry Speaks/Supermarket Trends," (text of an address presented at the FMI Convention, Dallas, 1979); and Richard T. Curtin, "Mounting Fears of Double Digit Inflation," Economic Outlook U.S.A., (Spring, 1979), 6:2, pp. 29-32.

private label and generic products from 1977 to 1980, can be attributed, at least in part, to tighter consumer food budgets. Similarly, the increased role of price in consumer brand and store choices has encouraged the growth of alternative grocery retailing store formats which are highly price competitive. Warehouse stores and limited assortment stores, for example, offer reduced labor and customer services, but feature prices which generally range 10 percent to 30 percent below those in nearby conventional supermarkets.²³ In several market areas, popularity of these store types increased tremendously during the 1970-78 period, the latter part of which was accompanied by annual food price inflation rates averaging almost 7 percent.²⁴

The "Energy Situation". The major contributor to high inflation rates in recent years, of course, is the vastly increased cost of petroleum-based energy. In 1978 energy costs for the first time exceeded rent in the majority of supermarkets.²⁵ With the 1978 energy inflation rate at 17 percent, "energy costs lead the worry lists of all major trade segments, with 76 percent of chain executives classifying energy as a major worry."²⁶ Higher energy costs may begin to temper the continued growth of the frozen foods and refrigerated sections of the store; and, because of higher energy costs, stores may establish shortened hours of operation. These high costs may ultimately encourage

²³Albert D. Bates, "The Super Stores: Emerging Innovations in Food Retailing," in Jim L. Grimm, ed., Marketing Strategies in Food Distribution, (proceedings of the Third Annual World Food Conference, American Marketing Association, 1976).

²⁴"46th Annual Report of the Grocery Industry," op. cit., p. 81.

²⁵Ibid., p. 89.

²⁶Ibid.

the development of alternative and less energy intensive food delivery systems, some of which will be addressed later in the report.

Legal and Political Environment. Federal, state, and local legislation designed largely to protect consumers, employees, the environment, and competition, has increased dramatically since the late 1950's. A substantial proportion of this legislation affects the grocery retailing industry. The following are but a few of the more pertinent legal/political developments in recent years.

-- Concentration ratios. There has been for some time, and continues to be, a strong interest by governmental agencies in the market share held by the largest few chains in particular markets. Markets dominated by a few very large retailers have long been suspected by some of non-competitive behavior in an oligopolistic context; the allegation being that higher prices have been charged consumers. While the subject of industry concentration has been widely discussed for years, the issue remains highly controversial with respect to what conclusions are to be drawn from the fact that wholesaling and retailing have over time become more concentrated. The issue conceivably could lead to more forceful action by governmental regulatory agencies--the Federal Trade Commission in particular--to prevent or slow further concentration; perhaps even to divide firms with large market shares into smaller, competitive units.

-- Bottle Bill Legislation. By June, 1979, seven states had passed roughly equivalent laws requiring deposits on most carbonated beverage containers. Opinions concerning the

ecological soundness of, and derivative ramifications from, this legislation vary considerably. In Michigan, where the law took effect in December, 1978, it was accompanied by demonstrably higher soft-drink distribution costs and retail prices. In particular, it has drafted grocery retailers as collection and refunding agents for empty containers; an activity which requires investment capital for the inventory of "empties" redeemed by consumers, and which entails a serious in-store sanitation burden and risk of contamination of other food products. It has been suggested that national legislation of this sort is a genuine possibility in the future.

-- Item Pricing. Among the savings originally thought to accrue from implementation of UPC scanning systems were the costs incurred in individually price-marking virtually every item in the store. Annual costs of item marking in a typical supermarket have been estimated to exceed \$31,000.²⁷ Consumer interests, however, have maintained that removal of individual item prices results in less effectiveness in identifying prices in stores, and ultimately will reduce shopper's price consciousness, allowing price increases to be passed unnoticed to consumers. As a result, several states and municipal areas already have passed legislation which prohibits or restricts the removal of item prices. Retention of item pricing also is favored by the United Food and Commercial

²⁷"The Big Payoff," (part of a special report entitled "Scanning '79"), Chain Store Age, (May, 1979), p. 70.

Workers International Union in order to protect this labor intensive activity. Industry scholars have suggested that increased consumer education and trust lie at the heart of gaining acceptance for productivity-increasing measures which involve the consumer directly, such as the item pricing issue does.²⁸

Consumer Numbers, Attitudes, Behavior, and Expenditures. Among the myriad social, cultural, and consumer trends currently in evidence in the United States, a few seem to have particular importance to the grocery retailing industry:

- Population Growth. Population growth has slowed dramatically from the post-World War II "baby boom" birth rates of the 1950's. In 1955, for example, 25 births were recorded per 1,000 population in the U.S.; by 1975 this figure had dropped to 14.8.²⁹ This drop in the birth rate coincided with a period of dramatic expansion for the grocery retailing industry. This expansion was not through a net addition of stores, but by the closing of smaller operations and the opening of larger ones. Rapid population growth in the post-war years through the early 1960's enabled grocery retailers to achieve impressive sales increases. Declining population growth has resulted in overcapacity of facilities in many markets, and subsequently, has created a setting for intense price competition. It should be noted,

²⁸Address by Professor John Allen, Director of the Food Systems Economics and Management Program, Michigan State University, East Lansing, Michigan, (April, 1977).

²⁹United States Department of Commerce, Bureau of the Census, Statistical Abstract of the United States: 1977, (Washington, D.C.: U.S. Government Printing Office, 1978), p. 55.

however, that the population of the United States is projected to expand considerably in the period 1980-2000. Conservative census projections suggest that the U.S. population will grow by 23 million people during the 1980-1990 decade.³⁰

- Family Size. Family size is also declining as the birth rate drops, as divorce rates climb (from 2.5 per 1,000 population in 1966 to 5.0 in 1976)³¹ and as increased numbers of people elect to live alone. In 1965, 15 percent of all households consisted of one person; by 1976, this percentage had grown to 20.6 percent. Changing family sizes, and the changing age composition within the family, may be better served by a new food product mix, and by new or different food package sizes, store shopping hours and services. A 1979 survey by the Green Giant Company revealed that one-third of all meals eaten at home are eaten alone--a reflection of busier family lifestyles.³²
- Working Women. Increasingly, women are entering the workforce; over 52 percent of all married women between the ages of 20 and 44 years held jobs outside of the home at the end of 1978.³³ This has resulted in increased income for the average household and a simultaneous need for increased convenience in the purchase and preparation of food. One study has reported that sales of premium-priced convenience foods have grown steadily and "now

³⁰ William Lazer, "The 1980's and Beyond: A Perspective," M.S.U. Business Topics, (Spring, 1977), 25:2, p. 23.

³¹ Statistical Abstract, loc. cit.

³² Steve Weiner, "Price Is No Object for Food Shoppers Bent on Convenience," The Wall Street Journal, (June 13, 1979), p. 1.

³³ Statistical Abstract, op. cit., p. 391.

account for fully half of the typical grocery store's sales."³⁴ Not surprisingly, increases in both the proportion of industry sales made by convenience stores and the proportion of total food consumed away from home have accompanied the increased entry of women into the workforce. Further, as women have assumed greater income-generating responsibilities, men have become more frequent grocery shoppers.³⁵ In a March, 1979, survey for Newsweek magazine, Factline Inc. "found that men regularly do the family shopping alone in 30 percent of the families interviewed, and . . . in the supermarkets surveyed, more than one-third of the shoppers entering the stores during the survey hours were men."³⁶

-- The Fast-Food Challenge. The growth of away-from-home eating has been important indeed. Between 1967 and 1977, food store sales rose 140 percent while the sales of all away-from-home eating establishments grew 193 percent. More profound has been the growth of what the U.S. Department of Agriculture refers to as "refreshment places". Primarily fast-food outlets, refreshment places registered a six-fold increase in sales between 1967 (\$3.1 billion) and 1977 (\$20.3 billion).³⁷

Increased consumer acceptance of eating away from home is a

³⁴Weiner, loc. cit.

³⁵Zbytniewski, Jo-Ann, "The Men Who Man the Shopping Cart," Progressive Grocer, (May, 1979), pp. 43 ff.

³⁶"Men Still Have Big Role in Food Shopping," Marketing News, (August 10, 1979), p. 15.

³⁷U.S. Department of Agriculture, "Price Trends," op. cit., p. 7.

major concern of the grocery retailing industry; currently 37 percent of food sales are for away-from-home consumption.³⁸

By way of response, many stores have added on-premises eating facilities or expanded deli operations with varying degrees of success--all in an attempt to stem the loss of trade to fast-food operations.

Internal Environment

Developments in the internal environment include those which are to some degree under the control of the industry or its member companies, and whose effects are primarily upon the industry. It includes developments in the competitive environment, i.e., industry structure, store operations and formats, and costs/margins; the technological environment, i.e., store equipment and design; and in the mix of products which flow through the system.

Competitive Environment. Slowed population growth, particularly in many local market areas, and rapid store expansion in the 1950's and 1960's resulted in serious overstoreing problems by the mid-1970's. This excess capacity intensified price competition in an industry already characterized by low margins, and it continues to force many smaller and more marginal supermarkets out of business. For example, in the mid-1970's, Detroit area retailers frequently offered redemption for three times the face value of manufacturer's coupons in an effort to generate store traffic. Thus, a 37 cent can of vegetables, if purchased using a

³⁸ Although these data are the most accessible, most properly a distinction should be made regarding the state of preparation of the food purchased. Often, for example, fast-food outlet purchases are taken home for consumption, and items purchased in grocery stores are consumed away from home on picnics, etc.

"10 cents off" coupon, cost only seven cents! These and other desperate marketing tactics have resulted in potential bankruptcy of two retail chains in the greater Detroit area. Nationally, while the total number of stores in operation has remained fairly constant over the past several years, total selling space has increased as larger stores have opened and smaller ones closed. The average store closed in 1978 was 12,800 square feet in size,³⁹ while new stores opened in 1978 averaged 32,500 square feet.⁴⁰

Competition between retail grocery enterprises has tended to focus on price in recent years, rather than on services or retailer promotional activities, such as games or trading stamps. Stamps were offered by an estimated 75 percent of supermarkets at the peak of their usage in 1962, but by 1976 this figure had dropped to 11 percent.⁴¹ Whether stamps will rise again to their former widespread usage is unknown. Certainly the cost of stamps--about one and one-half to two percent of sales--was an inhibiting factor in an era of one percent net margins in the late 1970's.

New Store Concepts in Grocery Retailing. The emergence of several new store formats has been discussed extensively in the literature.⁴² Recognition of distinct market segments has encouraged retailers to follow the marketing "axiom" which suggests that a product or service

³⁹Hammonds and Burris, loc. cit.

⁴⁰"46th Annual Report of the Grocery Industry," Progressive Grocer, op. cit., p. 60.

⁴¹Leed and German, op. cit., p. 250.

⁴²c.f., e.g., Bates, Salmon, Buzzell, and Cort, and "New Store Formats: The Experiments--and the Results," Chain Store Age, (February, 1978), pp. 29-35.

offering which satisfies the needs of a select target market very well will enjoy greater success than one which offers a less satisfactory mix aimed at "everyone".⁴³

Six emerging store formats are described in Table 2, where they are compared with conventional supermarkets and with each other on a number of criteria.⁴⁴ The store types are defined in part by the data and by the brief characteristics described below.

-- Super Store. The super store features service departments not usually found in a conventional supermarket, such as an on-premises bakery, service deli, or wine and cheese shop, and generates a larger percentage of sales from general merchandise. Super stores are experiencing tremendous popularity. One study defines a super store as being over 25,000 square feet in size,⁴⁵ and another as 30,000 square feet or larger.⁴⁶ Interestingly, the average size of the 775 newly-constructed "supermarkets" in 1978 was 32,500 square feet.⁴⁷ Clearly, a large proportion of new stores might be classified as super stores.

-- Combination Store. The combination store most frequently features the marriage between a food store and a discount drug operation, with a large emphasis on general merchandise, which occupies approximately half the selling space. With the grocery department providing high volume and customer traffic,

⁴³c.f., e.g., McCarthy, op. cit., Chapter 2.

⁴⁴Chain Store Age, "New Store Formats," loc. cit.

⁴⁵"46th Annual Report of the Grocery Industry," op. cit., p. 70.

⁴⁶Chain Store Age, "New Store Formats," loc. cit.

⁴⁷"46th Annual Report of the Grocery Industry," op. cit., p. 62.

Table 2. Basic Data on New Store Formats

	Conventional Supermarket	Super Store	Combination Unit	Hyper- market	Ware- house	Limited Assortment	Convenience Store
Gross Margin	22.0%	21.5%	24.0%	19.0%	12.0%	9.6%	29.4%
Payroll	10.1%	12.0%	12.5%	8.0%	4.5%	3.0%	11.6%
Total Expense	20.6%	19.5%	21.0%	14.0%	20.5%	7.7%	26.1%
Pretax Profit	1.4%	2.0%	3.0%	5.0%	1.5%	1.8%	3.3%
Sales per Store (in Mils.)	\$5.0	\$12.0	\$13.0	\$40.0	\$4.2	\$2.7	\$.33
Store Size (in Sq. Ft.)	20,000	35,000	50,000	100,000	25,000	7,500	2,400
Items Stocked	9,000	15,000	25,000	40,000	5,000	500	3,000
Investment (in Mils.)	\$1.0+	\$1.24	\$1.7	\$4.7	\$0.27	\$0.095	\$0.19
Return on Assets	--	10%	12%	21%	12%	25%	--

Source: Food Systems Economics and Management Program, Michigan State University

the drug department oversees high margin general merchandise and provides a prescription pharmacy service.

The "super combo" store type has been projected to evolve as the dominant form of food retailing in the U.S. and Canada by the end of the 1980's. Essentially, the "super combo" store is defined as being large and carrying "a larger proportion of non-food items--approaching the 50 percent level."⁴⁸

-- Hypermarket. This is a mammoth-sized store whose extremely wide product mix is designed to provide for almost complete one-stop shopping for the consumer. As such larger stores are constructed, groceries occupy proportionately less of the total selling space, which can range in excess of 200,000 square feet. In a hypermarket, groceries, building supplies, sporting goods, auto accessories, yard goods, toys, apparel, housewares, and other departments are organized under a single management, situated under one roof, and serviced by a common bank of checkout counters. The hypermarket idea originated in France and is still largely a European phenomenon, although the Hewel "Bazaar" in Chicago, and the Meijer, Inc., "Thrifty Acres" stores in central Michigan are successful domestic examples of this store format.

-- Warehouse Market. The warehouse market specializes in selling food at demonstrably lower prices than conventional supermarkets. Spartan facilities often void of decor, provision

⁴⁸"Super Combo Is Challenge to Baby Shark 'Food Markets'," Marketing News, (June 15, 1979), 12:25, p. 1.

for only essential customer services, tightly controlled labor costs, and larger average customer transactions characterize these stores. Some product categories are not represented fully; the stores often stock fewer than 3,000 items and some eliminate perishables entirely. National brands are very much in evidence although some private (wholesaler) labels are also offered. Larger size packages, including institutional sizes, are usually available. Typically, these stores will carry limited selections (20-40 items) in dairy, (pre-wrapped) produce, meat, and frozen food departments, as well as a small housewares section. Products are displayed in cut cases, and customers price mark each item with a grease pencil.

- Limited Assortment Store. The limited assortment store is a smaller operation than the warehouse market, featuring even fewer stockkeeping units (fewer than 500 at the Aldi-Brenner stores in the Midwest region of the U.S.). The stores often carry very few perishables, operate on a cash-only policy, require customers to bag their own purchases, and rely on deep price discounting on a product mix of mostly private label brands. Acknowledging that one-stop shopping is not practical through the use of these stores, proponents of the limited assortment concept hope consumers will patronize nearby supermarkets for perishables and other products which cannot be handled efficiently and routinely in the limited assortment format. As a result of this and other measures, labor costs are extremely low--about 3 percent of sales.

Limited assortment stores had captured at least 15 percent shares in some market areas by mid-1979; their success and operating characteristics had earned them the label "baby sharks" by some members of the retailing community.⁴⁹

-- Convenience Food Stores. In addition to these larger store types, convenience food stores continued throughout the 1970's to capture an increasing share of total industry sales. Convenience stores, such as the Southland Corporation's "7-Eleven" stores are small operations which offer a narrow assortment of fast-turning grocery impulse and staple goods, coupled with "neighborhood" locations and long hours of operations. High margins and high stockturn rates contribute to these stores' ability to generate profit, as does increasing consumer demand for convenience in shopping-- particularly for impulse and "fill-in" products between major grocery shopping trips. In 1960, convenience stores captured less than one percent (0.7 percent) of U.S. grocery sales.⁵⁰ By 1978, this figure stood at 4.9 percent.⁵¹

Trends in Grocery Products and Merchandising. Just as high levels of economic inflation have contributed to the growth of warehouse and limited assortment stores which emphasize price as their major competitive tool, so changes in the kinds and brands of products carried has

⁴⁹ Ibid.

⁵⁰ "44th Annual Report of the Grocery Industry," Progressive Grocer, (April, 1977), p. 152.

⁵¹ "46th Annual Report of the Grocery Industry," op. cit., p. 60.

reflected changing consumer preferences and an emphasis on total store profits. Consider the following, for example:

-- Private Label Products (also known as retailer brands).

Gradually increased their share of product category sales to about 20 percent during the 1970's.⁵² This trend appears to be stabilizing or even slowing, and private labels' proportion of store sales did not register any appreciable growth in 1978, the most recent year for which data were available. This is considered to be due in part to the introduction and rise in popularity of generic products, which had captured about 10 percent of product category sales by the end of 1979.

-- Generic (or unbranded products). Introduced in the U.S. in 1977, they captured significant shares of store sales in soaps and detergents, paper products, and canned fruit and vegetables (as much as 20 percent in these categories in some stores by 1979).⁵³ Generic products still are not represented in a wide product line, and for the most part, appear to be confined to product categories where private labels have been popular. One survey suggests that, in fact, it is the private labels which have lost proportionately more of their sales to generics; national brands have not felt the impact so strongly.⁵⁴

In several product categories, however, generics have captured sufficient market share to cause concern to

⁵² Charles G. Burck, "Plain Labels Challenge the Supermarket Establishment," Fortune, (March 28, 1979), p. 71.

⁵³ "Generics at Age One Analyzed by SAMI Report," Progressive Grocer, (March, 1979), p. 110.

⁵⁴ Ibid., p. 104.

manufacturers of national brands. Increasingly, retailers are expanding their generic offerings; in many instances some brand name goods have been eliminated to provide additional shelf space.⁵⁵

- Emphasis on Non-Foods. Greater emphasis on general merchandise and health and beauty aids departments within the store has been the result of grocery retailers' simultaneous desires to sell products which realize higher gross margins and to induce customers to purchase a greater share of their total product needs from them. Thus, while average store sizes (in square feet) have been increasing over the last several years, the amount of selling area devoted to grocery items has increased much more gradually. By and large, the new space is occupied by automotive accessories, household items, dry goods, and other general merchandise departments. It may be seen from the earlier discussion of emerging store formats that, in increasing order, the super store, the combination store, and the hypermarket rely on general merchandise in the composition of their total product/service mix.

Productivity and the Technological Environment. Food distribution is a labor-intensive activity. Labor outweighs all other expenses combined in most supermarkets, and labor costs continue to be among the most rapidly rising costs in the store. Labor costs for chains

⁵⁵Margaret Yas, "Generic Products Are Winning Noticeable Shares of Market from National Brands, Private Labels," The Wall Street Journal, (August 10, 1979), p. 6.

increased 20 percent between 1976 and 1978.⁵⁶ Furthermore, the Food Marketing Institute reported in 1979 that productivity measures of sales per square foot, sales per transaction, and sales per man hour have been stable or even decreasing in recent years once inflationary factors are removed from the data.⁵⁷ Thus, most efforts to increase productivity and general efficiency in operations have been and are focused on reducing the amount of labor required in operating the retail organization. The major enabling factor in the lower prices featured by limited assortment and warehouse stores is significantly reduced labor costs. Automated de-palletizing and order assembly systems at chain distribution centers provide significant cost savings per unit of throughput over manually operated warehouses.

Centralized Meat Processing. This represents another area of vast and as yet only partially realized potential. The notion of eliminating store level cutting operations entirely has encountered some resistance from labor unions. Also, consumer acceptance of centrally processed meat has yet to be won completely. In 1979, almost 70 percent of fresh meat was shipped to retailers in sub-primal cuts of 15-25 pounds, and cut according to local preferences at the retail level.⁵⁸ With centrally processed meat, transportation savings are considerable, since up to one-third of the carcass weight shipped to retail stores under conventional processing practices represents bone and fat. Store level preparation and wrapping of retail cuts, however, also entails

⁵⁶"46th Annual Report of the Grocery Industry," op. cit., pp. 77, 78.

⁵⁷Hammonds and Burris, op. cit., p. 12.

⁵⁸Best Foods, Inc., "Projections for the Retail Grocery Industry," 1979.

high labor costs, short production runs, and costly facilities which are often idle--and thus represents an area where additional efficiencies may accrue from further centralizing of meat preparation activities.

Universal Product Code (UPC) Scanning. The most important technological development in grocery retailing in recent years is that of data capture using the Universal Product Code (UPC). The full impact of UPC scanning systems upon the industry will not be felt for some time. A number of companies employed these systems as early as 1974; most have generated sufficient real savings and productivity improvements in test phases to justify further installations. As a result, system installations, which totaled about 500 stores at the end of 1978, were slightly over 1,000 by the end of 1979.⁵⁹ Production capacity of scanning equipment manufacturers may be the major limiting factor to growth beyond 1,000 installations annually for some time into the 1980's.⁶⁰ It has been predicted in the trade press that by 1985, "prices will be down so low that four-lane supermarkets and even convenience stores will be able to install scanners."⁶¹

The potential benefits and uses of a fully operational UPC scanning system have been described in detail by Shaw and others.⁶² They include such varied applications as precise item movement information--at different prices or on different days of the week, for example--improved labor scheduling, better inventory control, automatic

⁵⁹"Scanning: The Time Is Now," Chain Store Age, (May, 1979), p. 65.

⁶⁰Ibid., p. 100.

⁶¹"Scanning'79," Chain Store Age Executive, (May, 1979), p. 75.

⁶²c.f., e.g., Shaw, op. cit., or Chain Store Age Supermarkets, (May, 1979).

reordering capacity, and faster customer checkout. Currently, efforts are underway to apply scanning technology to random weight products (mainly meats and produce) and to a broader spectrum of general merchandise.⁶³

Electric Funds Transfer (EFT). Because of its large volume and the frequency and size of consumer purchases, the supermarket has been considered a key to the long-run success of EFT systems, whereby a customer's purchases are instantly and electronically deducted from his/her bank account and credited automatically to the store's account via equipment at the checkout counter. Some stores have been experimenting with this concept on a limited basis; the major limiting factor to more general EFT installations appears to be consumer apprehension about the implications of a so-called "cashless society".

New Food Distribution Systems. The energy crisis (i.e., vastly increased prices for imported petroleum products), high labor costs, and technological developments in home computers and cable TV systems have led some entrepreneurs to speculate about the possibilities of a resurgence in at-home shopping. Taking consumer orders by telephone and then delivering them free of charge was a service once provided by most food retailers, but it was eliminated by almost all of them in the 1920's and 1930's. Used in combination, in-home computers and cable TV could display products and prices for consumers and automatically process orders, they would be delivered on a pre-arranged basis. Such a system would permit the elimination of retail facilities; although the

⁶³Ibid., pp. 80, 84.

same distribution functions would be performed as before, the system would operate at lower total costs.⁶⁴

Trend Toward Market Segmentation

The retailer who understands and responds to the characteristics, needs, and desires of his customers may build a loyal customer franchise if he accomplishes this better than do his competitors. The independent owner of a single store often knows no other market than that which he serves; consciously or not, if he is successful he responds to his customers' preferences in the selection of his product mix, promotional policies, etc. The chain store manager, on the other hand, often has little discretion over his store's "marketing mix"--the selected combination of products, promotional strategies, pricing policies, etc. It may be more convenient and profitable for a chain to centralize such decisions and treat all individual stores as though they served identical consumer populations.

Historically, while there have been well-known generalizations about preferences of particular market areas (e.g., "consumers in Boston prefer brown eggs") there is no convincing evidence to suggest that chain management has attempted, until recently, to identify and serve distinct market segments. In fact, this historic relative inability of chains to cope with unique local consumers' attitudes and preferences has been considered an "equalizer" of sorts, allowing local independents, who often understand the needs of their patrons on an

⁶⁴ Gordon F. Bloom, "The Future of the Retail Food Industry: Another View," Journal of Retailing, (Winter, 1978), 54:4, pp. 3, 4.

individual basis, to remain competitive despite their lack of scale economies and investment capital.⁶⁵

Recently, chain management has devoted more effort to the identification of market segments. A 1978 trade publication described six consumer segments, relevant to the industry, each representing a life-style. The segments were defined by such variables as age, education, income, media exposure, price consciousness, and desire for personal services and convenience in shopping. Goff observed that successful new stores of the 1970's seem generally to be of two types: (1) small stores, such as convenience stores, specialty food stores, and limited assortment stores, and (2) mass merchandisers, such as "hypermarkets, family centers, combination stores, jumbo supermarkets, and food warehouses."⁶⁶ Each appeared to be serving different market segments.

The apparent evolution of supermarkets into two directions is a logical development given the rapid increases in popularity of super stores, combination stores, and hypermarkets on the one hand, and warehouse and limited assortment stores on the other. The former feature large stores, one-stop shopping, and extensive store services, while the latter emphasize small stores, a limited product assortment, and minimal store services. A Chain Store Age study matching store formats and market segments reflects that, indeed, particular market segments are more attracted to certain store formats.⁶⁷

⁶⁵ Paul Ingrassia, "Retailing Rivalry: Independent Grocers Outsell the Big Chains by Adapting to Markets," The Wall Street Journal, (November 28, 1978), p. 1.

⁶⁶ Steven C. Goff, "Matching Store Types to Market Needs to Better Serve the Consumer," Journal of Food Distribution Research, (February, 1976), 7:1, p. 59.

⁶⁷ "New Store Formats," op. cit., p. 34.

Market segmentation, and related marketing techniques, such as store positioning and retail life cycle analysis, are becoming necessary strategic activities as industry members seek to better satisfy customers, and earn higher profits as a result. Industry scholars have suggested that in 1979, most chains use "sophisticated forecasting methods and are active in formulating five-year plans."⁶⁸ A 1979 trade journal assessment of the first 50 years of supermarkets concluded: "Food retailing is entering the age of professional management and professional marketing."⁶⁹

Summary

Clearly, the grocery retailing industry is in a constant state of change, as is any evolutionary system in a dynamic environment. Changing economic conditions; threats of more costly and vastly reduced energy supplies, increasing government regulation, and changing consumer attitudes and behavior--all have stimulated reactive changes by the industry. Similarly, increased competition from fast-food outlets and emerging store formats, as well as from declining population growth and resulting oversupply of retail facilities, has forced industry members constantly to look for new customers, new merchandising and promotional ideas, and new products and services.

In general, grocery retailers, as all executives perhaps, appear resistant to change. Change requires the assumption of risk on investing in the purchase of new equipment, and greater personnel training.

⁶⁸"Planning: Consider the Contingencies," Chain Store Age Supermarkets, (May, 1979), p. 55.

⁶⁹"Half a Century of Supermarkets . . . And What's Ahead," Chain Store Age Supermarkets, (September, 1975), p. 74.

Moreover, new attitudes and ways of thinking about the future are required. Furthermore, many industry managers may be labeled "reactive" in that they are largely forced into responding to developments beyond their control. It has been suggested that grocery retailers feel locked into an inflexible cost structure, over which they have little control, because they are at the end of the food distribution channel.⁷⁰

Many of the changes currently underway in grocery retailing might reasonably be expected to continue, such as the move to larger average store sizes or an increased emphasis on adding general merchandise to the mix. Other developments may be fads, only to drop from sight. Indeed, generic products and the limited assortment stores are perceived by some to be merely short-lived fads which will stabilize at very low market share levels, and then regress.

Although the preceding discussion has hardly been an exhaustive assessment of the "state of the industry", it has provided key elements of the general evolutionary trends in the industry and current issues which confront it. Assessing what the future will bring, and how the industry and its member companies will prepare for it, is the mission of this research. It is appropriate at this point, however, to examine the results of other previously published forecasts for the industry and related areas.

Previously Published Food Industry Forecasts and Futuristic Thinking

There appears to be no shortage of speculation about the future of the grocery retailing industry. Academic scholars, trade publication

⁷⁰"Planning: Consider the Contingencies," Chain Store Age Supermarkets, loc. cit.

editors, and company executives have offered forecasts for part or all of the 1980's. The approach of the next millenium seems to have motivated some futuristic speculation about conditions in the year 2000 and beyond. The purpose of this section is to summarize and discuss these published forecasts with respect to both their predictions and the methods used to develop them. Many of the reports reviewed represent future thinking by industry professionals, and were not formal research projects, per se. However, valuable insights were obtained and were used in designing the present study. Because recency is an important factor in the evaluation of a forecast, the following discussion is restricted to forecasts or other studies conducted since 1970. For the most part, the forecasts are addressed in chronological order. Each study is identified by a short, descriptive heading; its publication date appears in parentheses.

The Food Industry in 2000 A.D. (1970)

An early and controversial industry forecast was presented by Cain and a revised and expanded version of this paper was published in 1971. Concerned with how the majority of meals will be provided in the U.S., the paper stated certain assumptions about human behavior in the year 2000. Suggesting expanded, wealthier, urban populations of very busy people, it inferred homemakers' desires for minimal personal involvement in providing for their families' food needs, an emphasis on speed and convenience in eating, and a vastly diminished role of the meal in the human social structure. Nutritional supplements, such as soy protein, were forecasted to play an increasing role. Food-away-from-home was expected to account for half of food expenditures by 2000, with institutional food preparation restricted to serving "pre-prepared,

ready-to-cook or partially cooked, portion controlled, basic meal components or complete meals."⁷¹

Cain projected a food consumption and distribution environment by the year 2000 which may require, rather than extensions of existing institutions, a completely different set, "owned, financed, and managed by people not presently involved in agriculture as it has traditionally been known." Retailers will need to emphasize ready-to-eat food items, complete meals, and portion controlled units of basic meal components. Wholesalers will have to change their basic philosophy from being handlers of meal components to being handlers of complete meals. Food processors will be grouped into two levels of businesses: First, processors will "receive perishable products from the field, prepare and preserve the products, and store them in bulk for use at a later date." "Further," processors will "receive 'first processed' items and combine, add to, cook, season, and otherwise prepare and package the meals or parts of meals for distribution further along the channel."

The major implications of this paper included the growing focus on complete meals rather than individual meal components throughout most of the food distribution process, and the importance--to individual firms within the industry--of positioning themselves to perform critical functions in the food distribution systems of the future.

Entrepreneurs (1972)

The role of the entrepreneur in the food industry of the future was discussed by Cain. Defined largely as innovators, future thinkers, and leaders, entrepreneurs will institute "radical departures" in the manner in which nutrients are delivered for human consumption. Cain stressed

⁷¹Jarvis L. Cain, "The Food Industry--2000 A.D.--Revisited," Journal of Food Distribution Research, (September, 1971), 2:1.

the necessity of such innovations given projected pressure on world food supplies in the face of rapidly expanding world population. He warned that the food industry "establishment's" "preservationist activities . . . in recent years have actively discouraged any sort of entrepreneurial activities."⁷²

Michigan Rural Potential (1973)

A comprehensive research study utilizing the Delphi Method assessed the rural potential in Michigan for 1985. Because rural Michigan derives a substantial portion of its revenues from the sale of agricultural commodities, the study included estimates with respect to national food consumption patterns. Projecting a substantial increase in consumer discretionary income by 1985, a greater proportion of women in the workforce, and increased travel and leisure time, the study predicted that more food products will be developed to be nutritionally balanced and quickly consumed--many foods in portion-controlled sizes and packaged to be consumed without eating utensils. Further, the study predicted: "Most kitchens of 1985 will have a microwave oven, in addition to the familiar ovens and ranges. This will no doubt revolutionize the preparation function of the dinner."⁷³

Nutrient Delivery System: Human Feeding in 2000 A.D. (1973)

In a paper encouraging futuristic thinking about food distribution, Cain suggested that the relative effectiveness of a "nutrient delivery

⁷² Jarvis L. Cain, "Entrepreneurship in the Food Industry, 1972-2000 A.D.," Journal of Food Distribution Research, (September, 1972), 3:2, pp. 27-29.

⁷³ Michigan State University Agricultural Experiment Station and Cooperative Extension Service, Project 80 & 5: A Look at Michigan's Rural Potential in 1985, (East Lansing: M.S.U., 1973).

system" is a function of both less total energy usage and a more favorable balance in the population-resource ratio. Applying a systems perspective to nutrient delivery, he identified some relevant implications for transportation, data handling, environmental concerns, quality standards, and portion control.

The major challenges to the entire food manufacturing and distribution industry were: (1) enhancing the psychological satisfaction derived from consumption of synthetic or synthetically supplemented foods, (2) eliminating food perishability, and (3) expanding the nutrient delivery system to a world-wide scale. He suggested that only novel and farsighted planning can equip the industry to meet these challenges.⁷⁴

A Delphi Forecast of Retailing (1973)

Looking into the future of retailing in general, Leo Bogart predicted that:

. . . in the next few decades these population trends will continue, but some of the most important new forces of change will be those wrought by the technological revolution--in the handling of information, in communication, in transportation, in warehousing and inventory management, and in the serving of customer needs.⁷⁵

Using a research methodology similar in many respects to that employed in this current study, Bogart distributed three successive iterations of a questionnaire to seventy-eight "executives drawn from the top management ranks of retail chains, wholesaling groups, and major independent stores, and to a number of outside experts in business,

⁷⁴ Jarvis L. Cain, "Nutrient Delivery System: A Human Feeding Concept for 2000 A.D. and Beyond," Journal of Food Distribution Research, (September, 1973), 4:3.

⁷⁵ Leo Bogart, "The Future of Retailing," Harvard Business Review, (November-December, 1973), p. 18.

including professors of retailing, corporate executives in related fields, and writers on retailing subjects." Among his findings were the following:

- More than half the sample believed retail store labor productivity, as measured by sales per square foot of selling space in constant dollars, will be 20 percent higher by 1985 than in 1973.
- Seventy-five percent of retailers, and nine of ten economists, believed the 1980's will witness the introduction of a pricing factor in most goods to cover the cost of disposing of them and of neutralizing whatever adverse effect they may have on the environment.
- Eight out of ten retailers believed that the four-day work week will become standard by the late 1980's.
- Nearly all participants agreed that Sunday store openings will be legal in ninety-five percent of the country by 1985.
- Seventy-five percent of the participants believed cable TV will increase its penetration of U.S. households from 10 percent to 50 percent by the early 1980's. Over half believed: ". . . that by that date virtually all homes on the cable will be able to automatically order merchandise which has been displayed."
- Two out of three believed that by 1989 a centralized, nationwide credit and banking system will be in operation.
- Sixty-seven percent believed that grocery, drug and other specialty retailers will represent an important new source of competition in the sale of general merchandise.

Bogart predicted a more affluent and sophisticated average customer, and a necessary growth in retailer efforts targeted at particular market segments. The outlook for retail trade prosperity in general was favorable: retailers were depicted as flexible and confident; and the existing social and economic trends according to the study, did not appear likely to be modified significantly or reversed.

Energy Needs of Future Food Systems (1974)

A focus on future energy consumption by the food industry was provided by Cain who calculated that total energy usage by the various segments of the food industry "could well exceed 30 percent of total national energy use."⁷⁶ Warning that the U.S. food industry "has become completely dependent on fossil fuels as a source of energy," he suggested vastly increased long-range planning with respect to energy problems, with particular effort focused upon alternative fuel sources.

Positive Prognosis for the Super Store (1974)

In an examination of present and future trends affecting the future of mass food retailers and manufacturers, Salmon, Buzzell, and Cort noted that chain operators have tended to diversify their product lines by expansion into non-food areas and have moved toward operations of fewer but larger stores. Defining the supermarket and super store as concepts in order to avoid arguments with respect to the size of product lines of particular stores, the author concluded that the major distinction between the two is in the much broader set of consumer needs which can

⁷⁶ Jarvis L. Cain, "Energy, Food, and Man--2000 A.D. and Beyond," Journal of Food Distribution Research, (September, 1974), 5:3.

be served by the super store. "The super store concept . . . is a logical extension of the supermarket concept in that (1) it appears to be well-suited to the changing needs of consumers, and (2) it seems to be a natural outcome of the process of competition among food chains and other types of outlets."⁷⁷

Describing the probable shape of the food chains' operations by 1980, the study suggested that the chains' evolution to the super store concept will be limited by commitments to fixed facilities and operating philosophies, and the inexperience of personnel. Chains will need to determine, for particular market areas, the boundaries of the product lines which are considered "routine purchases", which the study assumed to be the key to defining a super store. The study also predicted: (1) longer hours of operation, partially in an attempt to attract the male shopper; (2) a continuation of the trend toward fewer, larger retail stores; and (3) a reduction in the need for back-room space due to daily delivery of groceries and central meat cutting. Implications for manufacturers and suppliers in light of the trend toward the super store development included: (1) packages entirely pre-wrapped, resistant to pilferage, and "relatively easy to price-mark and shelve"; (2) greater consumer willingness to substitute private brands for national brands; and (3) "dual" logistics, wherein slow-moving products may move through warehouses and faster-moving products may be shipped directly to the super stores from manufacturers' facilities.⁷⁸

⁷⁷ Salmon, Buzzell, and Cort, loc. cit.

⁷⁸ Ibid.

Impact of Limited Assortment Stores (1975)

Discussing the likely impact of the limited assortment store upon grocery retailing in the United States, Goff examined the operating characteristics of these stores in Europe, where they have been established for several years. Summarizing the potential transferability of the concept, he noted a number of factors which pointed to future success for the limited assortment store:

- Inflation in the economy dramatizes lower prices to the consumer.
- Inner-city areas have a special need for low-price stores.
- Abandoned service stations could make investments modest.
- "Convenience" of location has appeal in today's marketplaces.
- Smaller, specialty stores have been successful.
- There is a need for convenient, low-price stores near apartment buildings and other living complexes where less mobile, fixed-income edlerly people live.⁷⁹

Goff explained that American retail executives are likely to question whether consumers will accept the limited assortment store concept, whether the appropriate merchandise mix can be identified, whether suppliers will cooperate, and whether the stores can generate the high gross sales necessary for profitability. Nonetheless, Goff believed the limited assortment store offers low risk and an exceptional financial return; and that it will make a significant impact upon the industry, primarily with locations in centers of major metropolitan areas.

⁷⁹ Steven C. Goff, "Limited Assortment Stores' Place in Serving Consumer Needs in 1975 and 1985," Journal of Food Distribution Research, (Spring, 1975), 3:2, p. 68-76.

Marketing Functions in Future Food Systems (1975)

Examining how traditional marketing functions might change by 2000 A.D., Cain discussed eight commonly accepted functions with respect to food systems. Among his conclusions were that:

- With respect to buying and selling, both buyers and sellers will be fewer in number, and ultimately, they "will be buying and selling nutrition, without regard to form."
- In transportation and storage, developments will be "closely linked to changes in production, preservation, transport and storage technologies", including:
 - * Utilization of more plant protein (i.e., the soybean) and protein from the sea.
 - * Irradiation and dehydration technologies for preservation.
 - * Growth in intermodal shipments and reduction in the "fantastic number of individual deliveries by suppliers to the retail level units."
- Market information in more usable form, with reassessment of information needs.
- With respect to risk bearing, vertical and horizontal integration and broadening financial bases will all tend to increase the capacity of the larger firms to bear risk. These larger firms, however, will operate more cautiously and thus be relatively less willing to bear risk.
- Standardizing and grading functions will become more complex as services are added to products, and as they are applied less to commodities and more to pre-prepared combinations of commodities, such as T.V. dinners.

-- With respect to financing, inflation plus generally increased risk in the industry will tend to shorten the life of investments.

Cain suggested that although the traditional marketing functions will still be performed by the food industry of 2000 A.D., there will be many changes in the mechanics of their performance, and they will be performed within a significantly different institutional context.⁸⁰

Technology and Lifestyles (1975)

An extensive Chain Store Age feature dedicated to "50 years of supermarketing" included an extensive projection of what lay ahead for the industry in five and ten years.⁸¹ Technology and lifestyles were suggested as the two primary areas of important change in the future which will affect the industry. Technologically, "widespread conversion to electronic scanners and totally electronic checkouts" was predicted by 1980. Productivity improvements in labor-intensive functions "implies moving work-intensive operations such as meat cutting and produce preparation back toward the central source of supply." A prediction was made that frozen meat will become widely accepted by 1985. One spokesman suggested: "Every chain will go frozen at the same time, the same way they all went from fresh turkeys to frozen in 1948-49."⁸²

With respect to fresh produce, the advent of UPC scanning systems will encourage the move to pre-wrap and code-marking despite another

⁸⁰Jarvis L. Cain, "Traditional Marketing Functions in the Food Industry--2000 A.D.," Journal of Food Distribution Research, (September, 1975), 6:3.

⁸¹"Half a Century of Supermarkets," Chain Store Age, op. cit., p. 71.

⁸²Ibid., p. 77.

recent survey which found that 78 percent of consumers prefer bulk displays of produce.

Family lifestyles will play a major role in decisions concerning where, and what kind of retail facilities should be provided. In general, new supermarkets will fall into the combination store classification, ranging in size between 30,000 and 65,000 square feet.

In a proscriptive posture, the article suggested some means by which the industry can prepare for the future:

- Moving labor-intensive operations toward the central supply sources.
- A total review and revamping of food transportation from farm to market.
- Establishing retail store formats which are tailored to fit the community and its consumers' needs.⁸³

Research Priorities (1975)

Norwood discussed research priorities to achieve major improvements in food system productivity, focusing on productivity issues in three categories. First, related to supplying stores, he noted that preliminary research findings revealed that freight consolidation and "combined delivery systems can result in 80 percent fewer deliveries to supply the needs of an average retail food store."⁸⁴ Consolidation, plus rapid advancements in the relatively young discipline of physical distribution management and methods for moving products with less

⁸³Ibid.

⁸⁴Lewis F. Norwood, "Food Distribution Research Priorities to Allow Major Improvements in Total Systems Productivity by 1985," Journal of Food Distribution Research, (July, 1975), 6:2, p. 7.

manpower in the store, (introduced by hypermarkets, warehouse stores, and limited assortment stores) will all enable significant productivity improvements in supplying retail stores.

Second, in-store productivity increases were felt to be forthcoming through the use of UPC scanning systems, centralized produce and meat operations, and designing store formats to best match the needs of the local markets.

Third, external forces will impact further on the industry including continued FTC investigations into the relationships between market concentration and store prices, increased regulations from a number of government agencies, and the resistance of both consumers and labor to technological improvements such as centralized meat processing or UPC scanning systems and subsequent removal of item prices.

In a subsequent and related article, Vastine and Norwood added that reliance on foreign energy supplies might well cause inflationary levels which erode U.S. consumers' standard of living. U.S. food surpluses, however, may serve as a political and bargaining tool in trading for strategic materials such as oil. This adds to the likelihood that food prices will be more volatile and difficult to predict.⁸⁵

"Meal Units" by A.D. 2000 (1976)

Assessing the effects of future energy and materials costs upon the industry, Cain predicted accelerated use of synthetic foods, and an emphasis on centrally processed, pre-packaged, nutritionally complete

⁸⁵William J. Vastine and Lewis F. Norwood, "Food Retailing in the Future," Journal of Food Distribution Research, (June, 1977), 8:2, pp. 10-16.

"meal units" by the year 2000, as shortages of energy and materials lead to more efficient food distribution methods.⁸⁶

Environmental Factors (1976)

In a study of emerging store formats, Bates assessed the likely environment for food retailing for the period 1975-1985, and identified five factors of special significance: (1) economic uncertainty, (2) consumer price awareness and concern, (3) escalating labor costs coupled with stable productivity, (4) increased asset investment levels triggered by larger store sizes and inflation, and (5) anticipated capital shortages which will affect future expansion plans.⁸⁷

Bates then identified five basic new store prototypes and assessed the likely success of each in light of the factors listed above. These store formats have been discussed previously in this chapter.

A Delphi Forecast of the U.K. Grocery Industry (1977)

A Delphi study by Gattorna sought ultimately to outline a scenario of the future operations of the grocery industry in the United Kingdom. Of 94 panelists from 85 companies who received Round 1 questionnaires, 42 responded to the third and final round. Panelists were senior managers from "a reasonably balanced mix of policy makers, planners, decision makers, implementers, and those most likely to be on the receiving end of changes in the industry."⁸⁸

⁸⁶ Jarvis L. Cain, "Energy and Materials Constraints--Opportunities and Changing United States Food Industry Structure, 1976-2000 A.D.," Journal of Food Distribution Research, (September, 1976), 6:3, pp. 2-38.

⁸⁷ Bates, loc. cit.

⁸⁸ John L. Gattorna, Innovative Developments in Distribution: The U.K. Grocery Industry, (Bradford, England: MCB Publications, 1977), p. 4.

The Round 1 questionnaire consisted of sixty-two predetermined event statements, in three broad areas: (1) external events--economic, political, social, and technological developments whose occurrence is largely independent of the grocery industry; (2) market competitive events, more directly related to the distribution function; and (3) internal control events, primarily concerned with cost reductions within individual companies. This number was reduced to forty-four in Round 2; eighteen events were dropped largely because of a heavy "never" consensus in Round 1. In Rounds 2 and 3, each panelist was asked to reconsider his previous estimates in light of feedback received on the panel's aggregate opinion in the previous round, and to rate his self-perceived competence to answer each question. Panelists whose final judgments fell outside the inter-quartile range of responses (from Round 2) were asked to defend their positions. Finally, panelists were asked to comment upon developments in distribution which would pertain to the event in question and to suggest probable implications of the event's occurrence.

The summary scenario from the entire project forecasted likely events in a number of areas, such as:

- Government Intervention. Continued price controls and stricter food standards were forecasted.
- Social/Demographic Arena. Total population (in the U.K.) was expected to remain stable. Energy costs will be the major cause behind a shift toward greater urbanization (as opposed to rural living).
- Consumer Behavior. A continued increase in pre-prepared food consumed outside the home, and a subsequent increase in

emphasis on "institution-type distribution" were forecasted.

Food expenditures as a percentage of total expenditures were expected to decline somewhat.

- Distribution Patterns. A net decrease in the aggregate number of stockholding points was forecasted along with an increase in direct-delivery to retail outlets.
- Evolution in Retailing. Substantial growth in the number of super stores (over 50,000 square feet net size), and increased installation and use of front-end automation were forecasted.
- Manufacturing Sector. An increased research effort toward extending products' shelf lives was forecasted, along with increases in advertising in order to retain brand loyalties, and the development of sophisticated account profitability analysis.⁸⁹

Marketing in 1985 (1977)

In a study to assess the likely general state of marketing in 1985, Lacznia, Lusch, and Udell polled the thirty-one top "thought leaders" and educators in marketing as revealed by a larger survey. Some of the overall judgments of the participants were that:

- Consumerism and other social pressures on business will likely increase by 1985.
- Resource shortages and product recall costs will be creating problems for business in 1985. In particular, the participants forecasted a grave problem of sufficient food production to feed the world's population.

⁸⁹ Ibid., pp. 8-11.

-- Marketing information systems, especially those oriented toward strategic decisions, should be markedly improved and more widely used by 1985.⁹⁰

Clearly, many of the problems and opportunities which now--or will--confront grocery retailing are shared by the business community at large.

An Interview with Chain Executives (1977)

In an extended interview with two top executives from the Kroger Company, Cort examined the various influences which will shape the future of food retailing. These chain executives foresaw increased pressure on large chains to approach the independent store's ability to cater its product and service mix to the needs and tastes of the local market which it serves. This can only be achieved, they felt, if chains recognize their major role to be consumers' buying representatives rather than to act as processors' outlets. They predicted an increase in the proportion of food consumed outside the home, yet in spite of the trend toward greater convenience in eating, they suggested that high inflation rates will lead to some convenient, prepared foods in the supermarket not being purchased in favor of more basic, consumer prepared foods. Finally, they suggested that the future promised no single answer to the question of growth opportunities, but that it will be critically important for managers to stay well informed about the markets which their stores serve. Furthermore, no single store type will capture all of any particular market in the future, but proper

⁹⁰Gene R. Laczniak, Robert F. Lusch, and Jon G. Udell, "Marketing in 1985: A View from the Ivory Tower," Journal of Marketing, (October, 1977), 41:4, pp. 47-56.

market segmentation can assure the validity of hypermarkets, box stores, and many other store format concepts.⁹¹

Forecast for Red Meat (1977)

In an extensive article on the future of the red meat industry, Allen suggested that the most significant and badly needed improvement in productivity "will come about through greater understanding and co-operation between the component members of the food system: producers, processors, wholesalers, and retailers."⁹² These improvements will involve changes in a number of sectors, for example, in consumer attitudes, government regulations, labor-management negotiations, and the physical distribution system. According to a U.S. Department of Agriculture study, "five cents on every retailed pound of beef could be saved by the general adoption of boxing and central cutting, allowing trucks to make backhauls, and eliminating featherbedding in labor-management contracts."⁹³

With respect to food in general, Allen predicted that periodic shortages of food (and other raw materials and products) will become more commonplace "as often for social and political reasons as for economic ones," and that for this and other reasons consumers will be more willing to select substitute products. Red meat products, in the face of criticisms that livestock grain consumption represents a net protein loss, may increasingly consist of range and grass fed animals which

⁹¹Stanton G. Cort, "The Future of Food Retailing: The Kroger Viewpoint," Business Horizons, (February, 1977), pp. 48-60.

⁹²John W. Allen, "The Future of the Red Meat Industry," Drovers Journal: Roll Call '77.

⁹³Ibid.

utilize otherwise non-productive land. To counter growing public belief that red meats are too high in fats and cholesterol, Allen foresaw both the culturation of leaner meat animals and a consumer education program sponsored by the meat industry which will emphasize the nutritional benefits of red meat.

Many Trends Likely to Continue (1977)

A forecast of food retailing in the 1980's was reported by Bellinger, Stanley, and Allen. The questionnaire responses of 102 leading practitioners and observers of food retailing were analyzed. With respect to consumers, the majority of respondents felt that in the 1980's (1) private brands will be strong, (2) rising store costs will decrease customer store loyalty, (3) the influence of advertising on grocery shoppers will not decrease, and that supermarkets will find it profitable to focus some attention on the senior citizen market. In the area of government regulations, "74 percent of the respondents felt that consumer-oriented legislation would significantly affect supermarket operations, while 76 percent agreed that the government would likely require information disclosures about competitive practices."⁹⁴

The vast majority of respondents believed that competition among supermarkets in the 1980's will be stronger than ever before (88 percent); and that energy costs for store operations would significantly increase (91 percent). They also predicted that lawmakers and consumers will accept UPC scanning methods.

⁹⁴ Danny N. Bellinger, Thomas J. Stanley, and John W. Allen, "Food Retailing in the 1980's: Problems and Prospects," Journal of Retailing, (Fall, 1977), 53:3, pp. 59-70.

The most significant problems facing food retailing in the 1980's were felt to be: (1) reducing costs and improving productivity, (2) rising energy costs, (3) increasing competition, and (4) excessive government regulation. The two most frequently mentioned changes foreseen for the industry were: (1) increased automation with UPC, EFTS, etc., and (2) an increase in the number of larger stores.

The study concluded that "the truly innovative supermarket of the 1980's will not attempt to cater to all market segments but will focus on specific target markets by differentiating itself from competitors."⁹⁵ This creative marketing plus the move toward automation for cost reduction were seen by the authors as "the two major avenues to successful food retailing in the 1980's."

Revolutionary Developments Feasible (1978)

In response to the study reported by Bellinger, Stanley, and Allen (1977), another view of the future of the retail industry was reported by Bloom (1978). Suggesting that the judgments expressed by participants in the earlier study might have been myopic, Bloom examined a different viewpoint which "postulates that the supermarket in its present form cannot adapt to various future economic, environmental, and technological factors and that new forms of distribution, posing a major threat to conventional supermarkets, will emerge in the next two decades."⁹⁶

Bloom posited that the three basic premises of supermarket operation have been undermined over the last several years, in the following manner:

⁹⁵Ibid., p. 70.

⁹⁶Bloom, op. cit., p. 5.

- Convenience and Fast Service. These no longer characterize the large supermarket, with long lines at checkout counters and enormous, crowded parking lots.
- Mass Merchandising of Volume Items at Low Prices. Other institutions, most significantly the discount specialty stores "which aim to move a particular kind of food product at high volume and low prices" have arisen to challenge the supermarkets' dominance. Health and beauty aids discount stores, the drive-in milk and egg stores, and particularly the warehouse and limited assortment stores are examples of these.
- High Productivity and the Most Efficient Methods of Material Handling and Production. Although specializing in relatively few, high-volume items is a key to high labor productivity, the number of items stocked by supermarkets has steadily increased, contributing to relatively low industry productivity performance. Thus, while real sales per man hour have remained basically constant over the last decade, labor costs have continued to rise eight to ten percent per year. Similarly, productivity increases with store size up to a point (approximately 27,000 square feet, according to one study) beyond which it tends to decrease as the overall stock-turn rate falls and labor-intensive service departments, such as bakeries and delicatessens, are added.

Bloom also noted a number of economic and environmental trends which will continue to trouble the industry in future years, such as:

- (1) the increasing importance of low prices to the growing number of families who are pressured by inflation which is powered by rapidly

rising energy and labor costs; (2) the changing nature of the American household, with its smaller size, more working women, and the increased desire and need for convenience; and (3) the deteriorating retail environment in the central cities, which may soon be served by other food distribution systems if supermarkets continue to ignore these markets.

The key to the future may be the emergence of warehouse-to-consumer food delivery programs, which currently face major, but not insurmountable difficulties with respect to: (1) higher labor costs associated with picking an individual order; (2) payment, which might be handled via credit cards or electric funds transfer; (3) the costs and risks associated with delivery; and (4) the problem of maintaining satisfactory profit levels given the removal of displays and other encouragements to impulse buying when the customer orders by telephone. These problems might be addressed by technological developments which Bloom predicted will emerge in the latter part of the 1980's. "These three critical areas are the development of the television set and the telephone into a sophisticated home information and communication center, a revolution in the cost, use, and application of microprocessors and minicomputers, and the development of sensor-automated robots."⁹⁷ Bloom suggested that the cost advantages of a warehouse-to-consumer food distribution system which utilizes the new technology will become apparent by 1990. Although the supermarket will not disappear at that time, the new cost-efficient system will be highly competitive, and will force the closing of still more stores due to their marginal productivity.

⁹⁷Ibid., p. 12.

Bloom's ideas represent a significant departure from most of the future scenarios described earlier. Certainly technology can revolutionize an industry in reasonably short order. However, diffusion and adoption of innovative technologies, particularly those whose capital requirements are high, may lag substantially behind the development of the technologies themselves. The example of UPC scanning may serve as a case in point. In 1969 it was predicted that scanning applications would be widespread by the middle 1970's,⁹⁸ yet at the beginning of 1979 it was estimated that fewer than 1,000 supermarkets (of a total of over 30,000) were equipped to process UPC information.

Teleshopping (1979)

A likely future for "teleshopping" of the sort described by Bloom was also reported in a Chain Store Age article in March, 1979. Predicted by well-respected futurologists to be a standard way of life by 2020, teleshopping is a means whereby an image of a product or products flashes on the TV screen in the consumer's home. If the item is desired by the teleshopper at the price she is willing to pay, she presses the designated response button on a hand-held keyboard and the order is placed.⁹⁹ An experimental approach to this concept has been in operation in Columbus, Ohio, since 1978. Such a system may be used for gathering marketing research data about consumer attitudes and preferences, and might serve as a political voting mechanism as well.

⁹⁸"The Supermarket of the Seventies," Progressive Grocer, (June, 1969), p. 77.

⁹⁹Chain Store Age, (March, 1979).

The resulting capital-intensive combination of wholesaling and retailing functions at the teleshopping distribution center promises substantial cost breakthroughs. Also under this shopping system, promotional responsibilities will shift more to manufacturers, package sizes will become standardized to suit automatic warehouses, inventory levels will fall, and real estate costs will decline as teleshopping gains in application. All of these will contribute to lower prices for consumers and higher profit levels for the industry.

Emerging Technologies (1979)

A survey conducted by Congress' Office of Technology Assessment (OTA) and mailed to food industry experts in processing and distribution "identified the social and economic factors that interact with and may be expected to influence the emergence and adoption of marketing technologies. The availability and cost of energy, supply of and demand for food (domestically and worldwide), environmental concerns, food safety, nutrition and health, and consumer attitudes were the major factors identified."¹⁰⁰ The study then examined a broad spectrum of emerging technologies in food distribution, describing for each its current state of development, the extent to which it will be used, the expected impacts from its use, etc.

On the basis of these criteria, the OTA study judged seven technologies as "highest priority" for the future:

- Fabricated Foods. Ingredients, such as fillers and extenders, and analogs--substitutes fabricated to resemble specific

¹⁰⁰ Office of Technology Assessment, Congress of the United States, "Emerging Food Marketing Technologies: A Preliminary Analysis," (Washington, D.C., 1978).

traditional foods such as breakfast sausage--will be more widely used.

- Food Sanitation in Distribution. New technology is needed for cleaning and decontaminating rail cars and other shipping containers.
- The Retortable Pouch. A multi-layer, adhesively bounded package which withstands thermoprocessing temperatures and which combines many advantages of the metal can and the plastic boil-in-the-bag container will come into use.
- Electronic Checkout. Developments of the electronic cash register, and more particularly, UPC scanning systems, will continue.
- Reduction of Food Losses. Losses are estimated at about 20 percent of all food produced in the U.S.
- Electronic Food Shopping. Automated, card-activated EFT mini-markets, interfacing with the consumer in her home via TV and with the food warehouse, may offer efficient solutions to the food distribution needs of large urban areas and rural areas as well.
- Returnable and Recyclable Containers. Such containers may offer a means of extending natural resources. Though confined largely to a few states and to carbonated soft drinks and beer in 1979, such technology could lead to a general concept of recycling being applied to many food product containers.

With respect to important socioeconomic factors in the industry's future, the study identified four which will be most influential on the new technologies:

- Energy Shortages and Higher Cost. This is seen as a strong motivator for the development of energy-saving processes throughout the industry.
- Increased Demand for Food. Demand is likely to increase both domestically and worldwide as populations grow. Moreover, continued exports of U.S. agricultural products will be necessary to balance imports of energy and other materials.
- Food Shortage. The supply of food through conventional agriculture is expected to be able to supply domestic needs until the year 2000. However, a world grain deficit was predicted by 1985.
- Food Safety and Nutritional Awareness. Increased consumer concern will continue to grow. In the near future these concerns will address the formulation of fabricated food, fiber in human diet, and consumption of fats and carbohydrates.

The OTA report forecasted the most important emerging technologies in food preservation, processing, packaging, ingredients and distribution, in addition to priorities for technologies discussed earlier. The following list is representative of these emerging technologies:

- Asceptic Processing and Packaging. The best known example of this packaging system is probably the ultra-high temperature (UHT) pasteurization of liquids combined with asceptic packaging.
- More Efficient Utilization of Food Products. The conversion of waste products, such as vegetable pulp and peel, or blood from animal salughtering, into food and animal feed.

- Improved Efficiency in Meat Handling and Distribution. Centralized meat cutting and packaging.
- Improved Efficiency in Final Food Preparation. Microwave ovens, in combination with especially developed food products and containers for them.
- Aquaculture. The systematic cultivation of animal life in a water environment, such as catfish and trout farms.
- Initial Preparation and Packaging of Fruits and Vegetables in the Field. Activities cover a spectrum from field wrapping in consumer packs with extensive secondary packaging to bulk bins sealed at picking and shipped unopened through the distribution system to retail stores.
- Improved Food Distribution Center Activities. Automation in warehouses, facilitated by computerized control systems, and standardization of shipping containers.
- Improved Wholesale-Retail Communications. Electronic interface between the retail store and warehouse, which could result in higher service levels, i.e., fewer out-of-stocks, and less inventory investment.¹⁰¹

Search for the "Big Idea" (1979)

Noting that many leading competitors in grocery retailing were reasonably sophisticated by 1979, a report by McKinsey and Company suggested that major breakthroughs in the 1980's are likely to emanate from:

¹⁰¹Ibid.

- Scanner data analysis in the search for new opportunities.
- Store format diversity, matching the diversity of store types to the needs of particular market segments.
- Product profitability analysis.
- Improved logistical management.

Although individual competitors may enjoy considerable success with innovations in these and other areas, the report had somewhat gloomy prospects for the industry as a whole in the 1980's: low sales growth, continuing high inflation, energy shortages, and severe competition as a result of overstocking. The report also suggested, however, that the 1980's may witness slowed growth in fast-food sales as saturation sets into many markets.¹⁰²

The Next Fifty Years (1979)

Leed and German devoted the final chapter of their book on food merchandising to a broad, fifty-year outlook for the industry, focusing primarily on trend observations.¹⁰³ They discussed anticipated changes in the population and its composition, including the challenge of meeting the food needs of large populations of disadvantaged non-white consumers in central cities. They predicted a better-educated and wealthier population overall, a continued increase in the proportion of married women who work, and a growth in leisure time as the work week becomes shorter and as workers continue the trend toward earlier retirements. As did the "Project '80 + 5" study, the authors emphasized

¹⁰² Jack Moore, "Search for 'Big Idea' Held Likely to Get Dominant Stress in 1980's Merchandising," Supermarket News, (March 19, 1979), p. 20.

¹⁰³ Leed and German, op. cit., Chapter 11, pp. 455 ff.

that consumers will increasingly desire more convenience in the preparation of foods. "The housewife of the future is likely to think more in terms of purchasing complete meals that are either fully or partially prepared but that satisfy the nutritional needs as well as the tastes and preferences of the family."¹⁰⁴ They also predicted growth in the food-away-from-home market, and that, in the retail store, fresh fruits and vegetables will become more standardized and sold by brand.

Retail merchandising will evolve toward at-home shopping via telephone, cable TV, or closed-circuit TV. Land or rent costs in high density population areas will make the retail store less viable, while increased branding and prepackaging will continue to reduce the need of consumers to purchase food on a personal inspection basis. These, plus growth in EFT systems and the "cashless society", could make at-home shopping a widespread reality by the year 2000.

Additionally, Leed and German predicted strengthened consumer protection laws, consumerists' demands for accurate, informative advertising, and a switch to the metric system, which will require extensive changes in packaging and labeling, but which will also facilitate the consumers' decision process.

A Forecast by Best Foods (1979)

A forecast for the grocery industry for "the next five or ten years" was constructed by researchers at the Best Foods Division of CPC International Corporation in 1979. Basing many of the predictions on both extensions of past behavior and influences (such as inflation) beyond the control of the industry, the study projected such foreseeable changes as:

¹⁰⁴Ibid., p. 465.

- A rise in labor costs, noting that total gross industry income spent for labor rose significantly between 1966 and 1979, and forecasting a continuation of this trend.
- The need for more capital, as machinery continues to replace labor, and as scale economies are sought from all possible angles. Internal generation of capital may be increasingly necessary given the industry tendency to have an average earnings ratio about one-third lower than the average for all industries combined. Limited capital "available to the retail end of the business will more likely be spent for stores than for backup facilities like warehouses."¹⁰⁵ The study also predicted that, increasingly, payment to suppliers will be based to some degree on the rate of item movement, i.e., slower turnover items will have more extended payment schedules.
- Increased competition in many market areas as population growth stabilizes and market share battles become the norm.
- The continuation of the energy crunch, with its derivative impact on backhaul, supply sources, and frozen food storage costs. On this issue, successful energy conservation programs of individual companies were forecasted to provide competitive advantages over less effective companies.

The study discussed several demographic trends which will act in the 1980's to bring change to the industry, including: population

¹⁰⁵ Best Foods Division of CPC International, Inc., "Projections for the Retail Grocery Industry," unpublished study, (1979).

stabilization (marked by "more families, smaller families, richer families") and shifts to the "sun belt"; working women (resulting in rising family incomes and less time for homemaking); and increased interest in health and nutrition. Rapidly rising government intervention was also predicted to have a major influence in the 1980's, particularly on industry productivity levels.

A second part of the study addressed the implications of the forecast for the industry. In particular, developments in the three key areas of technology, diversification, and economies of scale were analyzed in turn. Technology innovations forecasted to have a major role in the 1980's included:

- Central meat cutting, using "boxed" or sub-primal cuts which are fabricated into consumer proportions and wrapped at the retail level.
- Warehouse automation, extending far beyond the twenty or so "automated" warehouses in the U.S. as of 1979. A recognized limiting factor (for which no ready solution was predicted) is the lack of modularization of packages in the industry, and the resulting "almost 3,000 different sizes and shapes of boxes in a typical food distribution center."
- Scanning, with the myriad benefits it brings, was approaching 100 installations per month in late 1979, and a strong case was made that this trend will continue throughout the 1980's.

Diversification in the stores of the 1980's was forecasted to include a change in the product mix through the addition of higher margin items. The study supported Salmon's prediction (Salmon and Cort, 1974,

discussed previously) that "the supermarket will eventually become the seller of all those items a family routinely buys--items that are commonly used and, furthermore, are quickly used up, creating a repurchase pattern."¹⁰⁶ Shelf-space allocation decisions will be made with improved data, i.e., on item profitability, and growing sophistication.

The study indicated that economies of scale will encourage the continuation of the trend toward larger stores, although the study stated "there is obviously a limit to this growth."¹⁰⁷ The most successful store sizes were forecasted to be those between 35,000 and 60,000 square feet of floor space. The study also acknowledged the continued growth of the smaller, "convenience" stores.

Other areas of impact on the industry during the 1980's were felt to be:

- Upgrading of employees' educational and skill bases as higher levels of job sophistication are required.
- Expanded demand for convenience foods and "convenience items of all kinds: in response to changing consumer lifestyles."
- Emergence of more distinctly defined market segments with unique sets of needs, e.g., combinations of needs for convenience, health and nutrition, quality, and low prices.

The study concluded by suggesting, on the basis of extensions of past trend data into the future, that "there is a sound basis for optimism about the food industry," that the industry will successfully handle change in the future, and that the industry will survive and prosper.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

Impact of Inflation--the USC Study (1979)

An extensive forecast dealing with the impacts of inflation on the U.S. food distribution industry was constructed by Stevenson and Harris, under the sponsorship of the Ralston Purina Company.¹⁰⁸ Utilizing an extensive mail questionnaire, the study obtained responses from 120 chief officers of the largest food wholesaling and retailing chain organizations in the United States. These organizations accounted for approximately 40 percent of U.S. retail grocery sales in 1979. (In this respect the complementary nature of the Stevenson and Harris sample with that of the current study which, in addition to chief officers, also includes academicians and researchers in food distribution should be noted.)

The study reported that inflation exerts three major impacts on the food distribution system in the U.S., and that the likely continuation of relatively high inflation rates over the next several years underscores the need to address these effects:

- Inflation induces changes in consumption patterns. For example, increased per capita consumption of poultry and decreased consumption of red meat.
- Inflation alters consumer shopping behavior, as evidenced in greater coupon usage, greater price consciousness, growth of private label sales, and the emergence of new store formats.
- Inflation alters the financial and operating performance of food distribution, as evidenced in the 1970's by many mergers,

¹⁰⁸ Brian F. Harris and James H. Stevenson, "The Impact of Inflation on the United States Food Distribution Industry 1980-84," working paper, University of Southern California, Food Marketing Management Program, (1979).

liquidations, acquisitions, and other restructuring in the industry.

The report discussed in turn responses to questionnaire items in each of five subjects areas. These are summarized below:

- General Economic Conditions. Participants estimated the 1984 inflation rate at 8.5 percent, but also expected "the U.S. to experience a major economic recession between 1980 and 1984." (italics original) Seventy-five percent of the sample expected a major "shakeout" of the industry competitors in the 1980-84 period.
- Financial Strategies and Performance. Growth in real sales levels was expected in only the South and West regions of the U.S. On the cost side, cost of sales, total expenses, and labor costs were expected to increase between 9 and 10 percent per year between 1980 and 1984, while the rise in energy costs was expected to moderate from its 1979 level to 11.3 percent annually. In spite of this, subjects were optimistic about their companies' gross margins, which were expected to average 23.4 percent, compared with the 1978 average of about 22 percent. Net profit was expected to average 1.7 percent, identical to the 1978 figure. Highest investment priorities were expected to be remodeling existing stores and improving productivity and energy use in existing stores and warehouses.
- Distribution Strategies. Most subjects (88 percent) reported that their organizations will require additional warehouse space--an average of 35 percent or more--by 1984. This will be achieved mostly by improving the productivity of existing

distribution facilities rather than by building new distribution centers. Service levels to stores were expected to be maintained at, or exceed, 1979 standards by 80 percent of the respondents, although the study reported a strong likelihood that the frequency of deliveries to stores will be reduced.

- Store Strategies. Most chain executives suggested that one key to their success in the 1980's will be increasing the number of stores, an objective most expect to achieve through the acquisition of existing stores (as opposed to building new stores). Average size of new stores was expected to increase from 31,000 square feet in 1979 to 35,000 square feet in 1984.

With respect to plans for various service departments in stores, 86 percent of participants said that most of their stores will have service delicatessens, 76 percent said bake-off bakeries, 47 percent EFT systems, 41 percent pharmacies, 31 percent scratch bakeries, and 30 percent sit-down restaurants. UPC scanning operations were expected by 1984 to be in an average of 51 percent of a company's stores.

With respect to store formats, 58 percent of respondents expected their companies to operate super stores by 1984 (vs. 46 percent in 1979). Forty-two percent plan to operate combination stores by 1984 (vs. 19 percent in 1979), and 40 percent plan to operate limited assortment stores (vs. 19 percent in 1979). Regarding limited assortment stores, 73 percent of the respondents expected them to gain market share by 1984, although 49 percent felt the shares of these stores will decline if the inflation rate is curbed.

-- Merchandising Strategies. Respondents predicted that 20 percent more items will be stocked at the wholesale level (reflecting somewhat of a reduction in direct-store-delivery), and 11 percent at retail by 1984. Two-thirds of the sample predicted their companies will increase the share of private label sales, while 56 percent expected to offer generic products by 1984 (vs. 47 percent in 1979). Anticipated changes in space allocations by departments include more space for general merchandise, health and beauty aids, plants, flowers, and wine, and less space for frozen foods.

With respect to promotions, the proportion spent on TV advertising was expected to increase for 70 percent of the respondents. Increased use of in-store displays was expected by 42 percent of respondents, while use of trading stamps and games were the promotional activities found most likely to be reduced. The "everyday low price" strategy was expected to gain favor over weekly "hot specials" as the more successful price promotion alternative.

Among the major variables influencing responses was geographical region of the country. Generally speaking, surprisingly large differences were found between predictions of executives in the East and Midwest compared with those in the South and West. Responses from these latter regions were more positive and optimistic, a reflection of the relative growth of "sun belt" areas in recent years.

Stevenson and Harris suggested that although previous change in the industry could be considered evolutionary in nature, change in the

1980's appears likely to be more revolutionary, and that strategic management based on the evolutionary idea might not be sufficiently adaptable to the spectrum of change which is possible. They believe that the major challenge lies in creating organizations that can respond to these new changes quickly and astutely.

Discussion

This section has examined twenty-five forecasts and futuristic articles by leaders in the fields of marketing, retailing, agricultural economics, and food distribution. Most were research and position papers, although several involved interviews with the questionnaires distributed to practitioners and other thought leaders in various fields. Three of the forecasts were rigorous Delphi studies (Project '80 + 5, on Michigan rural potential (1973), Bogart (1974), and Gattorna (1977)).

By and large, the literature predicts a continuation of major trends, particularly in the short run. Total food consumption will continue to grow in the 1980's, although at a slower rate commensurate with slower population growth. Most sources seem to agree that an increasing share of food dollars will be spent outside the retail grocery store and supermarket, primarily at fast-food outlets. High inflation rates and scarcer energy at higher prices will continue to affect grocery retailing as they will most other sectors as well. Price competition and government regulations have been forecasted to continue to have short-term negative effects upon the industry as it seeks appropriate reactions to these and other influences.

Store sizes were universally forecasted to grow larger, and product mix decisions to place an increasing emphasis on non-food merchandise. Several forecasts also concluded that fewer total stores will be required, as larger retail units each will service a greater population. With respect to products, consumers will demand increasing convenience in the preparation and serving of food.

There are some distinctly positive aspects to many of the forecasts. Most predicted a significantly wealthier population enjoying increased leisure time. Technological innovations such as UPC scanning and centralized meat processing have been forecasted to promise sizeable true productivity gains, better customer service, and reduced costs throughout the industry.

In many respects, these forecasted future conditions represent continuations of trends which were apparent in the 1970's and previously. Interestingly, as the decade of the 1970's progressively witnessed higher rates of inflation and some indications of a coming recession, fewer of the later forecasts suggested vastly increased income levels and more concerned themselves with energy scarcity and inflation. Taken in the aggregate, however, these forecasts for the 1980's suggest that the future of this industry is best forecasted through an examination of the recent past and the trends which may be discerned therein.

Some of the futuristic research and opinion papers reviewed in this chapter have assumed a more radical posture, suggesting that the dominant conditions of the future will stem not so much from extensions of current trends as from revolutionary developments in technology and lifestyles which will exert a dramatic impact upon the food distribution system. The authors of these papers typically have viewed a more

distant time horizon, concerning themselves less with the 1980's and more with conditions of 2000 A.D. and beyond. Their intent seems to have been to alert concerned leaders in the industry to future scenarios, to which adaptation will require conscious effort even in the 1980's. Cain (1971, 1972, 1973, 1974, 1975, 1976) and Bloom (1978) have suggested a future which includes:

- Ready-to-cook, portion controlled, basic meal components.
- Greater utilization of plants and the sea for sources of protein.
- Virtual elimination of perishability in many food commodities, such as produce and meat.
- Warehouse-to-consumer food delivery systems utilizing advanced TV communications technologies, such as home computers and telephones for shopping and placing orders--thus establishing a substantial alternative to the conventional supermarket.

Furthermore, they have warned that existing institutions within the industry will not easily evolve these new forms of food distribution which will be optimally suited for future conditions. Rather, conscious planning and positioning strategies will be required for present institutions to be viable in the future.

Thus, the forecasts and futuristic articles reviewed in this chapter depict a broad spectrum of future conditions. Generally, those forecasts restricted to the 1980's predict essentially the continuation of existing major trends. Those whose time horizon is further into the future tend to foresee developments of a more radical nature which will significantly change the nature of the food distribution system and its constituent industries.

Certainly, evolution in the industry may be witnessed on a continuing basis. For example, emerging successful store formats suggest that from an evolutionary perspective, the supermarkets of tomorrow will differ substantially from those of today, just as today's stores are markedly different from the supermarkets of yesterday--or of ten, twenty, or thirty years ago.

Increasingly, grocery retailers are recognizing the advantages to be gained by segmenting the markets they serve. It has become increasingly clear to industry executives that no longer can a single store concept, format, and product mix fulfill the needs of an increasingly divergent population, particularly when innovative competitors consciously develop marketing strategies which appeal to one or a few particular consumer segments. The historical literature demonstrates quite clearly that retailers have long been advised to consider the income, age, and ethnic character of their local market areas.¹⁰⁹ The early discount supermarkets, such as King Kullen and Big Bear in the 1930's, consciously catered to a population of extremely price-conscious shoppers which had grown vastly larger as a result of the depression. These stores were reputed to draw customers who lived up to 75 miles away.¹¹⁰ However, beyond this price discounting, there is little evidence to suggest that retailers consciously identified multiple consumer segments within a market and then catered a marketing mix to one or more of them. The recent attention given to market segmentation, and

¹⁰⁹c.f., e.g., Lebharr, op. cit., or Paul H. Nystrom, Economics of Retailing, (New York: The Ronald Press Company, 1930).

¹¹⁰Charvat, op. cit., p. 18.

the accompanying notions that grocery retailing is "entering an era of professional management and professional marketing" seems to represent a major shift in the evolution of the industry. The rise of successful new store formats, each presumably targeted at particular consumer segments, offers strong evidence that this may well be the case.

It is interesting to note, however, that many of these new store formats have a common emphasis--lower prices for food and merchandise. The warehouse store, hypermarket, and limited assortment store all base much of their appeal on low prices. These stores emerged largely in the middle-1970's, concurrent with the rise of inflationary pressures which threaten the real growth of personal income and which create a nation of price conscious shoppers. Thus, it is an interesting question whether these emerging store formats represent the next major stage in the evolution of the industry, or whether they are temporary reactions to recent changes in market conditions. By contrast, such store formats as the super stores and combination stores often attract a major portion of shoppers by providing such expanded services as in-store delis, bakeries, floral departments; as well as vastly expanded use of products from which to choose. These stores reflect a strategy of greatly expanding sales. The previously mentioned store types achieve success by means of greatly reducing costs.

This review of previously published forecasts and opinion papers pertaining to various aspects of grocery retailing has been intended to demonstrate what has, and by implication, what has not been studied. It serves as a point of departure for the present study, an industry forecast based on the judgments of industry experts. This forecast investigates not only what is likely to happen, but also addresses

how industry members might plan for, and cope with, likely future developments.

Chapter III, which follows, describes the methodology used to construct and guide the current study, the kind of information it sought to gather, and the characteristics of the sample populations.

CHAPTER III

RESEARCH DESIGN

This chapter describes the research design which structured the generation and treatment of data in the study. Recall from Chapter I that the broad objectives of the current study were to:

- Construct a forecast for the grocery retailing industry in the 1980's.
- Analyze how the industry and member companies plan to cope with the developments suggested by the forecast.
- Stimulate among study participants a deepened interest in the industry's future and a further dedication of effort to improving all facets of the industry.

In essence, a "jury of expert opinion" forecast of the 1980's, using the Delphi method, was constructed for the grocery retailing industry. The Delphi method, which is further explained below, involves successive iterations of a questionnaire distributed to experts in a particular field, in an attempt to share ideas and perspectives, and to approach consensus in the predictions solicited by the questionnaire. Responses from each iteration, or "round", are summarized and presented to participants together with the next round of the questionnaire. In this study, three rounds of questionnaires were sent to two groups of industry experts:

- Grocery chain top executives (representing chains with eleven or more stores).
- Scholars, researchers, and government officials involved with the grocery industry.

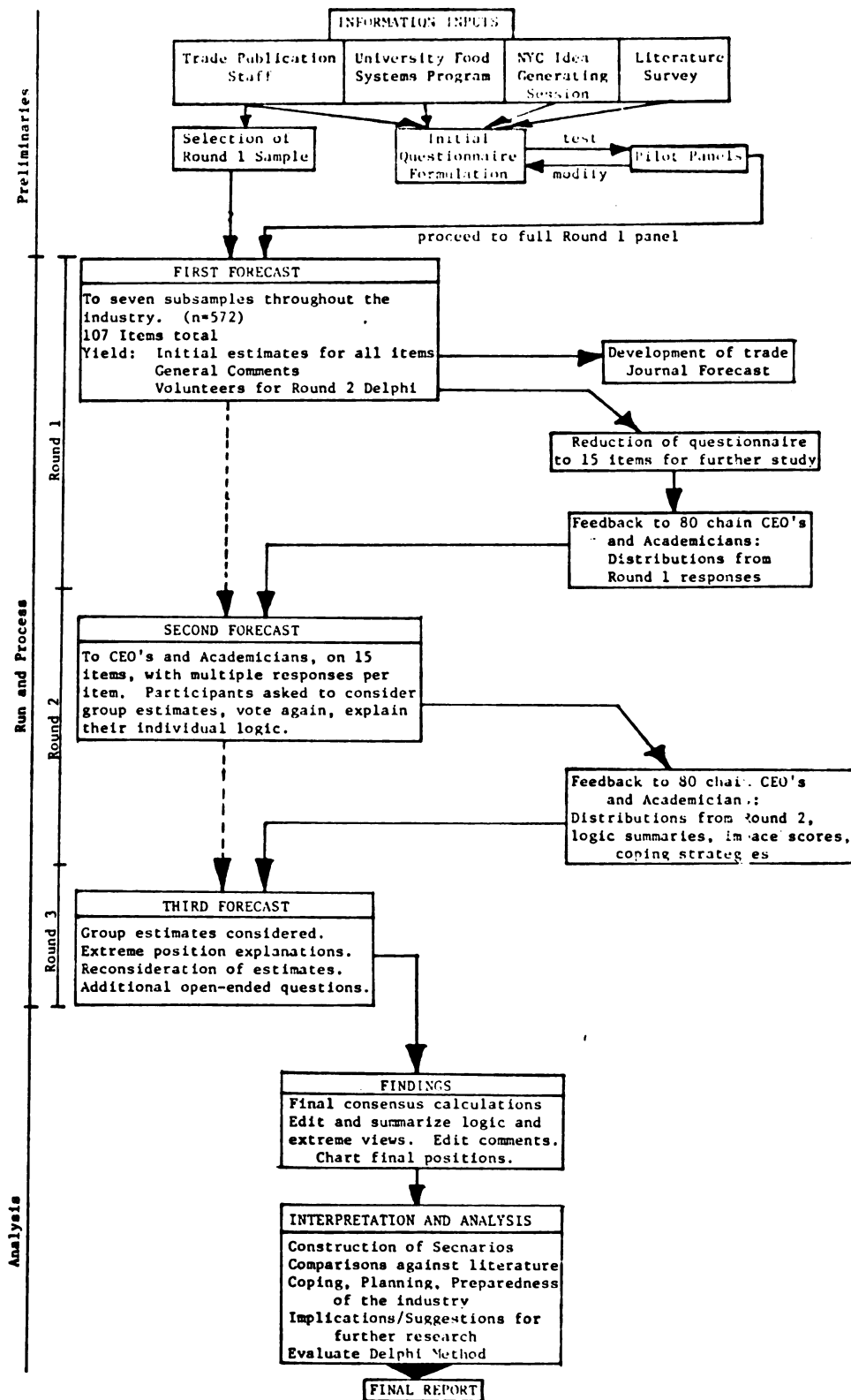
The study may be conceptualized by referring to Figure 1, which depicts a flow chart of the entire project. It may facilitate understanding of the study, as a whole, and of the relationships and sequencing among the component parts of the study. The discussion which follows describes the Delphi method in terms of its background and procedures, and then discusses its application in this particular study, on a round-by-round basis. The topical areas of investigation, a description of the sample populations, the mechanics of the questionnaire construction, and the data analysis techniques employed in the study are also described in turn.

Overview of the Delphi Technique

The Delphi technique "is a method of systematically obtaining a consensus of opinions from groups of experts. It contrasts with the normal utilization of expert opinion by restricting all communication to questionnaires written and controlled by a coordination or control group. The participants never engage in any face-to-face discussion . . ."¹¹¹ Questionnaire results are summarized and included in new questionnaires which are developed and re-circulated to the participants. Participants are then able to re-evaluate their original

¹¹¹ John K. Krobock, "Annotated Bibliography of References on the Delphi Technique," unpublished paper based on a research report prepared for Dr. W. C. Moor, College of Engineering Sciences, (East Lansing: Michigan State University, 1972), p. 1.

Figure 1. Flow Diagram of this Study's Utilization of the Delphi Method



answers based upon an examination of the distribution of responses for the entire group. "Successive rounds of voting, augmented by each participant's explication, in written but anonymous form, of assumptions underlying his judgments (for perusal by other participants) take place until results more or less stabilize in terms of a common understanding of the events being forecasted."¹¹²

The Delphi technique was first used in an experimental capacity in 1948; later, researchers from the Rand Corporation refined the technique in preparing a 1955 forecast on the likelihood of nuclear war and on future U.S. defense capabilities.¹¹³ Since the late 1960's, the method has been employed by many social scientists, government research teams, corporate planners, and numerous other researchers and forecasters. Formally, it is a method for obtaining or approaching consensus about any issue; however, it is most commonly associated with forecasting. In this capacity it has been utilized to construct forecasts in long range technological developments, educational innovations, business conditions, industry developments and climates, political feasibility, and a wide variety of additional areas.

Delphi as a "Family" of Techniques

In this broad range of applications, the method has undergone changes in research design in order to accommodate specific research conditions. Delphi, thus, has come to represent a family of related

¹¹²Paul E. Green and Donald S. Tull, Research for Marketing Decisions, 4th ed., (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978), p. 517.

¹¹³Linstone and Turoff, op. cit., p. 20.

research techniques whose objective and foundation are identical, but whose operational aspects may differ considerably from one study to another. The present study utilized techniques from several previous Delphi forecasts, in an effort to tailor the application of the technique to the conditions surrounding the study. In the following descriptions of samples and design of the questionnaires utilized in this research, the citations frequently refer to precedent Delphi studies from which particular techniques were taken.

The Delphi method is preferred to many traditional "jury of expert opinion" methods of forecasting. As one researcher has observed:

Some primary advantages of this particular forecasting method are negation or decrease of the traditional conference or meeting disadvantages where experts gather to make decisions and recommendations. Among these are compromises not necessarily correct, "bandwagon" effect, noise, and control by a high-ranking group member or one possessing "silver tongued" capabilities. Delphi's anonymity of respondents and iteration of controlled communication provide the capability to eliminate or lessen the impact of some of these undesired conference or meeting effects.¹¹⁴

As a means of approaching consensus in Delphi studies the aggregation of the responses--plus the logic and assumptions underlying, in particular, "extreme" or less popular responses--are shared with the entire group on the following round in an effort to determine whether additional information will sway the group's opinion. In many Delphi studies, the assumption has been made that the logic and assumptions underlying "middle range" answers; i.e., those within the inter-quartile range, are understood by all participants, and that the breakthrough ideas shared by "extremists" are the moving forces behind shifts in group opinion.

¹¹⁴Kroback, loc. cit.

Few Delphi studies have been continued beyond five rounds of questionnaires. Under most conditions, stability in the distribution of responses has been established after the third round. Major shifts in opinion beyond the third round have been rare.¹¹⁵ Indeed, Best reported that "studies have shown essentially no significant change after the second round of estimation."¹¹⁶ Moreover, it is observed by many researchers that successive iterations are often perceived as burdensome by participants, and a lower return rate and/or reduced effort in the completion of the questionnaires may result.

The Delphi method has been criticized due to the subjective and intuitive nature of input provided by participants. Potential pitfalls in this regard affect most forecasts using a "jury of expert opinion" method: several are described briefly below. These and the limitations discussed in Chapter I necessarily bring to question the validity of this study's projections; however, no forecasting method is without limitations. Other methods for approaching a forecast of this complex industry would be subject to pitfalls and shortcomings, as well. Defenders of the Delphi method point to its ordered and systematic construction and to the simple observation that the method works. Typically, the final round inter-quartile range is smaller than that of the initial round, i.e., convergence of opinion does occur, there is ample evidence that the feedback provided to participants has an effect upon their subsequent judgments.¹¹⁷

¹¹⁵Linstone and Turoff, op. cit., Part IV, pp. 227 ff.

¹¹⁶Roger S. Best, "An Experiment in Delphi Estimates in Marketing Decision Making," Journal of Marketing Research, (November, 1974), 11:4, pp. 448-452.

¹¹⁷Linstone and Turoff, loc. cit.

In general, group opinion forecasts are restricted to areas where some substitute for direct knowledge must be found in situations of uncertainty. That it is feasible to substitute expert judgment in these instances is based on some assumptions regarding the estimation process, among which are that experts are approximately realistic in their views, and that knowledgability is a stable property of the expert. On the other hand, there are several shortcomings of group opinion forecasts, several of which are related to human imperfections. Some of these are discussed below:¹¹⁸

- Humans Discount the Future. Intuitively, most people apply a discount rate to the future; they possess both short planning horizons and short memories. Thus, they find it more difficult to make decisions about events further away in time and they tend to be more influenced by events in the recent past. In this respect, for example, the energy scarcity of the mid-1970's, and particularly the vastly increased gasoline prices during 1978 and 1979 may be unrealistically influential in molding the opinions of participants in a "jury of expert opinion" forecast constructed in late 1979.
- The Prediction Urge. In general, humans are uncomfortable with uncertainty and instead seek specific answers with respect to future developments. In this regard an advantage of the Delphi method is its ability to expose divergent views and to serve as a two-way communication system, rather than solely a means to consensus.

¹¹⁸Ibid., pp. 573-586.

- The Simplification Urge. Humans tend to prefer simplicity to complexity. Often they are convinced that the complexity of a social system, for example, may be reduced with no sacrifice of realism. Actually, the interdependencies and interactions of complex systems can be counter-intuitive. Respondents' subjective probability assessments in a Delphi study are often biased toward the simplistic and "surprise-free" scenarios.
- Illusory Expertise. A specialist in a narrow subject area may not be the best forecaster; he may focus on the sub-system with which he is most familiar and fail to perceive key developments relative to the larger system. Similarly, given the nature of summary distributions of responses as feedback, the "tyranny of the majority" may overwhelm the judgment of an "extremist" participant who possesses valid insight.
- Careless Execution. Participants may hurry to complete questionnaire rounds and not give them thorough attention. The researcher may also be responsible for carelessness through inadequate selection of respondents or excessive specification or vagueness in questionnaire items.
- Optimism/Pessimism Bias. Some participants may be inherently optimistic or pessimistic; although their respective answers will tend to be consistent. With respect to time horizons, however, it is common for respondents to be excessively pessimistic in a long-range forecast, because they fail to see the development of new approaches to problems. Similarly, they may tend to be too optimistic in the short-run

because they fail to appreciate the complexities and mechanics of currently developing approaches to problems.

These potential difficulties must be recognized when interpreting the validity of the findings of this and any other study of this kind. Attempts were made to control for some of these shortcomings, as will be explained in the discussion of the questionnaires. Clearly, however, others are beyond the control of any study soliciting opinions and predictions about the future. The discussion now proceeds to describe the research design and how the Delphi method was applied.

Forecasts and Hypotheses

Most formal research projects devote considerable attention to the formulation of hypotheses. Being a forecast, however, the present study offers hypotheses; i.e., predictions about the future, as some of its conclusions. While it certainly is possible to hypothesize about the manner in which a "jury of experts" might view the future of the industry, such hypotheses are not nearly so relevant as the jury's actual predictions. Thus, the predictions of this study, when evaluated in light of the industry forecasts reported in Chapter II, suggest the hypotheses.

Topical Areas for Study

There are myriad areas of concern to serve as the basis for study of the future of grocery retailing. The subject is so broad, so complex, and so influenced by external forces that itemization of each and every issue would be a futile task. Seemingly new problems, issues, and opportunities surface practically daily. Clearly, one substantial problem of the research was to determine which issues to address in the

study, and thus present in the questionnaires. On the basis of their extensive experience with the industry, the editorial staff of Progressive Grocer magazine, a leading trade publication, formulated 123 preliminary forecasting items to be incorporated into a pilot questionnaire, the final version of which constituted the first round questionnaire for the present study. The selection process involved a process of seeking suggestions from a panel of grocery chain presidents and CEO's from several New York area grocery retailers, and by faculty and graduate student representatives from Michigan State University's Food System Economics and Management Program who became involved with the current study. This number ultimately was reduced to 104. Some of the items were more relevant for particular groups of experts. Each of four versions of the original, or Round 1 questionnaires, contained between 40 and 90 items, although each of the 104 items was addressed in at least one of the questionnaires. These were sent to respective samples from four distinct populations of persons connected with the industry. (The samples are discussed later in this chapter.) The 104 items were grouped into eight topical areas, as follows:

- Industry Structure. Propositions about future market concentration, the success of new store formats, average store sales, etc.
- Consumer Attitudes, Behavior, and Expenditures. Propositions with respect to future consumer brand loyalty, away-from-home eating, coupon redemption, etc.
- Store Operations. Propositions about future product mixes, UPC data utilization, store promotions, hours of operation, meat and produce department sales, etc.

- Products. Propositions about the future of generic products, general merchandise sales, boxed beef, private labels, etc.
- Store Equipment and Design. Propositions with respect to the future of EFT installations and credit purchases, scanning systems, "backroom" space requirements, frozen food space allocations, etc.
- Costs and Margins. Propositions about future gross margins, energy usage, productivity, labor cost, etc.
- Governmental Regulations. Propositions about future beverage container deposits, restricted operating hours, requirements for on-shelf identification of products containing suspected health hazard ingredients, etc.
- Industry Environment and Relationships. Propositions with respect to future manufacturer dealing, real growth rates, food price inflation rates, buyer/seller relationships, etc.

The second and third round questionnaires focused in depth on fifteen items selected (or combined) from the first round questionnaires, and solicited opinions on some other, broader issues as well. These iterations, and their accompanying questionnaires, are discussed in following sections. The 104 questionnaire items employed in the study may be found in the Appendix to this report.

The Sample

The sample for Round 1 questionnaires was selected under the guidance of the research staff of Progressive Grocer magazine, which conducted the Round 1 questionnaire administration and analysis for purposes of constructing a forecast based largely on Round 1 data. The

sample consisted of over 5,000 individuals closely associated with the grocery retailing industry, including executives from grocery chains, grocery wholesaling companies, and food manufacturers. This sample also contained store managers, independent store owners, academic scholars and researchers in the areas of food distribution, marketing, and agricultural economics. Because of the many perspectives represented in the sample, and in order to obtain coverage over a wide spectrum of questions about the industry's future, each of four sub-sample groupings were mailed a slightly different questionnaire, with topical coverage tailored to the specialty areas of expertise of each sub-sample.

The sub-samples of primary concern to this study were those consisting of grocery chain chief executive officers (CEO's), presidents, and (in a few cases) vice presidents and of academic scholars and researchers ("Academicians"). It was believed that the first group consisted of those who are responsible for the strategic decisions which will provide much of the industry's direction in the 1980's. Certainly, their judgments were relevant to an industry forecast. The second group was felt to have the clearest perspective of the industry as a whole, and to be most aware of trends in the industry, external factors impacting upon it, and the nature of the market system in which it operates. In fact, several of the Academicians in the sample for Round 2 and 3 were referenced in the literature review of Chapter II. Thus, these two sub-samples were felt to offer the most valid insight as to the industry's future.

Round 1 questionnaires sent to CEO's (of grocery chain companies with eleven or more stores) and Academicians solicited volunteers "for

a second round of no more than twenty questions, to be conducted by the Food Systems Management Program at Michigan State University." Twenty-eight CEO's and fifty-two Academicians thus "volunteered" to participate in Round 2. These participants were informed in the cover letter accompanying the Round 2 questionnaires that they would be asked to participate in a third and final round.

Round 1 Questionnaires

The first round of the questionnaire was intended to serve dual purposes. First, it constituted a measure of opinion throughout the industry for use by the staff of Progressive Grocer magazine in a feature which appeared in the October, 1979, issue of that publication. Also, it served as the first round questionnaire for the formal Delphi study of this current research project. In all, over 650 individuals, each associated professionally with the industry, returned questionnaires.

Round 1 questionnaires varied in length among the samples. Some groups in the sample were considered to hold valid opinions in more areas than others. Of the 104 total events for which future predictions were desired, for example, 90 were considered germane to the grocery chain CEO's. Because longer questionnaires are less likely to be returned, and because those sent to the other groups ranged from 40 to 60 items in length, the CEO sample therefore was split, and each half was asked 60 questions, of which 30 were common to both halves. At the end of the questionnaires was an item asking participants to comment on particular events or underlying reasons for their feelings about the future. In addition, the Round 1 questionnaires solicited descriptive

information, for statistical purposes, regarding the respondent's experience in the industry, company size, and company location. Also, as described previously, at the end of the questionnaires sent to the CEO's and the Academicians was an invitation to participate in Round 2.

The questionnaire "events" themselves were expressed in the form of propositions about the future. The following is a "typical" event proposition: "Convenience stores account for 10% of total industry sales (up from 4.9% today)." (A complete listing of the 104 items may be found in the Appendix to this report.) Each participant was asked to respond to all items by indicating which of four responses best expressed the year in which he/she believed the proposition had "more than a 50/50 chance of taking place." For all three rounds of the questionnaire, the fixed response choices were: "By 1984," "By 1989," "After 1990," and "Never." The year 1984 was chosen by the editors of Progressive Grocer over the actual middle of the decade, 1985, in light of the infamous projections of Orwell's novel 1984. Also, while technically a respondent who believed a particular event will occur in the year 1990 cannot respond, results from the pretest suggested that this wording of the response choices was clearer than the combinations of: "By 1989" and "After 1989," or "By 1990 and After 1990." Early versions of the questionnaire were tested by employees at Progressive Grocer, members of the research team, food systems seminar attendees, and several chain CEO's. In the interests of simplicity and obtaining judgments on a broad spectrum of future events in Round 1, only one datum was elicited for each event--the "earliest likely date" described above. By contrast, subsequent rounds focused on fewer events, but sought more information about each event.

Additionally, respondents were asked to indicate: (1) the number of years they had been associated with the food business, and (2) the first two digits of their ZIP codes in order to determine whether there were differences in responses attributable to geographic location. CEO respondents were also asked to indicate whether their companies' sales were "under \$50 million," or "over \$100 million." (On a nation-wide basis, approximately one-third of grocery chain companies' sales fall into each of these three categories.) All respondents were also asked the following open-ended question: "Would you care to tell us why you feel as you do about the 80's, and which particular issues you think will have the greatest impact on the grocery industry?"

Round 1 questionnaires were mailed in late June, 1979, with a stated deadline for receipt of completed questionnaires of August 1. Over 620 usable questionnaires were returned to the offices of Progressive Grocer by that deadline. Tabulated results of the Round 1 questionnaires, plus all general and open-ended comments from Round 1 questionnaires were provided to the research team involved in the present study during the third week of August, 1979. In addition, a list of names and addresses of the volunteers for Round 2 (28 CEO's and 52 Academicians) was compiled from the Round 1 questionnaires. These represent "volunteering" rates of $28/53 = 53$ percent for the CEO's and $52/74 = 70$ percent for the Academicians.

Round 2 Questionnaires

Round 2 questionnaires were sent to the 28 CEO's and 52 Academicians on August 31, 1979. The mailing consisted of a five-page questionnaire, using typewriter print reduced by 50 percent; a stamped and

addressed return envelope; and a personalized letter on Michigan State University Food Systems Economics and Management Program stationery which briefly described the study and its relationship to the earlier (Round 1) study conducted by Progressive Grocer. The letter promised anonymity to the respondent and a copy of the results of the study as inducements for participating, and encouraged the prompt completion and mailing of the questionnaire. Slightly different questionnaires were sent to each group; these differences are explained below.

A major objective of Round 2 questionnaires was to obtain an in-depth examination of several of the events from Round 1. Because greater understanding of each event and ultimate assessment of its likelihood required responses to several questions, it was believed necessary to restrict substantially the number of events which could be addressed by a single respondent. Thus, events for Round 2 were selected on the basis of the following general criteria:

- Events which the respondents indicated by answers in Round 1 were likely to happen, as opposed to those receiving a strong "Never" vote. Additionally, preference was given to events predicted to happen in the 1980's.
- Events for which opinion was split in Round 1 as to the likely date of its occurrence.
- Events whose wording and intention were judged to be straightforward and unambiguous. (A small number of the Round 1 event statements appeared to be problematic in this respect.)
- Events which in the opinion of the research team were most relevant to an understanding of the industry's future.

Initially, twenty-three events were selected for consideration in Round 2, from which fifteen ultimately were selected for inclusion. For these fifteen events, a major issue was the extent of information to be solicited in Round 2. Previous Delphi studies have asked participants to provide a variety of responses about a particular event, including:

- An extension of trend data about the event which was supplied to the respondent. (Goldstein 1975)
- The earliest date by which the respondent feels there is a chance ($P = .2$) of the event happening. (Bernstein 1971)
- The earliest date by which the respondent feels the event is probable ($P = .5$). (Bernstein 1971).
- The earliest date by which the respondent feels the event's occurrence will be a virtual certainty ($P = .9$). (Bernstein 1971)
- The logic behind the response(s) to any or all of the above questions. (Most Delphi studies)
- The implications of the event's occurrence. (Gattorna 1974)
- The respondent's self-rated level of expertise in the particular subject addressed in the event statement. (Gattorna 1974, Ludlow 1975, Walters 1974)
- The relative desirability of the event's occurrence. (Bernstein 1971, Linstone and Turoff 1975)
- The relative feasibility of the event's occurrence. (Bernstein 1971, Linstone and Turoff 1975)
- The estimated reliability and validity of the votes cast for each event. (Goldstein 1975)

The objectives of the study; i.e., construction of an industry forecast and investigation of plans for coping with the future, were such that understanding could always be increased through the use of a longer questionnaire. There simply are far too many issues, and too many aspects of each issue for a study such as this to be exhaustive. Thus, in selecting the data capture desired in Round 2, the value of an additional datum had to be weighed against the additional completion task which it represented to participants. Ultimately, it was decided to solicit the following information for each of the fifteen items:

- In light of feedback provided to participants which described the distribution of responses to the item in Round 1, a second vote of the year by which the respondent felt there is more than a 50/50 chance of the event taking place.
- A brief, open-ended explanation of the logic behind the response. (Two and one-half lines were provided for responses.)
- A self-rating of expertise in the particular area. This was asked of the Academicians only, and in an "experimental" capacity to determine whether the distribution of "expert" opinions differed markedly from that of the sample as a whole. It was assumed that the CEO's were all "experts" in these areas, and it was felt that to elicit this self-rating from CEO's might be interpreted as a challenge to their knowledge.
- Judgment as to the magnitude of either the positive or negative net impact which the event's occurrence would have on the industry was asked of Academicians. CEO's were asked to judge this impact on their individual companies. A seven

point semantic differential was provided, which ranged from "very negative" to "very positive." This "net impact" assessment is a combination of two scales used by Jillson: a "desirability/benefits" scale, and an "importance" scale.

Ideally, this assessment of effect would have been addressed in both Rounds 2 and 3; however, it was believed that an adequate measure could be obtained in Round 2, thus allowing the Round 3 questionnaire to address additional issues.

-- How the industry (asked only of Academicians)--or an individual company (asked only of CEO's)--might plan for and cope with the event. These "coping" questions are described below.

The Round 2 Coping Questions

A major objective of the study was to assess the manner in which the industry and the individual member companies will plan for and "cope" with the developments of the 1980's. Thus, for each of the fifteen events addressed in the Round 2 questionnaires, CEO's and Academicians were asked to comment on the planning implications of the event. Specifically, Academicians were asked: "How might the industry plan for, and cope with, this event?" CEO's were asked: "How do you think your company should plan for, and cope with, this event? Is your company planning for it?" For some items, CEO's were asked similar, but event-specific questions, such as: "Is your company moving actively toward an offering which stresses quality and service (as opposed to price)? In what respects?"

Round 2 Follow-up

The response rate of Academicians in Round 2 (37 of 52, or 71 percent) was considered adequate for the purpose of constructing Round 3

questionnaires, i.e., summarizing responses and constructing feedback to include in the Round 3 questionnaire. The response rate for the CEO's, however, was disappointingly low. After three weeks, only 9 of 28 CEO's (32 percent) had returned their questionnaires. A follow-up letter, mailed to the 19 CEO's from whom no questionnaire had been received, was sent three and one-half weeks after the initial Round 2 mailing. It emphasized the importance of the study, included a second questionnaire, and urged its completion and return in the stamped, addressed envelope provided. Only two additional questionnaires were received following the mailing of this reminder.

Round 3 Questionnaires

Round 3 questionnaires were mailed to the 28 CEO's and 52 Academicians on October 23, 1979. It was decided to send Round 3 questionnaires to all 80 "volunteers" in the study, and not to only the 48 respondents to Round 2. This decision was based on the hope that the number responding to Round 3 could be increased over that from Round 2 (59 percent overall). It was felt that even Round 3 participants who had not responded to Round 2 could nonetheless examine the summary feedback from Round 2 and prepare with competence their Round 3 response.

The questionnaires sent to CEO's and Academicians in Round 3 were identical; the minor differences between the Round 2 questionnaires sent to the two respective groups were eliminated for the following reasons:

- The self-rating of expertise asked of the Academicians for each event in Round 2 did not make a useful contribution to the analysis. Virtually all Academicians rated themselves

"3" or better on the five point scale provided, and no major differences in the distribution of responses were perceived when the aggregated responses of the "3 or better" experts were compared with those from the total sample of Academicians.

-- The distinction between "industry planning and coping" (asked of the Academicians) and "company planning and coping" (asked of the CEO's) was eliminated because most Academicians replied with references to actions appropriate for the individual company. Relatively little mention was made in the Round 2 responses by Academicians of the broader roles which university scholars and industry trade associations, for example, might play in planning for and coping with the events of the 1980's. Furthermore, the open-ended responses to the "coping" questions were coded, summarized, and fed back to all respondents in the form of several fixed-alternative response categories, thus making a standardized format for both groups more operational. Also, Round 3 included an additional question pertaining to ways in which the industry might insulate itself against external influences, thus providing an opportunity for respondents to comment on industry-level activities. This is explained below in a further discussion of the Round 3 questionnaire format.

-- The response rate from CEO's in Round 2 was disappointing, with only 11 of 28 responding (39 percent). Thus, the ability to conduct common analyses of the questionnaires in Round 3 was further reason for making both questionnaires identical.

Feedback Provided in Round 3

The feedback provided in the Round 3 questionnaire included the aggregate "vote" distribution for each particular event from Round 2, just as the Round 2 questionnaires provided aggregations of the votes from Round 1, as well as a summary of the logic with which Round 2 respondents had justified their Round 2 votes. This summary provided both majority and minority reasoning. For example, consider the following event from the questionnaire: "Food-away-from-home accounts for 50% of total food dollars. (Up from 37% today.)" The summary of Round 2 voting consisted of a histogram accompanied by the percentages of the sample who selected each of the four possible response categories, thus: "By 1984" -- 9%; "By 1989" -- 27%; "After 1990" -- 17%; "Never" -- 47%. Then the reasoning behind these votes was explained in the following summary paragraph:

LOGIC SUMMARY from Round 2. Those who voted "never" suggested there are limits to this growth, that consumer boredom with fast foods will set in, and that inflation and family budget trimming will encourage more at-home eating. The minority, who felt this to be a strong possibility in the 1980's, pointed to two-income, smaller families, with increased needs for convenience, and to a trend of strong recent growth for food-away-from-home.

The information solicited from each item varied according to a number of criteria. If Round 2 results indicated strong consensus in both the vote distribution and logic for a particular event, for example, then relatively less attention was paid to it in Round 3. In this respect, the Round 2 distribution for each event was classified as having one of three "degrees of consensus" categorized as follows:

- Strong consensus (50% or more in one category: no non-adjacent category represented by over 20%).

- Weak consensus (less than 50% in any category, but a single direction of response and supporting logic).
- Difference/Conflict (two or more strong response categories, with some conflicting logic explanations).

Based on this criterion, events in the third category received highest priority in the pursuit of further logic explanations; second category events were pursued with the objective of increasing consensus in Round 3; and first category events were treated least intensively, although a final "earliest date" judgment was solicited. Thus, the following grouping decisions were made:

- For four of the fifteen events respondents were asked only to vote for a final time; i.e., to indicate the earliest date by which they felt there is more than a 50/50 chance of the particular event taking place.
- For three of the events a final vote was called for, plus a restatement of the logic behind the vote.
- For four of the events a final vote was called for, plus a ranking of the three best strategies for a grocery retailer with respect to the event. A list of fixed-response categories, constructed from the responses to the "coping" questions from Round 2, was provided along with an invitation for the respondent to add his own ideas.
- For four of the events, all three data were solicited; i.e., a final vote as to the earliest date by which the respondent felt there is more than a 50/50 chance that the event will take place, a restatement of the logic behind the vote, and a ranking of the three best coping strategies.

External Influences on the Industry

At the end of the Round 3 questionnaire, four additional questions were asked of the participants. Previous Delphi studies have suggested the appropriateness of adding questions in subsequent rounds which were not adequately covered in earlier rounds. The first of these (item number 16 in the questionnaire) related to the open-ended question from Round 1, which had asked respondents to "tell us why you feel as you do about the 80's, and which particular issues you think will have the greatest impact on the grocery industry." Summary analysis of the responses to this question indicated a major concern of Round 1 participants to be changes and constraints forced upon the industry from outside. In particular, inflation, energy costs and shortages, and government intervention were cited frequently in the responses to this question. Thus, with respect to these influences, item 16 asked:

Can you think of ways in which the industry (or the individual chain) can act to insulate itself from these developments, or minimize their impact, or otherwise maintain greater control over its own destiny?

Corporate Strategies

The final open-ended questionnaire item was concerned with corporate strategy. Most of the fifteen events addressed by the questionnaire related to specific developments. Also, as discussed above, item 16 related to influences largely beyond the control of the industry or its member companies. It was considered appropriate to address developments on an intermediate, corporate level. Thus, item number 17 elicited comments about corporate level strategies, and provided space for responding to each of the two parts to this item:

Given your overall view of the grocery retailing industry in the 1980's, what strategic issues will be most important, and what company strategies will make for success during the coming decade?

The inclusion of items 16 and 17 in the Round 3 questionnaires allowed for forecasting judgments at three levels, a consideration parallel to Gattorna's 1973 forecast of grocery retailing in the United Kingdom for the 1980's. His research divided 62 event items into:

- External Events. Broad economic, political, social, or technological developments whose occurrence will be largely independent of the grocery industry. (These were addressed in the current study by the open-ended item in Round 1, and item 16 in Round 3.)
- Market-Competitive Events. Those events which are more directly related to the distribution and marketing of grocery products. (These were addressed in the current study by several of the fifteen events and by item 17 in Round 3.)
- Internal-Control Events. Primarily those events concerned with cost reduction developments. (These were addressed in the current study by several of the fifteen events.)

Item 18 asked respondents to indicate their occupation, to serve as a means of distinguishing CEO's from Academicians, and to eliminate any questionnaires whose respondents were neither university faculty members, researchers and administrators (the Academicians); nor presidents and vice presidents--chief executive officers of grocery chains. Finally, item 19 was directed at the CEO's only. It asked them to indicate the number of stores in their chains.

The back cover of the questionnaire invited participants to share any thoughts they might have about the future of the industry, the economy as a whole, or ideas which might assist the research effort in forming a more accurate picture of grocery retailing in the 1980's.

The Round 3 Follow-Up Postcard. One week after the mailing of Round 3 questionnaires, a follow-up postcard was sent to each of the 80 participants. This postcard, and the timing of its mailing, has been recommended by Dillman. It encouraged participants to complete and return their Round 3 questionnaires; thanked them if they had already done so; and encouraged them to phone collect to the Food Systems Economics and Management Program at Michigan State University if they had any questions, or had not received or had misplaced their Round 3 questionnaires.

The Round 3 Follow-Up Letter. After three and one-half weeks, 34 Academicians and 6 CEO's had returned Round 3 questionnaires. Through the use of ZIP codes on the return envelopes and handwriting samples from Round 1 questionnaires, participants could be identified for purposes of determining who had--and had not--returned their questionnaires. One month after the initial Round 3 mailing, 18 follow-up letters were mailed to the non-responding Academicians, and 22 to the non-responding CEO's. Ultimately, Round 3 questionnaires were received from 45 of the 52 Academicians (for a response rate of 87 percent) and from 18 of the 28 CEO's (for a response rate of 64 percent).

Analysis of the Early Rounds. Initial data analyses were conducted for Round 1 and Round 2 questionnaires largely for the purposes of constructing summary feedback to provide participants in the subsequent rounds. Extensive tabulations were also made of Round 1 data by the

research staff of Progressive Grocer magazine for use in the development of that publication's industry forecast (published in the October, 1979, issue). Analyses conducted for the purposes of the current study involved tabulations of fixed response questionnaire items, and coding and summarizing of open-ended responses.

Round 3 Analysis. Round 3 questionnaires were coded upon receipt and the data transferred to computer punch cards. Analysis and coding of responses to open-ended items in Round 2 provided guidelines for the coding of open-ended responses in Round 3. Initial Round 3 analyses, i.e., the basic findings of the study, are reported in Chapter IV of this report. Computer-based cross-tabulations, utilizing the SPSS package, assisted in determining relationships among the responses to two or more events, and in the construction of likely scenarios for the industry's future. These are reported and discussed in Chapter V.

CHAPTER IV

FINDINGS AND ANALYSIS

As described in the preceeding chapter, research results were obtained at three distinct points during the course of the study. Attention will be focused on the "final" data generated, as these represent the most reliable measures in the study. However, some discussion of results obtained from Rounds 1 and 2 is in order. Accordingly, this chapter will first describe briefly the results of the larger, though less formal study which constituted Round 1. Next, the results of Round 2 along with the nature of Round 2 feedback for the Round 3 questionnaires will be described. Finally, the major portion of the chapter will report detailed findings of Round 3. In that section, results of each of the fifteen items comprising the core of Rounds 2 and 3 will be discussed in turn.

Round 1 Findings

For purposes of the current study, Round 1 constituted the initial questionnaire iteration of the fifteen event statements selected for in-depth analysis. Additionally, however, Round 1 constituted a very broad examination of the industry's future, and served as the foundation for an industry forecast published by Progressive Grocer magazine in October, 1979.

Round 1 questionnaires addressed a total of 104 possible "events" which may take place in or impact upon the industry during the 1980's. Several distinct sub-samples of experts were invited to participate, as described in Chapter III. Between 40 and 90 of the 104 event questions were asked of each sub-sample, focusing on the particular areas of industry expertise which members of each group possessed. Because of the broad coverage of possible events, only one datum was solicited per event, namely an indication of the earliest date by which the respondent felt there was more than a 50/50 chance of the event taking place.

Round 1 questionnaires were returned by 674 of the 5,066 grocery industry experts to whom questionnaires were mailed in June, 1979, yielding a gross return rate of 13.3 percent. The rate for Academicians was 74 of 265 (28 percent), and that for CEO's of grocery chains (eleven or more stores) was 53 of 427 (12.4 percent). It should be noted that because of personnel shifts, attrition, retirement, and many other factors, an undetermined number of Round 1 questionnaires never reached their intended addresses. Doubtless the return rate of questionnaires received by participants was somewhat higher.

Nevertheless, the problem of non-respondent bias should be addressed. Normally, follow-up questionnaires are sent to non-respondents after a lapse of time; Dillman, for example, suggests three weeks.¹¹⁹ However, Round 1 was administered by a research organization whose goals and methods were such that numbers of respondents, rather than a questionnaire return rate, was the primary criterion in this regard. Thus, follow-up procedures were beyond control of the current study. It may

¹¹⁹Dillman, op. cit., p. 117.

be posited that non-respondents were different in any number of respects--that they were busier, or less concerned about their industry's future, or more pessimistic, etc. However, it is better to acknowledge that the participant sample may or may have not been representative of the industry as a whole, but they certainly represented the opinions of 674 experts from various phases of the industry.

The forecast constructed by the staff at Progressive Grocer was reported in nine distinct parts. Among the highlights, or more likely events by 1990, were the following from each of the nine parts:¹²⁰

- Industry Structure. More stores with "bare bones" formats, further concentration of chain units in major metropolitan areas, increased dominance of independent grocers in outlying counties, a gain in market share for "super stores," and continued growth of convenience stores.
- Store Formats. Growth of low overhead-low price stores to 5,000 units and a doubling of present market share, growth of "super stores" to 35 percent market share, and growth of convenience stores to 40,000 (compared with 32,000 in 1979).
- Equipment. Full-scale scanning in at least 10,000 supermarkets, shrinking "backroom" area of new supermarkets from 30 percent of total footage (1979) to 20 percent, conservation measures and new technology which will reduce supermarket energy usage by 25 percent, and growing popularity of wheel-in "modules" for dairy items ready for insertion into the case.

¹²⁰ The Round 1 findings were reported in detail in the October, 1979, issue of Progressive Grocer.

- Departments-Products-Packaging. Growth of "boxed beef" to account for 90 percent of fresh beef sales, reduction of the number of brands per product category, preference for bulk produce by high volume supers, upgraded private label in many chains, growth of general merchandise to 7 percent of sales, more products designed and packaged for microwave ovens, the advent of hybrid packages, and the inclusion of eating facilities in one of four newly constructed supermarkets.
- Employees. Need for more sophisticated, better educated personnel, store labor costs 50 percent above the 1979 level, and part-time employees outnumbering full-time employees.
- Customers. Fewer weekly shopping trips, declines in store loyalty and brand loyalty, more impulse buying, growth in the concern over nutrition and food safety, and slowed growth of eating out (food-away-from-home) due to greater convenience of at-home foods.
- Merchandising. Centralized merchandising and promotion decisions by data analysts at chain headquarters, increased use of manufacturer supplied display materials, increased chain promotions on TV and radio, greater store manager autonomy for matching offerings with neighborhood needs, and continued dominance of price as the primary competitive weapon.
- Supplier Relations. Shift to FOB pricing by manufacturers for most products, major decreases in store calls by manufacturers' salesmen, computerized systems linking manufacturers and buying offices, and backhauls in general use.

-- Store Management. Trend toward fewer hours of operation for supermarkets, virtual elimination of individual price marking, increased return per shelf foot from UPC scanning-assisted improvements, increased gross margin of standard supermarkets (to 25 percent), and increased sales per manhour.

Reflecting on the study as a whole, the editor-in-chief and publisher of Progressive Grocer, Edgar B. Walzer, reported the industry to be confident that operating efficiency and consumer satisfaction will be significantly improved by 1990. Importantly, the Round 1 study revealed that the 1980's will be a "period of purposeful differentiation and market positioning as retailers attempt to establish 'niches' in their local trading areas."¹²¹ Addressing the need for retailers to identify and cater to specific market segments, Walzer noted that "conventional supermarkets, trying to be all things to all people, are likely to be squeezed out of highly competitive areas."¹²² Also, noting that retail store square footage per capita continued to rise in the 1970's while sales per square foot, adjusted for inflation, showed decreases over the same time period, Walzer suggested that overcapacity will continue to be a major problem in many markets.

Walzer concluded by positing that, although the industry does indeed face serious challenges during the 1980's (e.g., the continued growth of fast-food outlets, rapidly rising costs, overstoreing, erosion of market share by convenience stores and other "new" store formats),

¹²¹Ed Walzer, "Optimistic Industry Sees Decade of Progress," Progressive Grocer, (October, 1979), p. 47.

¹²²Ibid., p. 48.

there is reason for optimism. New technology (most particularly, UPC scanning) was felt by the experts to offer such promise for improved productivity and control throughout the industry that they were confident the 1980's will be "a decade of accelerated progress in blending technology and creativity to build a stronger industry from the grass roots up."¹²³

Round 2 Findings

As reported in Chapter III, the Round 1 questionnaires to CEO's of chain stores and to Academicians solicited volunteers for participation in Round 2. Twenty-eight of 53 CEO's (53 percent) and 52 of 74 Academicians (70 percent) agreed to participate. Again, the question of "non-volunteer" bias may be raised, and it should be emphasized in this respect that this sample of 80 eminently qualified experts, is not necessarily representative of the industry.

Round 2 questionnaires were mailed to the 80 "volunteers" from Round 1 on August 31, 1979. A follow-up letter and questionnaire were mailed September 25 to those CEO's whose questionnaires had not been received by that date. In order that Round 3 questionnaires could be constructed and distributed expediently, Round 2 results were summarized six weeks after the initial mailing. By that date, 35 Academicians (67 percent of the sample) and 12 CEO's (43 percent) had responded. The low number of CEO responses in Round 2 encouraged the pooling of data for the analysis and feedback into Round 3. Ultimately, three additional Round 2 questionnaires were received over the next several weeks, though they were of no practical use to the study.

¹²³Ibid.

Round 2 results were used strictly "in house," and exclusively for the design and presentation of Round 3 questionnaires. Recall that the Round 2 questionnaires focused on fifteen of the 104 event statements from Round 1, but that for each event, four separate responses were solicited from CEO participants, and five from the Academicians. (Criteria for the selection of the fifteen items were discussed in Chapter III.) The response areas for each item were:

- A second "vote" concerning the earliest date by which the subject felt there was more than a 50/50 chance of the event taking place.
- A brief, open-ended logic explanation behind the "vote."
- A self-rating of the respondent's expertise in the topic area for the academicians only.
- An estimation, on a seven-point semantic differential, of the net impact (positive or negative) the event would likely have "on your company" (asked of the CEO's) or "the grocery retailing industry" (asked of the Academicians).
- An open-ended comment about how "your company" (asked of the CEO's) or "the grocery retailing industry" (asked of the Academicians) might plan for, and cope with, the event.

Since they will be referred to throughout this and the following chapter, the fifteen events are listed in Table 3 along with abbreviated statements by which each will be identified in subsequent sections of the report.

In general, the Round 2 "voting" demonstrated a movement toward consensus from Round 1 results on the same events. For eleven of the fifteen events, Round 2 votes showed a strengthening of the dominant

Table 3. The Fifteen Event Statements and Reference Terms

Event Number	Event Identification	Event Statement
1	Limited Assortment Stores	Warehouse stores, limited assortment stores, and other low overhead, low price outlets double their present share of total national volume (est. at 3-5% today).
2	Convenience Stores	Convenience stores account for 10% of total industry sales (up from 4.9% today).
3	Food-Away-From-Home	Food-away-from-home accounts for 50% of total food dollars (up from 37% today).
4	Brand Loyalty	Consumer loyalty to brands declines significantly.
5	Item Pricing	Individual item price marking virtually eliminated.
6	Data Analysts	Data analysts at chain headquarters initiate almost all merchandising and promotion programs.
7	Quality and Service	A significantly larger number of retailers successfully use quality and service (rather than price) as primary draw.
8	Meat Sales	Meat sales, now about 20%, drop below 15% of total store volume.
9	Modular Meals	Preprocessed modular meals--TV dinners and their extensions--triple present sales.
10	Generic Products	Unit sales of generic products generally increase to four times their present level.
11	Central Meat Processing	More than 25% of all fresh meat sales are in the form of centrally processed retail-ready cuts requiring no store level preparation.
12	Private Label	Private labels, including generics, double their present share of sales.
13	Scanning	Full-scale scanning in operation in 10,000 supermarkets (about 1,000 today).
14	Gross Margin	Gross margin of standard supermarket exceeds 25%.
15	Sales Per Man Hour	Supermarket sales per man hour (in constant dollars) increases by 10%.

choice from Round 1. For four events, a different response category was dominant in Round 2. These were the Quality and Service, Central Meat Processing, Gross Margin, and Sales Per Man Hour events. (Vote distributions over the three rounds may be compared in Table 21 in Chapter V.) Events for which the Round 2 voting represented strong consensus were emphasized relatively less in Round 3. Conversely, events for which there was a shift in the distribution of responses in Round 2, or events for which consensus was not achieved, were emphasized relatively more in Round 3.

It should be recognized that, in some respects, comparison of Round 1 data with that from Round 2 may be likened to that between "apples and oranges" because of the markedly different composition of the samples. That is, for example, Academicians represented 74 of 674 respondents in Round 1, or 11 percent, while in the participant sample for Rounds 2 and 3, they represented 52 of 80, or 65 percent. On the other hand it should also be realized that participants--from all sub-samples--were professionally associated with the industry.

The logic explanations from Round 2 were coded and summarized for purposes of feedback to respondents in Round 3. The Round 3 questionnaire provided not only a "vote" distribution for each item from Round 2, but a short paragraph explaining the logic behind both majority and minority responses in Round 2.

The self-rating of expertise for Academicians was included in Round 2 on an experimental basis. It revealed two things: that fewer than five of the 35 Academician respondents rated themselves "1" or "2" on the five point scale ("5" = very knowledgeable in the subject area), and that elimination of the non-expert responses, i.e., "1" and

"2", had virtually no impact upon the vote distribution. On the basis of these discoveries, the self-rating questions were dropped from Round 3; their contribution appeared negligible, and it was felt that respondent effort could be focused more profitably on other issues.

The estimations of the net impact of each event upon companies or the industry were used to aid in the selection of events for special emphasis in Round 3. These data also were consulted in preparing the final interpretation and recommendations which are the subject of Chapter V. In this respect, some data were collected in Round 2 which were not solicited in Round 3, in order to keep Round 3 questionnaires brief, thereby encouraging a greater response rate.

Finally, the responses to the "coping" questions were coded, summarized, and used as fixed-alternative responses to the coping/strategy questions in Round 3. Although different questions were asked of CEO's ("How will your company plan for, and cope with . . .") and Academicians ("How can the industry plan for, and cope with . . .") it was discovered that the responses from both groups were remarkably similar, dealing primarily with possible actions which individual companies might take. Thus, the Round 3 "coping" questions were refined to read (in most cases): "What do you think are the best strategies/tactics for a grocery retailer with respect to this event? (Please rank the best 3 strategies, adding your own ideas if you wish.)" Then the more popular suggestions from Round 2 were listed, along with space to accommodate respondents' unique contributions.

Round 3 FindingsResponse Rate

The response rate to the Round 3 questionnaires was gratifying. By December 31, 1979, 45 of the 52 Academicians had returned their questionnaires, for a response rate of 87 percent. Of the 28 CEO's in the sample, 18 had returned their questionnaires by January 5, 1980. One CEO was reported no longer to be employed by the company in care of which the questionnaire had been sent; thus, the net response rate for the CEO's was 18 of 27, or 67 percent. Overall, 63 usable responses from a sample of 79 experts yielded a response rate of 80 percent. Clearly, a number of non-respondents in Round 2 elected to "catch-up" by participating in Round 3. Round 3 questionnaire instructions encouraged former non-respondents to participate. This high response rate must be attributed in part to the study's use of mail survey techniques suggested by Dillman including personalized cover letters, "booklet" form questionnaires, postcard follow-up reminders, and personalized follow-up letters to non-respondents.¹²⁴ Also, however, it quite probably was a reflection of strong interest which the study's participants (and the industry generally) place in understanding and reducing the uncertainties of the future. These response rates may be compared against the only other Delphi forecast reported in Chapter II whose methodology parallels that of the current study--Gattorna's 1977 forecast for the grocery industry in the U.K. In that study, 42 of 94 panelists in Round 1 completed and returned Round 3 questionnaires, for a return rate of 45 percent.

¹²⁴Dillman, op. cit.

Data Solicited

Recall that Round 3 questionnaire items elicited varying amounts of information concerning the 15 different events. For all events, a third and final "vote" was taken as to the earliest date by which the respondent felt there to be more than a 50/50 chance of the event taking place. For seven of the events, a final open-ended explanation of the logic behind the vote was solicited. For the remaining events, the logic explanations from Round 2 were deemed sufficient for purposes of the study, in light of strong consensus and the emergence of clear and similar logic explanations. Similarly, for eight of the events, respondents were asked to "rank the best three strategies/tactics for a grocery retailer with respect to this event" from a list summarizing the responses to the corresponding "coping" questions from Round 2. For the remaining events, responses to the Round 2 "coping" questions were deemed sufficient. Additionally, Round 3 questionnaires asked three broader, open-ended questions which will be discussed later in this chapter.

Analysis Format

The following discussion reports Round 3 results on an event-by-event basis. They are reported in the order in which they appeared in the questionnaires, and no significance is or was attached to this order. The discussion here is restricted to reporting data from the research, and not to their interpretation, which is the subject of Chapter V.

For each of the events, the event statement is provided below exactly as it appeared in all three questionnaire rounds. Next, the

accompanying table depicts the distribution of Round 3 votes for the Academicians, the CEO's, and the sample taken as a whole. The logic summary is then provided, summarizing the open-ended logic explanations given by respondents. For seven of the events this logic summary is derived from responses made in Round 3.¹²⁵ For the remaining eight events the logic summary is drawn from responses in Round 2 because, as discussed previously, Round 3 logic explanations were not elicited for these events. Next, for eight of the events the top ranking "coping strategies" are reported.¹²⁶ These rankings were computed by weighting a respondent's first choice by a factor of three, his second choice by a factor of two, and his third choice by a factor of one. The rank scores reported reflect this ranking method. Rankings of this nature were not elicited for the remaining seven items. Finally, a brief discussion summarizes the data pertaining to the event, noting apparent differences between the judgments of CEO's and Academicians, particularly strong (positive or negative) predicted impacts on the industry and member companies (from Round 2), and other relevant aspects of the event.

Detailed Summaries of Responses to Round 3

Low Cost, Low Overhead Stores

Event Statement. "Warehouse stores, limited assortment stores, and other low overhead-low price outlets double their present share of total national volume (est. 3-5% today)."

¹²⁵ These events were: fast-food, brand loyalty, data analysts, quality and service, meat sales, modular meals, and private label.

¹²⁶ These events were: limited assortment, convenience stores, fast-food, brand loyalty, item pricing, quality and service, central meat processing, and private label.

Vote Distribution from Round 3.Table 4. Final Vote Distribution Percentages --
Limited Assortment Stores

Sample	by 1984	by 1989	after 1990	never
Academicsians	74	12	5	9
CEO's	59	6	23	12
Total	68	12	10	10

Logic Summary (from Round 2, in this instance). Those believing this event will occur by 1984 cited inflation, momentum, and rising labor costs as the major reasons behind their votes. Those who felt this might happen after 1990 or never, pointed to the inconveniences of shopping these stores for less than all of a family's grocery needs (i.e., one-stop shopping is virtually impossible at these stores). They also felt that Americans will continue to demand service and wide product choices when shopping.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular. Numbers in parentheses refer to the rank scores of the strategies.

- Cut costs, develop better efficiency to be more price competitive, but retain standard supermarket format. (109)
- Tailor stores more to the preferences of individual trading areas. (96)
- Monitor consumer preferences and reactions to these stores. (79)
- Diversify into limited assortment format. (53)

Discussion. There was general agreement among both Academicsians and CEO's that this event is very likely by 1984, though CEO's generally felt this will happen somewhat later. Round 2 responses revealed that

the event will have largely a neutral impact upon the industry and member companies.

Convenience Stores

Event Statement. "Convenience stores account for 10% of total industry sales (up from 4.9% today)."

Vote Distribution from Round 3.

Table 5. Final Vote Distribution Percentages--
Convenience Stores

Sample	by 1984	by 1989	after 1990	never
Academicians	9	21	26	44
CEO's	6	23.5	23.5	47
Total	8	22	25	45

Logic Summary (from Round 2, in this instance). Respondents who felt this will never happen pointed to rising fuel costs, which they felt will encourage one-stop shopping and better planned shopping trips (thus reducing the need for emergency, or "last minute" shopping), limited new site locations in many areas, and increased consumer price consciousness under inflation. Those who felt convenience stores will attain ten percent of industry sales indicated that the convenience store "system" and expertise are in place at this time, and that consumers will demand increasing convenience in their shopping.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular.

- Offer more quick stop shopping within the supermarket. (137)
- Expand hours, emphasize wide assortment in the supermarket. (73)
- Open these kinds of stores--away from supermarkets. (49)

-- Open these kinds of stores near or adjacent to existing company supermarkets. (42)

Discussion. Both groups of respondents expressed very similar vote distributions; more than half the respondents felt that convenience stores eventually will capture ten percent of the industry's sales, but only 30 percent predicted this will happen in the 1980's. It should be noted, however, that slightly less than half (45 percent) felt this degree of penetration will never occur. The distribution of voting on this question was very consistent throughout the three rounds, suggesting that little additional consensus was gained via the provision of feedback summaries. This event was predicted in Round 2 to have a slightly negative impact upon grocery retailers and the industry generally.

Food-Away-From-Home

Event Statement. "Food-away-from-home accounts for 50% of total food dollars (up from 37% today)."

Vote Distribution from Round 3.

Table 6. Final Vote Distribution Percentages--
Food-Away-From-Home

Sample	by 1984	by 1989	after 1990	never
Academicians	7	38	22	33
CEO's	0	6	18	76
Total	5	29	20	46

Logic Summary. Those who felt this will never happen pointed to family budget trimming caused by inflation, high energy costs, and to more convenient at-home food preparation and eating which they felt

will discourage eating out. However, over one-third of the sample felt that food-away-from-home will capture one-half of the food dollars in the 1980's, citing the affluence of two-income households and the increased demand for convenience which two-income households (and most others as well) express.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular.

- Expand ready-to-eat and fast preparation items in deli and bakery departments. (138)
- Consciously enter the "total food" business to satisfy a wider spectrum of needs. (82)
- Add an in-store fast-food department with eating facilities. (51)

Discussion. Clearly, the Academicians and CEO's did not agree on this event; this was also evident in the vote distributions in Rounds 1 and 2. Note that only one-third of the Academicians expected that fast foods would never claim 50 percent of food dollars, while over three-quarters of the CEO's felt this way. The split was evident in the logic explanations as well. CEO's saw inflation and family budget trimming, more convenient home meal preparation, and boredom with fast foods as highly influential; whereas, Academicians pointed to increasing affluence and demands for convenience. The event was predicted in Round 2 to have a decidedly negative impact upon grocery retailers and the industry generally.

Consumer Brand Loyalty

Event Statement. "Consumer loyalty to brands declines significantly."

Vote Distribution from Round 3.Table 7. Final Vote Distribution Percentages--
Brand Loyalty

Sample	by 1984	by 1989	after 1990	never
Academicians	42	19	0	40
CEO's	38	6	0	56
Total	42	15	0	43

Logic Summary. Increased consumer price consciousness, particularly under inflation, accompanied by increased consumer education and sophistication, were explanations given to support predictions that this event will occur within the 1980's. Increasing quality of private labels also was cited by several respondents, although this was not discussed in the Round 2 logic summary nor mentioned previously in the course of the study. The logic behind the "never" votes was that branding simplifies consumer decision making; thus, consumers will continue to use brand loyalty to assist in making routine purchase decisions. Furthermore, half the CEO's and a few Academicians felt that national branders will advertise sufficiently to prevent a significant decline in brand loyalty.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular.

- Emphasize very top quality private labels. (117)
- Emphasize standard quality private labels. (68)
- Cut back on the number of brands stocked per category. (54)
- Emphasize generic items. (49)

Discussion. Note from Table 7 that no respondent felt this might happen after 1990; it appears that a significant decline in brand

loyalty will occur by 1984 (42 percent overall) or never (43 percent). CEO's tended to consider the promotional clout and determination of national brands and their companies, while Academicians tended to look on the market side and see a more sophisticated, price conscious consumer. Interestingly, both CEO's and Academicians foresaw higher quality private labels emerging in the 1980's. It is also possible for respondents to have interpreted this question in two distinct ways; if "brand loyalty" were considered to pertain only to national, or manufacturer brands, consumers shifting to private (or wholesaler/retailer) brands would be considered less brand loyal. On the other hand, a broader definition of "brand loyalty" would include loyalty to private labels as well. Thus, in this case a decline in brand loyalty would mean a reduction of brand identification generally as a purchase criterion. A high association between responses to this event and event 12--on the growth of private labels--implies that respondents restricted "brand loyalty" to mean manufacturer brands. The event was predicted in Round 2 to have a slightly positive impact upon grocery retailers and the industry generally.

Individual Item Price Marking

Event Statement. "Individual item price marking virtually eliminated."

Vote Distribution from Round 3.

Table 8. Final Vote Distribution Percentages--
Item Pricing

Sample	by 1984	by 1989	after 1990	never
Academicians	2	79	17	2
CEO's	0	65	23	12
Total	2	75	18	5

Logic Summary (from Round 2, in this instance). Consensus logic explanations stressed that heavy scanning installations will make this event possible by the late 1980's, but that consumer and union resistance may slow the removal of item prices for some time. In some areas, this resistance was predicted to result in legislation to keep prices on individual items.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular.

- Incur extra costs, if necessary, but be sure shelf-marked price always agrees with the price stored in the computer. (123)
- Well-planned retailer-sponsored consumer education. (110)
- Pass some of the savings from elimination of price marking on to the consumer. (57)

Discussion. Although CEO's seemed a bit more hesitant than the Academicians to suggest that item price marking will all but disappear in the 1980's, there was strong consensus on this item generally. This consensus increased markedly between Rounds 2 and 3; in Round 2, 50 percent of the respondents selected "by 1989" as their response. Table 8 reveals that in Round 3, 75 percent of the sample voted this way. The event was predicted in Round 2 to have a decidedly positive impact on grocery retailers and the industry generally.

Centralization of Chain Merchandising and Promotion Decisions

Event Statement. "Data analysts at chain headquarters initiate almost all merchandising and promotion programs."

Vote Districution from Round 3.Table 9. Final Vote Distribution Percentages--
Data Analysts

Sample	by 1984	by 1989	after 1990	never
Academicsians	2	51	2	44
CEO's	0	71	6	23
Total	2	57	3	38

Logic Summary. Most of those voting "never" on this item indicated that local markets need local variations, particularly to react to consumer preferences and competition. However, several of those voting that this event will occur in the 1980's indicated that centralization need not preclude flexibility for local store managers to alter programs somewhat to accommodate local conditions. Those who felt this event will happen indicated that UPC scanning and other technologies are available now to make centralized decision making possible, and that chain management is growing increasingly sophisticated and currently is exhibiting a trend toward centralization of decisions.

Best Retailer Strategies for this Event (from Round 2, in this instance). Open-ended responses to the "coping" question in Round 2 revealed that chains will need to hire and train more sophisticated managers and data analysts, and find the appropriate blend of centralized control and local manager autonomy, perhaps through providing alternative programs and variations from which a local manager could choose the best for his store's local circumstances.

Discussion. While close to half (44 percent) of the Academicsians felt this will never happen, due largely to the need for flexibility at the store level, the CEO's tended not to see this need as necessarily

incompatible with centralized decisions. They predicted widespread chain centralization to occur in the late 1980's. From Round 2, there was little consensus as to the nature of the impact this event will have on the industry and its members; responses to this item were about equally distributed among the five choice alternatives from "negative" to "positive."

Quality and Service as Primary Competitive Strengths

Event Statement. "A significantly larger number of retailers successfully use quality and service (rather than price) as primary draw."

Vote Distribution from Round 3.

Table 10. Final Vote Distribution Percentages--
Quality and Service

Sample	by 1984	by 1989	after 1990	never
Academicians	29	12	0	59
CEO's	6	31	6	57
Total	22	17	2	59

Logic Summary. The strong "never" vote was supported by statements that the U.S. grocery marketing system is designed for price appeal, and that declining real consumer purchasing power under inflation acts as a further deterrent to price being replaced by quality and service in all but selected affluent market areas. Several CEO's and a few Academicians indicated that there will always be a sizeable market segment attracted to service and quality (at somewhat higher prices). Many of those who felt the event will occur in the 1980's indicated that quality and service represent a movement back to the "basics" of grocery retailing.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular.

- Determine carefully which segments want these benefits. (122)
- Train store personnel to emphasize courtesy and store cleanliness. (94)
- Determine affordable service levels and the relationship between cost and service. (93)

Discussion. Over the three rounds, respondents increasingly voted "never;" after Round 1, for example, only 29 percent of the CEO's felt that quality and service will never be successful general strategies. Evidently the sharing of feedback through successive iterations of the questionnaire had some influence on changes of opinion. With respect to the best "strategies," note that the top ranking strategy is not an "action" strategy, but rather one of monitoring the marketplace. It seems logical that it would rank at the top, since other strategies would necessarily rely on results of the monitoring. This event was predicted in Round 2 to have a neutral to slightly positive impact on grocery retailers and the industry generally.

Share of Meat Sales

Event Statement. "Meat sales, now about 20%, drop below 15% of total store volume."

Vote Distribution from Round 3.

Table 11. Final Vote Distribution Percentages--
Meat Sales

Sample	by 1984	by 1989	after 1990	never
Academicians	2	29	19	50
CEO's	12	19	19	50
Total	5	26	19	50

Logic Summary. The half of the sample indicating that meat sales will never drop below this point indicated strongly that meat is an important part of Americans' diets and that eating habits change very slowly. Those who felt meat's share of store sales will drop below 15 percent pointed to three reasons in about equal proportions, indicating that: meat prices will be too high relative to substitute foods; there is evidence of diet changes away from meat, particularly red meat; and a broader mix of non-foods in the supermarket necessarily will mean that meat's share will decline as a percentage of store sales.

Best Retailer Strategies for this Event (from Round 2, in this instance). Suggested "coping" responses in Round 2 included extensions of product lines which substitute for meat, improved merchandising of meat, fish, and poultry, an emphasis on meats if they are a strong point in the company's reputation, and consumer monitoring with respect to changes in food preferences and diets.

Discussion. In retrospect, it was realized that this event statement does not allow for isolation of the cause of the possible erosion of meat's share of store sales. The fact that supermarkets are expanding their assortment of non-foods necessarily means reductions in meat's share, although such a change is independent of changes in meat consumption patterns. It should be noted that both Academicians and CEO's expressed very consistent voting on this event, with Academicians feeling that meat's share will decline somewhat later in the 1980's than did the CEO's. This event was predicted in Round 2 to have a slightly negative impact on grocery retailers and the industry generally.

Preprocessed Modular Meals

Event Statement. "Preprocessed modular meals--TV dinners and their extensions--triple present sales."

Vote Distribution from Round 3.

Table 12. Final Vote Distribution Percentages--
Modular Meals

Sample	by 1984	by 1989	after 1990	never
Academicians	2	35	30	33
CEO's	0	31	44	25
Total	2	33	35	30

Logic Summary. Those respondents who felt this event will occur at some point indicated increasing consumer desire for convenience, improving meal variety and quality, and technological advances such as microwave cooking and the advent of the retort pouch. Those who felt preprocessed meals never will triple present sales indicated continuing poor meal variety and quality as the major reasons.

Best Retailer Strategies for this Event (from Round 2, in this instance). Suggested "coping" strategies from Round 2 included expanding frozen food departments and merchandising of preprocessed meals to stem the continued erosion of food dollars going to fast-food outlets. This would be achieved through both shelf-space allocations and consumer education about the economy and convenience of in-home food preparation.

Discussion. Academicians and CEO's alike were in agreement that preprocessed modular meals will not experience anything so dramatic as a tripling of present sales in the early part of the 1980's. Beyond that, there was little agreement as to when, if ever, this event will occur. Similarly, respondents provided a diverse set of logic

explanations in about equal proportions. A number of the explanations had not been mentioned in the feedback provided in Rounds 2 or 3, including: that preprocessed modular meals represent the least efficient, highest cost method of food distribution; that the cost of energy may limit the space which can be allocated to frozen foods in the store; that new technology developments will be a long time in coming; and that microwave cookery will preclude the need for preprocessing and modularization. The event was predicted in Round 2 to have a slightly positive impact on grocery retailers and the industry generally.

Generic Brands

Event Statement. "Unit sales of generic products generally increase to four times their present level." (Note: Round 1 devoted three questions to generic brands, with one each devoted to canned fruits and vegetables, soaps and detergents, and paper products. Furthermore, the events specified that generic sales rise to "ten times their present level." Two-thirds of the sample in Round 1 felt this would never happen for any of the three categories. Rounds 2 and 3 condensed the three event statements into one, and modified the growth figure from ten to four.)

Vote Distribution from Round 3.

Table 13. Final Vote Distribution Percentages--
Generic Products

Sample	by 1984	by 1989	after 1990	never
Academicsians	2	12	17	69
CEO's	0	0	6	94
Total	2	8	14	76

Logic Summary (from Round 2, in this instance). The clear majority of the sample felt generic brands to be a "gimmick" which ultimately will face problems associated with low quality product and lack of supply. Also, respondents indicated that national brands will do whatever is necessary by way of promotion to keep generics from gaining a large share of market. Those few who voted that generics will rise to four times their present sales level pointed to continued inflation, and the price consciousness of consumers who will buy generics if product quality is good.

Best Retailer Strategies for this Event (from Round 2, in this instance). The most popular "coping" strategies for this event included developing high quality sources for generic and private label products, lower margins and inventory levels on branded goods, and a general emphasis on improved generics. These strategies are all contingent on a significant rise in sales for generic brands, an event which the vote distribution in Table 13 suggests is unlikely.

Discussion. Although generics became a widely discussed innovation in the later 1970's, Academicians and CEO's alike saw them as essentially "gimmick" private labels whose share penetration will be slight and perhaps short-lived. Academicians seemed less adamant about this event than the CEO's, 94 percent of whom believed this level of generic penetration will never occur.

Central Meat Processing

Event Statement. "More than 25% of all fresh meat sales are in the form of centrally processed retail-ready cuts requiring no store level preparation."

Vote Distribution from Round 3.Table 14. Final Vote Distribution Percentages--
Central Meat Processing

Sample	by 1984	by 1989	after 1990	never
Academicians	2	81	17	0
CEO's	6	65	29	0
Total	4	76	20	0

Logic Summary (from Round 2, in this instance). The efficiencies inherent in central processing of fresh meat led to an overwhelming vote that even retail-ready processing will account for 25 percent of total volume by 1989, with union and consumer resistance and "fine-tuning" the system responsible for short-term delays in widespread usage.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular.

- Carefully monitor customer meat preferences in local markets. (82)
- Begin a gradual cut-back of in-store meat service. (67)
- Move cautiously, and maintain capability of re-establishing in-store meat service. (62)
- Integrate backward to control meat supplies and processing. (50)

Discussion. The question was designed to "force" the sample to consider a form of central processing beyond the sub-primal level which gained tremendous popularity during the 1970's; by considering centrally processed retail-ready cuts. A number of respondents addressed this point by suggesting that the sub-primal method, although requiring some store-level preparation, allows variations to accommodate local market needs, such as for thickness of cuts or serving size. Academicians

appeared to expect the event somewhat sooner than CEO's, but the vote distributions are similar in all other respects. Consensus was strengthened on successive questionnaire iterations for this event in "classic" style, with Round 3 results reflecting a stronger move toward consensus than Rounds 1 or 2. It should be noted that the most popular "strategy" was one of monitoring, rather than action, and this may help to account for its choice as the best. This event was predicted in Round 2 to have a slightly positive to positive impact on grocery retailers and the industry generally.

Share of Private Label Products

Event Statement. "Private labels, including generics, double their present share of sales."

Vote Distribution from Round 3.

Table 15. Final Vote Distribution Percentages--
Private Label

Sample	by 1984	by 1989	after 1990	never
Academicians	5	60	12	23
CEO's	0	59	18	23
Total	3	60	14	23

Logic Summary. The majority, who felt this event will occur in the late 1980's, indicated that inflation and increased price pressures on the consumer, coupled with increasing consumer confidence in retailer brands, will push private label share to twice its 1979 level, (that is, to almost 40 percent). Those who felt this never will happen pointed to heavy advertising by national brands to prevent it, and to the value of national brands in simplifying consumer decision processes. They

also suggested that there is a limit to the growth of private label sales.

Best Retailer Strategies for this Event. From the strategy alternatives provided, the following were the most popular.

- Develop top-most quality private labels. (113)
- Heavy merchandising of private labels. (90)
- Broaden product coverage of private label to a truly complete line. (78)

Discussion. Most respondents felt private labels will double their present share of sales in the late 1980's. In Round 2, a number of respondents inquired as to the current share of private labels, but to maintain consistency and in an effort to measure faith in the future of private labels generally, the question was not amended in Round 3 to report this figure. (Currently, private label share is about 20 percent of total industry sales.)¹²⁷ Over the three questionnaire rounds, "by 1989" consistently gained favor (from 32 percent in Round 1 to 60 percent in Round 3) while "never" decreased to 23 percent from 32 percent, thus, suggesting that the feedback mechanism of the Delphi method did influence opinions. This event was predicted in Round 2 to have a slightly positive impact upon grocery retailers and the industry generally.

UPC Scanning Installations

Event Statement. "Full-scale scanning in operation in 10,000 supermarkets (about 1,000 today)."

¹²⁷ Charles G. Burck, "Plain Labels Challenge the Supermarket Establishment," Fortune, (March 26, 1979), p. 71.

Vote Distribution from Round 3.Table 16. Final Vote Distribution Percentages--
Scanning

Sample	by 1984	by 1989	after 1990	never
Academicians	19	79	2	0
CEO's	18	76	6	0
Total	19	78	3	0

Logic Summary (from Round 2, in this instance). Most respondents felt that the benefits to be derived from scanning are too important to pass up, and the costs will drop significantly in the 1980's. However, many in the sample also felt that equipment availability and resistance by consumers and unions could slow this growth such that 10,000 installations (roughly one-third of all supermarkets) will not occur until the late 1980's.

Best Retailer Strategies for this Event (from Round 2, in this instance). Suggested "coping" strategies in Round 2 included purchase of equipment upgradeable to scanning, upgraded management able to utilize the data which scanning makes available, and consumer education programs stressing benefits of scanning.

Discussion. Academicians and CEO's responded similarly with respect to this event. Consensus grew stronger with each iteration of the questionnaire that the event will occur by 1989. The event statement did not lend itself particularly to discussion of possible retailer strategies beyond what was deduced from Round 2. There seems little doubt that the best strategy for a supermarket chain in this regard is to install scanning equipment, ceteris paribus. The event was predicted in Round 2 to have a positive impact on grocery retailers and the industry generally.

Gross Margins in Standard Supermarkets

Event Statement. "Gross margin of standard supermarkets exceeds 25%."

Vote Distribution from Round 3.

Table 17. Final Vote Distribution Percentages--
Gross Margin

Sample	by 1984	by 1989	after 1990	never
Academicians	2	12	3	83
CEO's	6	35	18	41
Total	3	19	7	71

Logic Summary (from Round 2, in this instance). Most respondents felt that strong competition and price consciousness of consumers will prevent this ever from happening. Those who thought the event will occur pointed to inflation, increased wages and other costs forcing margins up, and to a product mix emphasizing higher margin items.

Best Retailer Strategies for this Event (from Round 2 in this instance). Suggested "coping" strategies reported in Round 2 included a warning to beware of new, i.e., low margin, forms of competition; expanded emphasis in health and beauty aids, general merchandise, bakery, and floral departments; and the substitution of more technology for labor as an enabling condition.

Discussion. CEO's expressed considerable optimism with respect to their stores' future gross margins; over half believed that this margin will exceed 25 percent at some point, due largely to inflation, better efficiency through technology, and a mix of higher margin products. A few respondents wished to know the range of present margins, although it was inferred most were aware that current supermarket gross margins

are in the neighborhood of 18 percent to 22 percent. Academicians clearly felt that gross margins will never exceed 25 percent. There was little agreement in Round 2 about the impact which this event will have if it occurs; responses were somewhat evenly distributed from "negative" through "positive."

Sales Per Man Hour

Event Statement. "Supermarket sales per man hour (in constant dollars) increase by 10%."

Vote Distribution from Round 3.

Table 18. Final Vote Distribution Percentages--
Sales Per Man Hour

Sample	by 1984	by 1989	after 1990	never
Academicians	14	82	2	2
CEO's	6	94	0	0
Total	11	85	2	2

Logic Summary (from Round 2, in this instance). Most respondents felt that UPC scanning systems will provide more control and data to enable increased efficiency, and that less labor, reduced services, and such developments as centralized meat processing will boost productivity significantly. Many respondents felt that union resistance will slow progress in this area.

Best Retailer Strategies for this Event (from Round 2, in this instance). Suggested "coping" strategies reported in Round 2 included increased mechanization and lowering of labor requirements wherever possible, better recruitment, training, motivation of management, and better labor scheduling and inventory control through scanning data.

Discussion. There appears little doubt in the opinion of the sample that real productivity gains in sales per man hour of 10 percent will occur during the later 1980's, largely as a result of technology and in particular, UPC scanning utilization. This event was predicted in Round 2 to have a decidedly positive impact upon grocery retailers and the industry generally.

Open-Ended Questions Added in Round 3

For several reasons, the study sought in Round 3 to elicit responses to open-ended questions which were not asked in the previous rounds. These questions, and a summary of responses, are reported below.

Insulation from External Influences. First, participants had been asked at the end of the Round 1 questionnaires: "Would you care to tell us why you feel as you do about the '80s, and which particular issues you think will have the greatest impact on the grocery industry?" The large majority of responses to this question addressed developments beyond the direct control of the industry, most notably inflation, energy shortages, and government intervention. From this, a questionnaire item was constructed to read: "Can you think of ways in which the industry (of the individual chain) can act to insulate itself from these developments, or minimize their impact, or otherwise maintain greater control over its own destiny?"

The most frequently mentioned responses to this question are listed in descending order below. The numbers in parentheses refer to the number of responses in each subject category.

- Active involvement in the process of government at all levels, particularly to counteract the involvement of unions and other

special interest groups. Most particularly, stronger lobbying efforts by trade associations, i.e., FMI. (16)

- Promotion of increases in productivity and/or efficiency in grocery retailing. (9)
- Contingency planning and flexibility, plus continual monitoring of these external influences. (6)
- Generation of greater consumer confidence in grocery retailing in particular, and private enterprise in general. (6)
- Better store location and market selection strategies. (3)
- Several different topics, including better control over physical distribution costs, list pricing as a hedge against inflation, profit sharing with store managers based on energy savings, and better, more sophisticated management. (2)

Strategic Issues of the 1980's. The next question was designed to address the "middle ground" of overall corporate strategies, since for the most part, the strategies/tactics associated with the fifteen questionnaire events were event specific. The question was divided into two parts, the first of which concerned the most important strategic issues of the 1980's, and the second of which asked for ideas as to which corporate strategies will make for success during the 1980's. The precise wording of this questionnaire item was: "Given your overall view of the grocery retailing industry in the 1980's, what strategic issues will be most important, and what company strategies will make for success during the coming decade?"

The most frequently mentioned strategic issues are listed below. The numbers in parentheses refer to the number of responses for each strategy.

- Better communications with consumers; consumer education and understanding of changing consumer preferences. (7)
- Increased cost control, efficiency, and productivity; decreasing overhead. (7)
- Inflation and its impact on purchasing. (6)
- Ability to maintain low prices and stay competitive against low-margin retailers. (5)
- Store locations. (5)
- Better market segmentation and positioning. (5)
- Size of stores. (3)
- Government intervention and restrictions. (3)
- Store format (i.e., "1-stop shopping," "convenience," or "limited assortment") and the accompanying mix of merchandise and services. (3)
- Several different issues, including anti-trust pressures on large chains, attracting good personnel, shifting consumer preferences, analogs versus natural foods, service levels in stores, and store versus brand loyalty. (2)

Strategies that Will Make for Success. The second part of the preceding questionnaire item dealt with overall corporate strategies. Although many of the strategies reported by respondents were similar, there appeared little consensus as to what strategies will be most successful in the 1980's. The most frequently mentioned responses to this question are listed below. Again, the numbers in parentheses refer to the number of responses for each strategy.

- Be truly consumer-oriented; determine and respond to consumer demand. (7)

- Maintain flexibility in planning and operations. (3)
- Focus on improved efficiency and productivity. (3)
- Better employee motivation, scheduling, and training programs. (3)
- Opening stores in growth areas, better site selection. (3)
- Better control through improved utilization of computers. (2)
- Smaller stores to accommodate quick shopping and neighborhood markets. (2)
- Larger stores. (2)
- Tougher labor relations and negotiations. (2)
- Political involvement to restore the market system. (2)
- Building a favorable customer image of the store/chain. (2)
- Several different strategies, including better segmentation, better perishables marketing, reduced direct delivery and more efficient logistics, and winning greater cooperation from manufacturers with coupon presentations. (1)

Back Cover Comments. Finally, the back cover of the Round 3 questionnaire booklet asked for whatever additional comments or reflections the respondent cared to make. No two comments were alike among the several received. Some dealt with broad issues such as:

- "The industry is ripe for change. Leaders should look broadly at food delivery systems. Are there better ways?"
- "The energy problem is here to stay, though inflation will abate."

Others dealt with more specific issues. There are listed below:

- "Experiment with case sales in supermarkets."
- "Develop dating mechanisms for all perishables."

- "Establish 'microwave' sections of deli departments."
- "Push suppliers for more inventory financing."
- "Place greater emphasis on productivity."
- "Logistical improvements are half the battle."
- "Most households will be spending less time shopping."

Concluding Note

These were the data generated over the three iterations of the questionnaires in the study. For numerous reasons, the focus in this section has been on the results from the Round 3 questionnaires. What remains is the process of interpretation. Taken collectively, what do these data mean? What do they imply? On the basis of these data, what suggestions may be presented to the industry which may be of assistance in the 1980's? These questions are the subject of Chapter V, which follows directly.

CHAPTER V

INTERPRETATION, IMPLICATIONS, AND CONCLUSIONS

The purposes of this chapter are to integrate the findings of the study and to construct scenarios describing the likely states of the grocery retailing industry in 1984 and 1989. Corporate strategic planning implications of these scenarios will be discussed in some detail. The focus will be on potential major difficulties in the 1980's, and the most likely "success" strategies for responding to them. The chapter will conclude with an evaluation of the Delphi method as utilized in the study, and recommendations for further research.

The Study Taken as a Whole

Chapter IV provided a report of the findings regarding each event item in the Round 3 questionnaires. In this chapter these data are treated simultaneously, as a body of relevant information. There was not uniform agreement, however, as to the likelihood of particular events. Higher confidence may be afforded the mediations for events where consensus of respondent opinion was stronger.

Event Ranking by Degree of Consensus

Thus, it is useful to examine which of the fifteen event statements elicited the greatest consensus. Table 19 reveals that four of the five "most agreed upon" events pertain directly to technological improvements within the industry and resulting gains in productivity.

Table 19. Event Ranking by Degree of Consensus in Round 3

Rank	Event Number	Event Name	Percent of Vote in Dominant Category	Predicted Date of Occurrence
1	15	Sales Per Man Hour	85	by 1989
2	13	Scanning	79	by 1989
3	11	Central Meat Processing	76	by 1989
4	10	Generic Products	76	never
5	5	Item Pricing	75	by 1989
6	14	Gross Margin	71	never
7	1	Limited Assortment Stores	68	by 1984
8	12	Private Label	61	by 1989
9	7	Quality and Service	59	never
10	6	Data Analysts	57	by 1989
11	8	Meat Sales	50	never
12	3	Food-Away-From-Home	46	never
13	2	Convenience Stores	45	never
14	4	Brand Loyalty	43 (42)	never (by 1984)
15	9	Modular Meals	39	after 1990

It may also be noted that the lowest levels of consensus were registered for events largely beyond the control of retailers: food-away-from-home, convenience stores, brand loyalty, and modular meals--events which concern activities of consumers, competitors, and manufacturers. Thus, to some extent there appears to have been stronger agreement about the likelihood of events whose development lies within the control of the industry.

Important Developments

In general, the industry forecast constructed on the basis of findings from Rounds 2 and 3 contains no profound surprises. In many respects, none should have been anticipated; there is little to suggest that people will not continue to purchase the majority of their food needs from grocery retailers throughout the 1980's. However, there are a number of probable developments described below which deserve the attention of grocery retailers.

Emerging Store Formats

It appears likely that the emerging and growing forms of retail food outlets will continue to erode the market shares of food needs previously satisfied by the supermarket. In the 1970's, the erosion of supermarket shares was caused primarily by "fast-food" outlets. In the current study, limited assortment stores were predicted to grow dramatically during the 1980's, while convenience stores and food-away-from-home were considered to represent more established industries which will experience slowed growth and even saturation in some markets. It is noteworthy that for each of the three event statements pertaining to limited assortment stores, convenience stores, and food-away-from-home,

respectively, the CEO's were more conservative than the Academicians. CEO's predicted that the events will occur later than did the Academicians, and a greater proportion of CEO's felt that the events never will happen. For the event statement: "Food-away-from-home accounts for 50 percent of total food dollars," the difference between CEO respondents and the Academicians was major; 76 percent of the CEO's felt that this event never will occur, while only 33 percent of the Academicians felt this way.

Due to the scope of the research, major distinctions between limited assortment stores and other low-price, low-overhead formats, most particularly the warehouse store, were not included. Such a distinction, however, is in order. The formats are different in many respects, and there is evidence to suggest that the warehouse store might ultimately prove more successful than the limited assortment store because it may offer greater perceived benefits to both consumers and many retailers.

First, warehouse stores feature manufacturer brands, whereas limited assortment stores focus almost exclusively on private labels and generics. Second, one-stop shopping is more feasible in the warehouse store, with the wider assortment of approximately 2,500 items, including some perishables--the more popular dairy and produce items. Further, while the limited assortment store may feature lower prices on the items it does carry, a consumer's overall food bill is likely to be lower if the warehouse store is shopped exclusively, (as opposed to shopping at a limited assortment store and completing the desired product mix at a supermarket).

In addition, the warehouse store is more appealing to independent store owners, who lack resources and scale economies to establish private

labels or generics, or to operate highly streamlined distribution networks--necessary aspects of the limited assortment format. Thus, warehouse stores may figure very strongly in the growth of share for "limited assortment and other 'bare bones' store formats" (as measured in the questionnaires) during the 1980's.

Consumer Brand Loyalty

The predicted growth of limited assortment stores is also related to an anticipated decline in consumer brand loyalty, an event which 4 percent of the entire sample felt will occur by 1984. Recall from Chapter IV the major split among both CEO's and Academicians, on this event. In turn, these predictions are related to the event statement concerning the doubling of private label share, which was predicted to occur in the late 1980's. This optimism for private label products is likely an expression of CEO's faith in their own companies' efforts with private labels, and in improving quality of private label; 70 percent of the Round 1 respondents predicted upgraded private labels for chains in the 1980's. This also reflects the total sample's recognition of a more sophisticated, better informed, more price conscious consumer in the 1980's. It should be noted, however, that the industry expected private label share to increase dramatically during the "early days" of inflation in the early 1970's. It did not; private label share of industry sales remained relatively constant at about 20 percent between 1968 and 1978.¹²⁸

In spite of these predictions of a decline in brand loyalty and much stronger private labels, it is interesting to observe that generic

¹²⁸Burck, op. cit., p. 71.

products were predicted not to increase to four times their 1979 sales levels. These data, plus some Round 2 open-ended comments (and two unsolicited comments in Round 3) suggested that the sample generally regarded generic products as fads which will achieve very low equilibrium share levels in their respective product categories.

There are other data, however, which suggest that generic products may prove to become tremendously popular--across many market segments--under conditions of high price inflation.¹²⁹ By 1980, consumers appeared satisfied with the quality of generic products, and delighted at their price. Further, the fact that increased demand for generics may create supply shortages of lower grade product at the processing level suggests that the quality of generic products will improve for this reason alone, although this may decrease the retail price differential between them and other brands. Many consumers, nevertheless, will feel compelled by inflationary pressures to purchase the lowest price (i.e., generic) brand. Finding the quality acceptable, consumers will continue to purchase generic products on a routine basis.

Thus, participants in the current study expressed what may prove to be popular, but naive judgments in Round 3 by commenting that generics are a "gimmick." Writing in early 1979, Murphy and Laczniaak noted that rapid consumer acceptance of generics challenged preconceptions held by some in the industry. They continued:

Specifically, supermarket product manufacturers and certain food wholesalers believe that generics are a temporary gimmick with marginal appeal used to briefly increase customer traffic.¹³⁰

¹²⁹Ibid., pp. 170-176.

¹³⁰Murphy and Laczniaak, op. cit., p. 4.

In many respects, it is impossible to separate generic products from the private label category. In the current study, although respondents felt the potential for generics to be limited, they nonetheless predicted a doubling of share for "private labels, including generics" by 1989, in spite of fairly stable private label share in the industry for the ten years preceding the study. It is possible that they attributed a substantial portion of this predicted share growth to generic products.

Customer Demand for Convenience

Open-ended comments throughout all three rounds of the study suggested that price inflation will induce a growing price-conscious segment of consumers to opt for small cost savings in food product purchases at some sacrifice of convenience, i.e., that rather than paying for value added by preprocessing, they will prefer to add value through their own labor. For example, some respondents predicted inflation will have a pronounced negative impact on food-away-from-home, and another hypothesized that cost savings will induce housewives to shop for more basic, non-processed food products. In spite of these possible impacts of inflation to move consumers away from convenience, the general direction suggested by the findings of the entire study is toward an ever-increasing consumer demand for convenience. Some consumer segments will be extremely convenience-oriented, and most segments will desire relatively more convenience. Busier lifestyles and the relative affluence of the two-income household were the dominant explanations behind the predictions that convenience stores and food-away-from-home will continue to grow (although more slowly during the 1980's), and that preprocessed modular meals will triple present sales at some point

(35 percent of the respondents felt this will happen during the 1980's).

Productivity

UPC scanning was generally believed by respondents to hold tremendous promise for productivity improvements in the industry. The rate of scanning installations was expected to increase dramatically in the early 1980's, limited primarily by shortages on the supply side. Over 95 percent of the sample expected full-scale scanning operations to be in 10,000 supermarkets by 1989, which will represent about 30 percent of all supermarkets by that time. The specific productivity improvements made possible through UPC scanning applications were discussed briefly in Chapter II,¹³¹ although more than one researcher has predicted data capture possibilities from scanning operations to be so vast that new, productivity-oriented applications will be uncovered for some time into the 1980's.¹³²

Another reason for forecasted productivity improvements may be traced to rapidly increasing labor costs, which were predicted to encourage rapid moves toward automation. Throughout the study, respondents referred to replacing labor with technology "wherever possible" because of anticipated increases in labor costs. (In the Round 1 study by Progressive Grocer, respondents predicted a 50 percent increase in store labor costs by 1989 over 1979.) Sales per man hour (in constant dollars) were predicted in the current study to increase by 10 percent in the

¹³¹These included improvements in inventory management, labor scheduling, and item movement analysis, for example.

¹³²"Scanner Data Can Measure Long-Run Promotion Response," Marketing News, (January 11, 1980), p. 11.

late 1980's, consistent with the late 1980's prediction for 10,000 scanning installations. Also predicted to contribute to increased productivity in the 1980's were central meat processing and better recruitment, training, and motivation of personnel (mentioned repeatedly in open-ended questionnaire responses). Thus, it appears that the productivity "stagnation" which confronted the industry throughout the 1970's will be replaced by real gains--primarily as a result of technology--in the late 1980's. It should be noted, however, that scanning represents a major innovation, and that it may be some time before the industry witnesses another technology change of similar magnitude.

Store Operations

UPC scanning installations, discussed above, were predicted to have a significant impact on many facets of store operations. Among other things, it was felt they will allow for the virtual elimination of item price marking once resistance from unions and consumer groups can be overcome, probably in the late 1980's. In addition, scanning operations were considered to be the enabling condition behind the predicted shift of chain store operation control to chain headquarters, and the initiation of merchandising and promotion decisions by data analysts there. It was reported in Chapter IV that almost 40 percent of the sample felt this degree of centralization never will happen, primarily because local markets need local variations to accommodate unique circumstances of competition and consumer preferences. However, it was also noted by a number of respondents that centralized decisions of this sort need not preclude providing store managers with the latitude to adjust merchandising and promotion programs to local conditions. This notion speaks

favorably for centralization. Furthermore, a Round 1 event statement found 65 percent of respondents predicting that most chains will give greater autonomy to store managers in the 1980's to allow for these adjustments.

There was general agreement in the study that price will remain by far the primary competitive weapon and customer draw as opposed to quality and service. Respondents noted that while a growing consumer segment will seek quality and service as major store evaluation criteria, the impact of inflation and, more importantly, the price-oriented nature of the grocery marketing system in the U.S. will maintain the important role of price. This also was borne out by the predicted growth of limited assortment and other low overhead, low-margin stores, the predicted decline in brand loyalty by 1989 (by only slightly over half--57 percent--of the sample), and the predicted doubling of private label products (including generics) share also by 1989. Finally, despite rapidly rising costs and relative emphasis on higher margin non-food items in the store, the sample predicted that the gross margin of the standard supermarket never will exceed 25 percent. (Interestingly, Round 1 data, as reported in the Progressive Grocer forecast, suggested that gross margins will exceed 25 percent by 1989. The feedback mechanism in the Delphi method was probably responsible for the reversed distribution of responses to this event over two additional questionnaire iterations.) Strong competition and strong price consciousness among consumers were expected by respondents to exert continued pressure to keep margins low.

Meat Sales

Half the sample felt that meat sales--as a proportion of total

store sales--will decline only slightly, if at all, and that they never will fall below 15 percent of store sales. The overwhelming logic behind this judgment was that meat is, and will continue to be, a central, stable aspect of the American diet. Several respondents suggested that prices and nutrition education may reduce the share of meat sales enjoyed by beef, but that this share will be compensated for by growth in poultry and fish sales. This overall prediction of meat sales is strengthened by the general trend (and prediction in the larger Round 1 study) toward a broader mix of non-foods in the store, which will require meat sales to increase relatively to maintain their share of store sales. This trend was listed frequently in defense of predictions in Round 2 that meat's share will decline; subsequently, it was included in the feedback portion of the Round 3 questionnaires, and it may have been responsible for a slight shift, in Round 3, away from feelings that such a share decline never will happen (54 percent in Round 2 to 50 percent in Round 3). In spite of this, however, the feeling remained strong that meat sales will maintain fairly stable share levels throughout the 1980's.

General processing of meat, which gained tremendous popularity in the 1970's with the use of sub-primal cuts, was expected by over 75 percent of the sample to include central processing of retail-ready cuts (25 percent of total movement) by the end of the 1980's. Major resistance to this development was predicted by the sample to come from labor unions and, in particular, from consumers. The idea of consumer resistance to centralized fabrication of retail cuts conforms with the belief that retail cuts must be made to accommodate local preferences. As a point of interest, early industry efforts toward central processing of retail-ready cuts were abandoned for the central processing of sub-primal portions only.

It appears that most of the industry will continue through the 1980's to trade off a more dollar efficient system (complete central processing, eliminating the need for store-level preparation facilities) in favor of higher customer service levels (meat cutting and wrapping in the store).

Uncontrollable Variables

Variables which impact upon the industry, yet which will remain largely beyond its control, were mentioned frequently by respondents throughout the study. As discussed in Chapter IV, responses to a Round 1 open-ended question, asking respondents why they felt as they did about the 1980's, elicited a large number of comments related to three broad areas: inflation, energy costs or scarcity, and government intervention. These areas were addressed again in the Round 3 questionnaires, and summaries of these comments were reported in Chapter IV.

In general, respondents felt that these three influences will be the strongest external variables in shaping the industry's future. Many expressed the belief that high inflation rates will be relatively short-lived, but that energy scarcities will be a permanent fixture in the U.S. economy for the remainder of the twentieth century, at least. These external variables were predicted to impact upon the industry in a variety of ways, which are described below.

The Energy Crisis. The general shortage of energy was predicted by some respondents to encourage the growth of neighborhood supermarkets, and to cause a reduction in the frequency of consumer shopping trips.¹³³

¹³³ According to Dr. Jim Stevenson of the Food Marketing Management program at USC, although there is wide-spread speculation that the number of shopping trips will decline, there is no documented evidence to support it.

Within the store, energy shortages were predicted by some respondents to cause a reduction in frozen food space allocations, and in hours of operation.

Inflation. Many respondents felt that inflation will motivate further evolution of the extremely price conscious consumer. The forecasted growth of limited assortment stores and private labels may be traced directly to inflationary pressures on (especially single-income) household budgets. Inflation on the "supply side," particularly of labor costs, was frequently offered as reasoning behind the forecasted rapid growth of scanning installations and other investments which trade off mechanization against labor.

Government Intervention. Government constraints and intervention rarely were described in detail by respondents. However, several respondents encouraged increased lobbying efforts by industry trade associations and active involvement in the political process by individuals, in an attempt to gain greater representation in government. Respondents offered such comments as: "make ourselves heard in Washington," and "counterbalance the influence of other groups, i.e., labor and special interest groups." Stronger lobbying efforts and active personal involvement in government processes at all levels (i.e., federal, state, and local) represented the most frequent responses to the Round 3 questionnaire item which asked participants to discuss means by which "the industry might insulate itself from or minimize the impact of, inflation, energy shortages, and government intervention."

Incorporation of Round 1 Results

Recall from Chapter IV the discussion featuring highlights of the

Round 1 study--the broader, but less in-depth forecast constructed by the staff of Progressive Grocer magazine. It is useful at this juncture to incorporate certain of the more likely predictions from that study as a next step in the progression toward the construction of probable scenarios for the industry during the 1980's. The following are some of the more likely events from Round 1 which were not studied in subsequent rounds:

- More chain operations in metropolitan areas and increased dominance of independents in rural and outlying areas.
- More "super stores" (defined in Chapter II) to 35 percent of industry sales by 1989.
- More "boxed beef" to account for 90 percent of fresh beef movement.
- More general merchandise--up to 7 percent of store sales for a standard supermarket by 1989.
- More consumer concern over nutrition and food safety.
- More use of manufacturer-supplied displays.
- More FOB pricing by manufacturers for most products.
- More automated communication between manufacturers and chain buying offices which automatically re-order when replenishment levels are reached.
- More backhauls by 1989.
- More returns per shelf-foot due to scanning-assisted merchandising improvements.
- Fewer brands per product category.
- Fewer weekly shopping trips by consumers.
- Less "back room" space in supermarkets by 1989 to 20 percent

of total floor space (from the 1979 figure of about 30 percent).

- Reductions in store level energy consumption of 25 percent.
- Less store loyalty by consumers.
- Expanded lines and higher quality in private label products.

Summary

Taken as a whole, results from all phases of this study imply that the 1980's will witness:

- Some Fairly Rapid, Wide-Spread, and Fundamental Changes in Consumer Buying Behavior. In general, these will be reflected in increased price consciousness of a growing segment of consumers, and their increasing willingness to sacrifice some services or brand preferences in exchange for a lower price. Parallel to these new directions in consumer attitudes and behavior will be continued consumer demand for convenience. While at first this latter trend may appear to contradict anticipated increases in consumer price consciousness, there are two explanations which assist in understanding the simultaneous development of these trends. First, some consumer segments will be more concerned with convenience, quality, and other services than with price, namely those which retain relative affluence in spite of inflationary pressures. In general, these groups will include the relatively wealthy, and two-income households. Middle and lower income segments, particularly one-income households, will grow relatively less affluent and more concerned with price. Secondly, consumers generally will be willing to sacrifice aspects other

than convenience in return for lower prices--aspects such as services and brand preferences.

- A Technological "Revolution" in Computerization and UPC Scanning Data and Applications. In general, these will enable increased efficiencies throughout virtually every phase of store operations (e.g., labor scheduling, inventory management, item movement and profitability analysis, etc.). They also will enable more accurate matching of store offerings with the needs of store customers. Simultaneously, they will enable and encourage the centralization of chain merchandising and promotion decisions. Summarizing the Round 1 study, Progressive Grocer editor-in-chief and publisher, Edgar B. Walzer, predicted that UPC systems and other technology will make for some fundamental, "grass roots" improvements in the industry which will more than offset some of the less positive forecasted developments (i.e., erosion of industry sales by fast-food outlets, convenience stores, and emerging "bare bones" store formats, plus overstocking, and rapidly rising costs).
- Intensified "Battle of the Brands." Although the study did not specifically investigate the implications of growth of private label and generic products versus manufacturer brands, it appears that retailers will find an increasingly receptive market for their private label and generic products. Increased consumer price consciousness and growing confidence in the quality of retailer brands will continue to be influential in this development. Further, many retail CEO's in the current study implied that private label coverage will be broadened to

a more complete product line during the 1980's. Finally, retailers in many respects control shelf positioning of products, and are thus capable of assigning private labels to favorable shelf facings and end-aisle displays. Manufacturers will likely counter this development somewhat through intensive consumer and trade promotions (i.e., both stronger "pulling" and "pushing" strategies), product innovations, more extensive point-of-purchase display materials, and more attractive credit terms for retailers, particularly for slower movement items.

Certainly many manufacturer brands will remain very strong, and it is likely that the first and second most popular brands in a product category will not suffer share losses. The implications may be ominous, however, for lower ranking manufacturer brands. Retailers will likely stock fewer brands per product category, choosing instead to utilize this shelf space and inventory investment for general merchandise. Lower ranking manufacturer brands may find it necessary to concentrate their promotional efforts in areas where they are strongest in order to retain shelf position.

Integration with Other Forecasts

Chapter II reviewed many relevant forecasts and future projections about the grocery retailing industry or facets of it. It is appropriate to compare briefly the predictions of the current study with certain of the forecasts reviewed in Chapter II. Although several of those forecasts will be addressed in the following discussion, particular attention will be given to two 1979 forecasts: that by Professors Stevenson and Harris of the University of Southern California (the "USC study"), and that by Mr. Clarence G. Adamy, former president of the National

Association of Food Chains, and Mr. Lee Reiser, vice president of marketing development for the Best Foods Division of CPC International (the "Best Foods study"). Several of the forecasts which were discussed in Chapter II are represented in Table 20 below which indicates focal areas addressed by those studies as well as the current research. It should be realized that forecasts addressing fewer issues were more thorough in the areas which were considered. More complete discussion of these forecasts is found in Chapter II and, of course, even that discussion is a substantial abbreviation of the actual forecasts as they are reported in the literature. It is suggested that Table 20 serve as a guide in the search for topic areas which have been forecasted and that the original references be consulted if further analysis or understanding is desired. A discussion of the other forecasts follows directly; the USC and Best Foods studies are discussed in succeeding sections.

Comparison with Other Forecasts

Bogart's (1973) Delphi forecast of the retail sector in general predicted that productivity (sales per square foot of selling space) will rise 20 percent between 1973 and 1985. The current study, investigating only the grocery retailing industry, was somewhat more conservative, predicting a 10 percent rise (in sales per man hour) in the late 1980's.

Salmon, Buzzell, and Cort (1974) predicted, among other things, reduced need for backroom space in the store, and longer hours of operation. The current study found similar predictions about backroom space, but (perhaps in response to energy shortages and fears in the late 1970's) predicted ultimately shorter hours of operation as an energy-saving measure.

Table 20. Selected Topical Coverage of Recent
Food Industry Forecasts

Subject Area	This Study (1980)	U.S.C. Study (1979)	Best Foods (1979)	Bloom (1978)	Bellinger et.al. (1977)	Salmon et.al. (1974)
Store Formats						
Ltd. Assortment	X	X		X		
Super Stores	X	X	X		X	X
Convenience	X		X			
Fast Foods	X			X		
Industry Capital Requirements			X			X
Brand Loyalty	X				X	X
Generic Products	X	X				
UPC Scanning	X		X	X	X	
Segmentation	X		X		X	
Competition	X		X		X	
Warehousing Technology		X	X			X
Food Safety and Nutrition			X		X	
At-Home TV Shopping			X			
Central Meat Processing	X		X			
Margins and Profits	X	X	X			

Goff's (1975) study of limited assortment stores in Europe noted environmental and economic factors favorable to their development. Two factors which he stressed were the extent to which inflation dramatizes lower prices to the consumer, and the continued appeal of convenience in "today's market places." The current study forecasted not only rapid growth of limited assortment stores, but the continuation of factors favorable to their development as well.

Cain (1975) predicted that although the traditional marketing functions (of buying, selling, transporting, storing, etc.) will be performed within the food delivery system of 2000 A.D., they will be performed in many novel ways and by many institutional arrangements that were virtually unknown in the 1970's. Cain's warning is supported by the current study's predictions that alternative food delivery systems with specialized appeals, such as food-away-from-home, convenience stores, and limited assortment stores, will continue to erode the broad market traditionally served by the relatively unsegmented strategies of most retail chains in the 1960's and 1970's.

Both Chain Store Age (1975) and Norwood (1975) referred to centralized labor-intensive operations as boosting productivity. Norwood predicted in-store productivity increases as a result of UPC scanning data utilization. Norwood also predicted consumer and labor resistance to centralized meat processing and UPC scanning systems. These particular areas were addressed in several other forecasts under review, with essentially the same predictions. In the current study, respondents repeatedly commented about reducing labor costs "wherever possible," and UPC scanning installations were predicted to be widespread (i.e., over 25 percent penetration among supermarkets) by 1989. As in

Norwood's study, the current research found widespread predictions that consumer and labor resistance may slow progress in these areas.

Bates (1976) assessed the likely impact of external, environmental factors upon the industry. Three of the five factors which he concluded were of special significance were addressed in the current study through either the questionnaire items and/or in the open-ended responses of participants: economic uncertainty, consumer price awareness and concern, and escalating labor costs. It is interesting to note that the "USC study," which will be discussed in a following section investigated the other two of Bates' five factors: increased asset investment levels triggered by larger stores and inflation, and anticipated capital shortages which will impact future expansion plans.

Cort's (1977) extended interview with top executives of the Kroger Company revealed their prediction that proper segmentation and catering of individual store offerings to local market preferences will be critical in the future. Responses to open-ended questions in the current study lend support to these earlier and more personalized predictions.

In a report on the future of the red meat industry, Allen (1977) suggested that consumers will grow increasingly willing to substitute products, not only for economic reasons (as suggested by the findings of the current study) but for social and political reasons as well, including more frequent periods of product shortages. He also pointed to tremendous potential savings in meat distribution costs from central meat processing and increased use of backhauls. These two areas were addressed in Round 1 of the current study, and were predicted to be more widespread by 1989.

The 1977 industry forecast by Bellinger, Stanley, and Allen predicted, among other things, continued growth of private label products, gradual consumer acceptance of UPC scanning systems, and the need for stores to target on specific market segments if they are to be "truly innovative and successful." The current study lends support to these predictions. The most important forthcoming industry problem areas suggested by the 1977 study were how to: increase productivity, cope with rising energy costs, deal with increasing competition, and reduce excessive government regulation. All four of these problem areas were forecasted by the current study to remain of concern throughout the 1980's.

Bloom (1978) predicted some rather more dramatic changes to confront the industry than those suggested by Belling, Stanley, and Allen (1977). Bloom's discussion of the feasibility of direct, warehouse-to-consumer food delivery programs noted that the technology which will be required to make such systems operational may be on-line by 1990. The Round 1 questionnaires in the current study elicited judgments as to whether home-delivery of orders placed by telephone will capture a 10 percent market share in one or more major markets. The overwhelming response was that it would not, at least during the 1980's (only 23 percent believed this might happen). However, 63 percent predicted that this will occur at some point. While this question was not directly parallel to the notion discussed by Bloom, it is similar enough to suggest that slow diffusion, acceptance, and adoption of these methods may lag significantly behind the creation of the technology itself. Bloom's ideas are consistent with many put forth by Cain in several articles reviewed in Chapter II. Like Cain, Bloom addressed himself to more distant horizons than the 1980's. However, the fairly dramatic changes

which together they imply for the industry by 2000 A.D. should arouse concern among planners at the corporate and trade association levels.

The Best Foods Study

The Best Foods forecast (1979) predicted rising labor costs, a need for more (and more internally generated) capital to sustain increasingly mechanized and larger operations, increased competition in markets where population growth will be very low, and a continued shortage of energy. The current study addressed--and found support for--predictions regarding labor costs and energy shortages. Predictions for capital shortages and increased competition were mentioned by several respondents in the current study, and are consistent with the overall findings.

The Best Foods study also investigated likely technology innovations for the industry in the 1980's, forecasting increases in central meat processing of sub-primal cuts, widespread UPC scanning installations, and warehouse automation. The current study lends support to the first two of these areas, and did not specifically investigate warehouse automation.

Finally, the study predicted the need to upgrade personnel as jobs become more sophisticated, increased consumer demand for convenience, and the emergence of more distinctly defined market segments. Through questionnaire items and open-ended responses, the current study found support for each of these general predictions.

The USC Study

The Stevenson and Harris (1979) forecast of the impacts of inflation on the industry is both supported and complemented by the current study. For example, the USC study noted that inflation increases consumer price

consciousness, private label sales, and the emergence of new store formats such as the limited assortment store. In the current study, these changes were either strongly implied or specifically forecasted for the 1980's.

With respect to financial performance, the USC study found predictions of 25 percent gross margins by 1984 only in the Western region of the U.S. (25.6 percent). The current study predicted more conservatively. Respondent opinion suggested that for standard supermarkets, gross margins never will reach 25 percent.

The USC study predicted that the average size of new stores will increase from 31,000 square feet in 1979 to 35,000 square feet in 1984. In the current study, although some of the open-ended responses in Round 3 suggested that average store size will increase, there also was strong support for the notion that average sizes will decrease, in response to energy costs and a return to neighborhood supermarkets of the warehouse store or limited assortment format.

In the USC study, 30 percent of the respondents believed the majority of their new stores will have sit-down restaurants by 1984. In Round 1 of the current study, respondents predicted that 25 percent of all new supermarkets will feature in-store eating facilities by 1989, an apparently similar prediction.

Forty percent of the companies represented in the USC study planned to operate limited assortment stores by 1984 versus 19 percent in 1979, while 48 percent expected to operate warehouse stores versus 25 percent in 1979. In the current study, respondents predicted that limited assortment and other low overhead, low price stores will double their current 3 to 5 percent share of national volume by 1984. While there

is no direct method of comparing these data, it is evident that both studies predict rapid growth for these new store formats. One-half of the USC respondents expected market shares of limited assortment stores to decline if inflation is curbed.

Two-thirds of the respondents in the USC study felt their companies' private label products will gain in share of store sales by 1984. In the current study, private label shares (including generics) were expected to double by 1989, a similar, if more dramatic prediction. The strong possibility of decreases in frozen food space allocations was also made by each of the studies. Similarly, 42 percent of the USC study respondents predicted an increase in the use of in-store displays, while, remarkably, 42 percent of the respondents in the current study predicted an increase in the use of manufacturer-supplied displays, both by 1984.

The USC study predicted that by 1984 chain distribution centers will stock 20 percent more items than in 1979 (a reflection partly of reduced direct delivery), while at the store level, this increase will be 11 percent. Round 1 of the current study found 58 percent of the sample predicting that the typical supermarket will carry 20 percent more items in 1989 than in 1979.

With respect to promotions, 70 percent of the USC study respondents indicated that their companies will spend a higher proportion of their advertising budgets on TV. In Round 1 of the current study, 51 percent of the respondents felt that radio and TV advertising expenditures for retailers would rise from 12 percent to 25 percent of total food ad expenditures during the 1980's.

To be sure, there were many specific aspects of each study which were not addressed in the other, and the discovery of several parallel predictions in both forecasts should not be interpreted as more than casual overall support for each other's findings. Still, it was comforting to discover that investigations of the same issues from different perspectives yielded rather similar predictions. In another respect, these similar findings also lend credibility to the predictions about subjects which were not common to both studies. Thus, in this context, additional merit is to be afforded the predictions in the USC study for those subject areas which were not addressed in the current research.

Final Comment

To varying degrees, the benefits of even casual similarities between forecasts may be applied to all of those addressed in the preceding discussion. Certainly when taken as a group, the forecasts reflect such a spectrum of perspectives that predictions must become more credible when made by a number of independent research efforts.

Scenarios for the 1980's

The discussion now turns to the construction of brief scenarios from all phases of the current study, including the investigations of previous forecasts. These scenarios are general in nature, and are provided for both 1984 and 1989.

Scenario for 1984

Consumer price consciousness, largely as a result of continued inflation, will encourage pronounced growth in areas which enable consumers

to lower their total food expenses. Limited assortment stores, warehouse stores, generic brands, private labels, and, quite basically, low price will be much more in demand. While this consumer attitude will not apply across all market segments, it is expected to have an impact on most, as consumer incomes, over a broad range, decline in relative buying power. At the same time, consumer lifestyles will be more active than ever; thus, the demand for convenience will remain very strong for most segments, and will be a dominant shopping criterion for a growing segment. Increasingly, consumers will consider their shopping time as a major factor in calculating total costs of different shopping and product alternatives. This will result in the continued increase in the movement of food expenditures toward food-away-from-home and convenience stores, although for several reasons this growth rate will be slower than in the 1970's.

Chain management will be in the midst of two seemingly opposing trends; greater centralization of decision-making through computer technology applications, and simultaneous granting of greater decision-making or "tailoring" authority to better trained and more sophisticated store managers. These changes will be more pronounced, and more "finely tuned" by 1989. The success of stores which cater to more specifically defined market segments will be evident. Conscious segmentation of the market, particularly in very competitive urban areas, will characterize leading chains.

Within the distribution channel, a greater proportion of products will be routed through distribution centers as suppliers increasingly opt for logistical savings over the direct-delivery system. Although standard supermarkets and larger stores will carry more products, item

profitability analysis via UPC scanning data will assist chains in making more sound shelf allocation decisions. Much of the growth in product assortment will be in general merchandise and other non-food departments, particularly as larger store formats prove successful in both meeting a wider spectrum of consumer needs (i.e., fairly comprehensive one-stop shopping) and in lowering unit costs. Within the grocery departments of these stores, it is entirely possible that by 1984 there will be a general reduction in the number of brands stocked per product category.

Although chain expansion will be seen as a successful strategy, lack of capital available to the industry generally will encourage chains to expand through the acquisition of existing stores, particularly in markets with stable population, where scale economies will be a major factor in increasing overall efficiency. Strong store growth is expected in the sun belt states where population increases will be greatest. It is difficult to predict a trend in average store sizes. The average size of newly constructed stores will increase to accommodate the larger store formats, but because of tight capital and an increased emphasis on "neighborhood" stores (in response to less travel due to high cost energy and the need for better segmentation) most newly-opened stores will be smaller, remodeled supermarkets (and warehouse stores) in the 10,000 to 20,000 square foot range.

Much of this scenario for 1984 is influenced from outside the industry; in particular, high rates of economic inflation and escalation of energy costs. In this respect, the 1984 scenario, and that for 1989 which follows, is predicated on the assumption that inflation rates will average about 10 percent per year between 1980 and 1984. It was not a

mission of the current study to forecast general economic patterns of the future; there are many scholarly and commercial forecasts devoted to these subjects. It cannot be overlooked, however, that general economic conditions will have a very powerful impact upon grocery retailing in the 1980's. Thus, the predictive confidence of this study's forecast is necessarily constrained by external uncertainties. Thus, these predictions should be evaluated within the context of the larger economic scenario associated with annual inflation rates in the 10 percent range.

Scenario for 1989

The technological "revolution" which has been predicted to hit the industry in the late 1980's will be in full swing in 1989. Costs of scanning equipment will have dropped, data capture applications will permeate every aspect of store and chain management, and smaller chains and independent owners of conventional supermarkets will be installing scanning equipment so as to realize the same significant productivity and merchandising benefits as their larger competitors. Item price marking will have disappeared from supermarkets in all but a very few market areas, where it will be required by law. While consumer trust in retailers will have risen somewhat, the acceptance of scanning and the end of item pricing will be more a function of consumers' rising confidence in technology as it affects an increasing portion of their lives. Simultaneously, many stores will operate under less technologically complex conditions. At the "other end" of the technology spectrum, many limited assortment and other low overhead, low price formats will operate with very little formal data on item movement, peak sales hours, and the like.

By 1989, consumers and industry alike will have achieved equilibrium in their adjustment to a more or less permanent "energy shortage." Among those adjustments will be significantly less use of the automobile, and the adoption of "one-stop shopping" as an ingrained habit for many consumer segments. Thus, super stores, combination stores, hypermarkets, and other large store formats will be extremely popular in urban and suburban areas where population densities are sufficient for sustaining them. Also popular will be smaller "neighborhood" supermarkets, many of which will feature aspects of the warehouse and limited assortment store formats.

Chains will have grown most rapidly in urban areas, while independent operators will be stronger in rural and isolated areas. Due to mergers, acquisitions, and liquidations, the overall chain store share of market will increase significantly, especially in many urban areas. In this respect, it is possible that the industry will be subjected to charges of anti-trust behavior or abuses stemming from concentration of industry power (i.e., market share) in the hands of a few companies.

It is also likely that many ecological concerns in the U.S. will be traded off for lower-cost solutions in a number of areas during the 1980's. Among these "sacrificed" concerns may be forced deposits on returnable or recyclable beverage containers and, by extension, packaging materials generally. Legislation in these areas may be delayed or may not become widespread because of the higher cost distribution system which results and the higher resulting prices to consumers. Almost two-thirds (62 percent) of the respondents in Round 1 of the current study believed national forced-deposit legislation will occur during the 1980's.

The "food-away-from-home" share of the food dollar will stabilize in the late 1980's as inflationary pressures soften and real incomes rise (encouraging eating out), while energy conservation habits and increased convenience in at-home food preparation (encouraging eating at home) become more widespread. Another food-delivery system, featuring warehouse-to-consumer deliveries in response to orders transmitted through home computer telephone hookups will be proving successful and cost-efficient in modern, highly urbanized experimental environments.

The eventual use of "teleshopping" is just one of many developments which will demand flexibility on the part of successful retailers in finding more efficient and need-satisfying methods of grocery distribution. The industry is in a constant state of flux, as are the variables which impact upon it from outside. Thus, a scenario for 1989, ten years from the data on which it is grounded, is subject to developments which were unfathomable in 1979, or which seemed extremely remote.

This report next turns to a discussion of implications of the data and the forecast for corporate strategy planners. It is hoped that it will prove useful in directing industry executives to areas of concern, and in helping to create strategies for success.

Planning Implications

The importance of corporate strategic planning became well-known during the 1970's, particularly as external influences, such as competition and inflation, created an environment of growing uncertainty. Contingency planning and long-range forecasting gained favor in the 1970's, and will grow increasingly popular during the 1980's as rapid rates of change continue. The following discussion is an attempt to

relate the findings and predictions of the current research to tactical, and particularly strategic planning implications. It will draw extensively from responses elicited in the Round 3 questionnaires pertaining to the fifteen "events" of particular concern to the study, and the open-ended questions addressing strategic issues and "strategies for success" in the 1980's. These data were reported in some detail in Chapter IV, and the discussion here utilizes them in summary form.

Planning Issues

The responses reported in Chapter IV predicting the most important strategic issues of the 1980's can be distilled into the two broad categories below:

- Better understanding of, communication with, and orientation toward consumers.
- Increased efficiency, productivity, and cost control.

Each of these issues will be discussed in turn.

Consumer Orientation. Understanding consumers requires a continuous research endeavor to investigating their reactions to inflation, their attitudes toward brands, stores, price, quality, item price marking, consumer protection, one-stop shopping, and a host of other subjects. Among the major objectives of such analysis is the identification of distinct consumer segments within a market area. However, even attending to the vast amount of secondary information about consumers which is published on a regular basis is a challenging task. In many instances, original research even at the store level to determine local preferences, for example, also will prove beneficial. Retailers should attempt to broaden their understanding of the consumers who patronize,

or might patronize, their stores, This is particularly important during periods of rapid change due to largely external forces, e.g., periods of rapid inflation.

Communication with consumers should be designed to build retailer credibility by convincing specific market segments that their needs will be better satisfied when they shop at the retailer's stores. This is essentially a task of effectively communicating a retailer's sincere customer orientation. Given the relatively low regard in which consumers generally appear to hold of grocery retailers, such an image can constitute a significant competitive advantage. Whether negative consumer attitudes are justified in this respect is a matter of conjecture; because of the frequency of consumer food shopping, grocery retailers are apt to bear an unwarranted burden of consumer complaints, frustration, and negative feelings toward inflation and "big business." To the extent that these negative consumer beliefs are not based on fact, retailers face a challenging, but potentially very rewarding, task of changing these beliefs through more effective communication.

Efficiency, Productivity and Cost Control. These areas will benefit greatly from planning which coordinates the timing of technology installations with capital availability, labor force obligations (i.e., union contracts), and capable management to utilize the increased data capture which accompanies UPC scanning, for example. Planning for the purposes of keeping costs low will be particularly important for conventional supermarkets, which will be the target of intensified competition from limited assortment and warehouse stores.

There are other strategic issues for the 1980's suggested by the findings of the current study which are not easily sub-summed under the

headings discussed above. Foremost among these is government intervention, an influence which is largely beyond the control of the industry, but which speaks to the need for contingency planning and for political efforts by industry trade associations.

Two other strategic issues receiving attention in questionnaire responses were store locations and store sizes, both of which are variables whose future directions are among the most uncertain of those facing the industry. Both are tied intimately to the broader areas of consumer preferences and efficiency which were discussed above.

Potential Problem Areas

The purpose of this section of the discussion is to address briefly some less intuitive or less visible, but likely, problem areas to confront the industry during the 1980's. These cautions should not escape the eye of the corporate strategy planner, for they are areas where poor or inadequate planning could frustrate corporate effort significantly.

Marketing Myopia. The most general of these cautions is the simple notion of "marketing myopia" advanced by Levitt (1964). In many respects, the grocery retailing industry is tradition-bound, reactive rather than pro-active in nature, and secure in the knowledge that people must eat. This does not, however, imply that consumers will unthinkingly continue to purchase from conventional supermarkets indefinitely. The world is continuously evolving, as are consumer preferences and optimal means of satisfying them. Previous discussions in this report have addressed a number of alternative feeding and food distribution methods and formats which will continue during the 1980's to erode the "corners" of the broader market served by the supermarket. This does not imply

so much that retailers must necessarily segment and adopt new store formats, but rather that they be more aware of the forces impacting upon the industry, and that they be receptive to and seek to understand significant departures from past food distribution methods. This requires, in many respects, a broadening of the company's basic concept of "what business are we in?" Companies which define their mission as satisfying a broader range of consumer food and shopping needs will be far more flexible and farsighted than those who see themselves as restricted to the conventional supermarket format.

Generic Products. This tendency toward myopia may be evidenced in what appears to be a negative industry attitude toward generic products. There is evidence to suggest that generics are bound for greater heights than industry experts (including participants in the current study) believe, and that, particularly under inflationary conditions, they will in many instances achieve equilibrium market shares in excess of 30 percent.¹³⁴ Consumers across all income and educational levels appear to be satisfied with generic products; most users intend to continue purchasing them.¹³⁵ Thus, although adding a line of generic products may require substantial initiative on the part of the retailer, the long-term benefits of such a strategy appear greater than many in the industry believe, or are willing to admit.

Manufacturer Brands. In a related context, and in many respects an "unknown," is the nature and extent of large-scale retaliatory efforts by manufacturer brands in reaction to share losses to private labels

¹³⁴Burck, op. cit. p, 70; and Murphy and Lacznia, op. cit., p. 14.

¹³⁵Murphy and Lacznia, op. cit., p. 4.

and generic products. A number of respondents in the current study suggested that manufacturers of national brands will do whatever is required to recover and maintain market share against generics and private labels. Previously in this chapter, discussion addressed the likely intensification of the "battle of the brands," as retailers assign more favorable shelf positions, advertising space, and merchandising effort generally to private labels and, in some instances, generics. It was suggested in that discussion that the most popular two or three brands in a product category (in a given market area) probably will not suffer share losses, but that lower-ranking brands may be in some jeopardy. Thus, it is very likely that manufacturers of lower-ranking national brands will employ extensive retaliatory strategies. Some will be directed at consumer (i.e., "pull" strategies), such as increased advertising, increased couponing, more product innovations, or increased use of free or very inexpensive trial sizes. Others will be directed at channel member (i.e., "push" strategies) and will include increased manufacturer-supplied point-of-purchase displays, more inventory financing, financial incentives for favorable shelf-facings, and the like. What is not known is the extent to which these and other practices will prevail.

On a higher plane is the more general question regarding the effect which the anticipated rise in generic and private label share will have upon the manufacturer-retailer relationship. Both parties recognize the importance and mutual advantage of cooperation in maintaining an efficient distribution channel. On the other hand, as retailers grow larger, and the sales share of private labels and generics increases, the power base in the channel will continue to shift toward retailers.

This shift is likely to be significant during the 1980's, and will be tempered by the fact that manufacturer brands will surrender market share very grudgingly.

Over-Reacting to Inflation. Throughout this report, it has been stressed that price inflation will induce some profound, and not yet fully understood, changes in consumer behavior. Some market segments will be affected severely, while others will escape relatively unscathed. In this respect, retailers should be cautioned against over-reacting to inflation. The dramatic increase in the number of two-income households during the 1970's, and the increase in single-person households of above average per capita income,¹³⁶ plus an ever-growing professional and managerial class, all suggest large numbers of relatively affluent households during the 1980's upon whom inflationary impacts will be mild. These affluent segments will be extremely oriented toward convenience, and will demand higher than average quality and service as well. Because of their willingness to pay for these benefits, these segments offer high profit potential for the retailer who can convince them that he can better satisfy their needs.

Understanding Inflationary Impacts. This report has suggested that consumer behavior in the late 1970's was profoundly influenced by economic inflation and declining relative purchasing power. Beyond that, however, research evidence is far from complete in understanding more specifically the nature of these changes, and which consumer segments are, and will likely be, most affected. There are, however, historical and international precedents of periods of high inflation,

¹³⁶ James F. Engel, Roger D. Blackwell, and David T. Kollat, Consumer Behavior, 3rd ed., (Hinsdale, Illinois: The Dryden Press, 1978), p. 169.

as well as tremendous current opportunities to study its impact in many specific sectors of the economy. Of particular relevance to grocery retailers would be research explaining the interactions of inflation, brand loyalty, and price.

Upgraded Personnel. The grocery retailing industry has a tradition of recruiting its executive ranks from store personnel who have worked themselves up through the organization. The 1980's will require the recruitment of data analysts and skilled strategic and marketing planners who, of necessity, will be brought in from outside the organization. Salary offers to top business school graduates and quantitative analysts will need to be competitive if top quality personnel are to be attracted to the industry. This will require major adjustments on the part of middle and upper managers who frequently will resent the salaries and authority awarded to relative newcomers in their organizations.

This discussion of potential problem areas is incomplete, as its purpose has been one of illustration rather than one of providing an exhaustive inventory. It is, above anything else, a recommendation that retailers maintain a receptiveness to novel ideas as they look for better ways of serving customers in the 1980's, and for higher profits.

Success Strategies

What will be the better ways of satisfying customer needs and of earning higher profits in the 1980's? Throughout Rounds 2 and 3 of the questionnaire in the current study, industry experts were asked to suggest specific and overall company strategies for successfully coping with likely future events. Chapter IV reported the most popular suggested "strategies for a retailer" with respect to the fifteen

questionnaire events, as well as those overall corporate strategies which were thought will prove most successful in the 1980's. Additionally, combining the results of this study with those of other forecasts for the industry helped to suggest some of the strategies which are discussed below.

Segmentation and Consumer Orientation. That there appear to be several successful overall strategies for retailers in the 1980's is a result in large part of the emergence and recognition of several large market segments--unique combinations of consumer needs and "benefits sought." Successful marketing strategies require this recognition as a critical first step in the construction of a marketing "mixes" designed specifically to address the needs of one or more segments.

The conscious selection of specific segments with high potential is but one of the input data in the basic strategy planning process. A host of other external, or "uncontrollable" variables also must be considered, including political and legal impacts on the industry, new technology opportunities, economic conditions, other members of the procurement and distribution channels, and, very importantly, competition. Examination of all these variables is then molded and tempered by the objectives and resources of the organization to yield the most appropriate market segment(s) to serve, and the mix of means by which they are to be served. This mix includes such aspects such as width and depth of product assortments, services, pricing policies, distribution methods, site locations, and promotions. Careful monitoring of the purchasing behavior and demands of a company's target segments is crucial in the design and refinement of these mix elements, and requires, in many

respects, a genuine consumer orientation. The benefits, in terms of increased sales and heightened utility, may be significant indeed.

Productivity, Technology, and Labor. Total labor costs, including benefits, in the industry were reported to constitute some 70 percent of total gross income in 1978.¹³⁷ Additionally, labor costs have been predicted, both in the current study and in others, to rise sharply in the 1980's. Simultaneously, many companies installing UPC scanning equipment in 1979 were anticipating returning that investment in less than two years.¹³⁸ While other labor reducing technologies will not pay back quite so rapidly, the growth of central meat processing and warehouse automation also will be pronounced, and may be restricted only by shortages of investment capital within the industry.

There are also means for reducing labor and other overhead costs which rely on simplifying and eliminating some services. Thus, while productivity measured in sales per foot of shelf space or per employee hour, for example, may be relatively high in the limited assortment and warehouse stores, the technology in such operations may be primitive by current standards.

Large Chains and Bigger Stores. The belief was expressed in answers to Round 1 questionnaires that large chain operations will tend to focus their efforts in urban and suburban areas during the 1980's. A large part of this trend may be attributed to scale economies in distribution center operations and in retail stores. Successful larger

¹³⁷ Best Foods Division of CPC International, "Projections for the Retail Grocery Industry," op. cit., p. 1.

¹³⁸ Ibid., p. 2.

chains will be better able to raise investment capital for continued expansion into growing urban areas. This expansion will be through the opening of larger stores, especially super stores and combination stores, whose volume is sufficient to justify the most advanced technology available. Furthermore, the size, assortment, and location of these stores will enable virtual one-stop shopping for consumers, a time and fuel saving benefit which they will seek increasingly.

Large Chains and "Newcomers," the Limited Assortment Stores. The format and relative advantages of the limited assortment store were described in Chapter II. Because of their emphasis on private labels and generics, a reasonably large volume of operation (i.e., several stores) is required for them to be financially viable. Many large chains are experimenting with these store formats and are finding them extremely popular and profitable. Aldi, a company which pioneered the limited assortment concept in Germany, but which is relatively new to U.S. operations, opened over 50 stores in the U.S. in 1979.¹³⁹ Some industry authorities have warned that other newcomers to the domestic grocery system including foreign companies and U.S. companies from other industries may capture large portions of grocery sales, largely as a result of their receptiveness to new methods.

A concept which may prove even more successful than the limited assortment store is that of the "expanded limited assortment store" which features the addition of a limited line of basic staple perishables such as produce, dairy products, and, in some cases, meat. In many instances, this expanded concept does in fact enable one-stop

¹³⁹Class discussion with an Aldi regional manager, Food Systems Marketing program, Michigan State University, (April, 1979).

grocery shopping, at least for several weeks at a time until a household needs to replenish slower turnover and specialty products not found in these stores.

The limited assortment store can be located in neighborhoods as opposed to central shopping areas and requires smaller facilities (10,000 square feet or so) which are common and often quite inexpensive to lease or buy such as old supermarket buildings, storage facilities, commercial garages, bowling alleys, etc. The price advantages which it offers to the consumer will become more appealing as inflation continues. Inflation may also encourage a "back to basics" consumer attitude toward food products such that many will be content with a smaller product assortment for most of their shopping.¹⁴⁰ The addition of a limited selection of perishables to this limited assortment format appears to overcome at least partially its major disadvantage--the preclusion of one-stop shopping. In 1979, the A & P "Plus" stores and the Jewel Company's "Jewel T" stores were examples of this expanded limited assortment concept, which is expected to prove very successful.

Independents and the Warehouse Store. The warehouse store (described in Chapter II) typically features 2,500 to 3,000 items, including more popular produce (usually pre-wrapped), dairy, bakery, meat, and frozen items. Typically, between ten and forty items are carried in each of these categories. Although warehouse stores may carry generic

¹⁴⁰Such a situation is entirely consistent with the lifestyle and shopping patterns of a rapidly growing segment of consumers known as "voluntary simplifiers"--middle-class families beset by declining purchasing power who are cutting back significantly in purchasing and seeking less complex lifestyles. These are among the conclusions of Avraham Shama--whose research into the impact of recession on the middle class has been reported in the Marketing News, (March 21, 1980), p. 1.

products and an extensive private label lines, national brands are very much in evidence. While prices are not as low as those found in limited assortment stores, prices are low on a wider spectrum of products such that for a consumer's total food needs, prices may tend to be more attractive overall. In these respects, the warehouse store is felt to overcome some of the possible weaknesses of the limited assortment store.¹⁴¹

The warehouse store format should be particularly attractive to very small chains and independent owners, for a number of reasons. First, these stores are relatively easy to operate. Private labels are often available through wholesaler cooperatives, and manufacturer brands are easily procured. A relatively small initial investment is required. Further, it is likely, according to Round 1 data from the current study, that small chains and independently owned stores will gain greater market share dominance in rural areas and smaller, remote communities. These areas are less likely to attract limited assortment stores and the larger, super store formats. Thus, warehouse stores may be virtually unchallenged in serving extremely price conscious segments in rural areas and smaller communities. Finally, it is feasible for an independent owner, faced with a smaller conventional supermarket, old and fully depreciated store equipment, and a poor financial position, to convert his operation to the warehouse store format with relative ease.

The "Revised" Conventional Supermarket. In many respects, the preceding discussion of successful retailer strategies for the 1980's has focused on major new store formats which will serve growing and

¹⁴¹Telephone conversation with Mr. Willard Bishop, consulting economist, February 13, 1980.

significant, but somewhat peripheral segments around the large core market served very satisfactorily by the conventional supermarket. The term "conventional" does not refer to a static condition; this store format is evolving continuously. In the late 1970's, some of these evolutionary directions included larger average store sizes, expanding lines of general merchandise with higher than average gross margins, increased promotional expenditures, centrally processed meats, and the use of the UPC scanning equipment.

The conventional supermarket will continue to account for the largest single share of industry sales throughout the 1980's. However, its description in 1990 may differ significantly from that of 1980. The more successful "conventional" supermarkets and the chains made up of these stores will be innovative in a number of ways;

First, conventional supermarket chains will be perceived as the mainstay for manufacturers' brands. Thus, management will be able to place certain demands on these manufacturers, such as additional discounts for carrying a full-line, or for providing favorable shelf positioning, or for cooperating with promotional themes and point-of-purchase displays. They might successfully demand some degree of inventory financing, particularly for slower turnover items. They also might be able to negotiate for more favorable delivery conditions. In general, they will demand increased services from manufacturers; to a significant extent, manufacturers will comply.

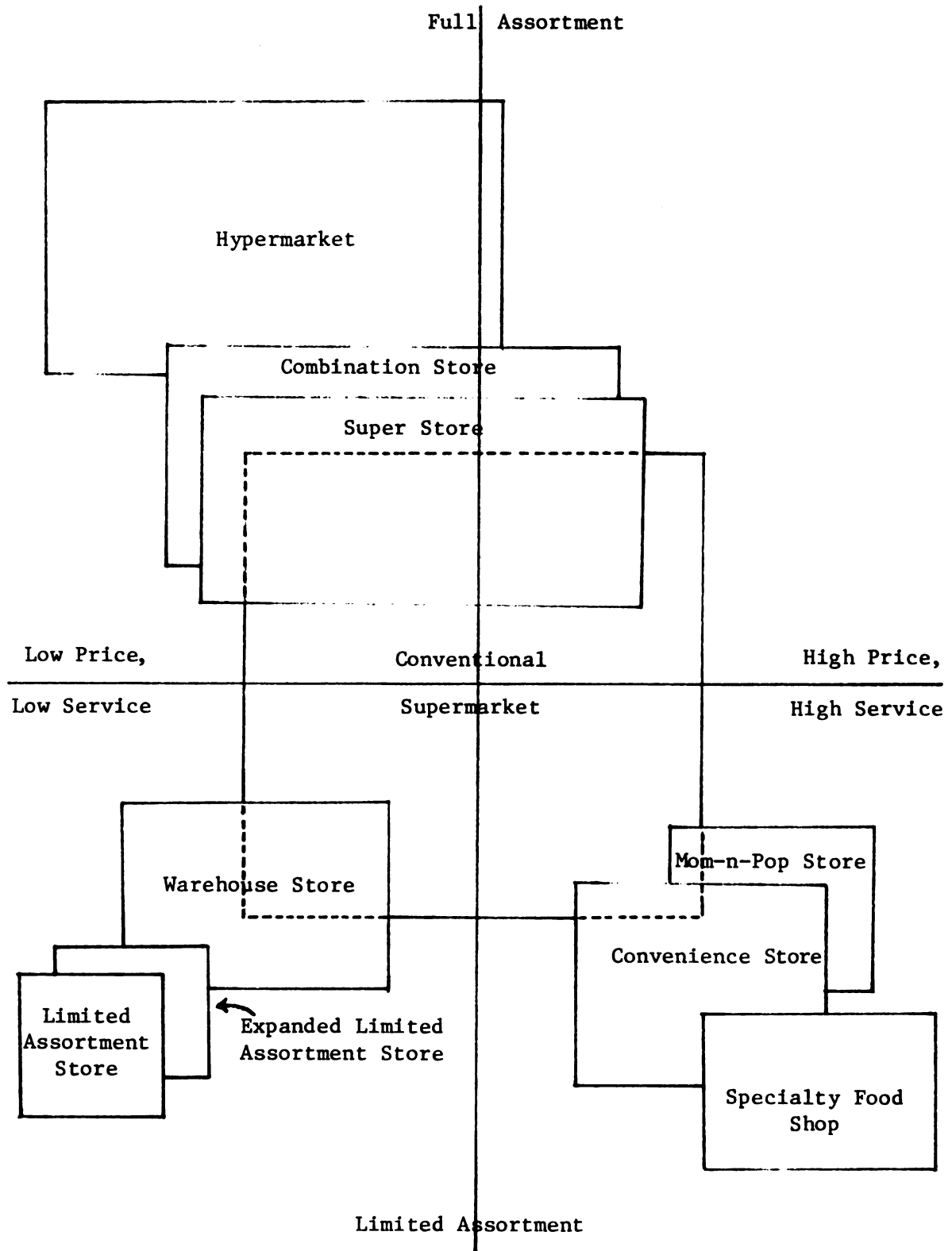
Secondly, where a conventional store is locally in competition with a limited assortment store, it may be absolutely necessary for the conventional supermarket to discount very competitively the several hundred items available at the other store. Perishables also should be

emphasized in such a situation, along with health and beauty aids, delis, and other departments not found at the limited assortment store.

Third, as inventory carrying costs continue to climb, and as there is ever-increasing competition among products for shelf space, conventional supermarkets may reduce the number of brands stocked per product category and allocate that shelf space to more general merchandise and other non-grocery departments. This reduction in the number of brands may also be in response to very heavy local price competition. Under these conditions, the conventional supermarket may feel compelled to lower prices in order to compete, but will face a relatively inflexible cost structure. A reduction in the number of brands stocked per category and general elimination of slow moving items will ease these cost pressures somewhat.

The Supermarket "Space". When is a supermarket not a supermarket? Although Chapter II described some generally agreed upon guidelines for the definitions of store formats, it should be evident that these formats occupy some overlapping positions, such as depicted in Figure 2. The figure attempts to position store formats according to the variables of price/service, and width of assortment. The conventional supermarket is placed at the center of this space, and the other format positions are defined relative to it. Note the concentration of formats toward the low price/low service side, a reflection of growing consumer price consciousness in the 1970's and the importance of price as a competitive weapon. It is difficult to predict the extent to which there will be a shift toward higher price, higher service formats as the U.S. eventually recovers from high inflation rates, although some movement in that direction should be expected.

Figure 2. Retail Food Store Format Positioning



In the lower left quadrant of Figure 2 is the warehouse store, which in many instances may fulfill the criteria for definition as a supermarket. Directly below this is the expanded limited assortment store, and below that the "standard" limited assortment store, with its extreme price emphasis, lack of national brands, and narrow selection.

Directly above the conventional supermarket is the super store, which is larger, carries a greater assortment of general merchandise, and features a wine or gourmet shop, an on-premises bakery, or some similar "non-conventional" departments. In effect, many of the stores opened in the 1970's fit this super store description, although they may also be perceived by consumers as large supermarkets. Above the super store is the combination store, with its large drug and expanded general merchandise departments.

Figure 2 also reveals that some formats are situated on the "fringes" of this space, such as the hypermarket, the limited assortment store, and the convenience store. It is interesting to observe that these three formats are not especially grounded in the conventional supermarket tradition; that is, they are expanding their market toward that served by the conventional supermarket. Many successful companies utilizing these store formats have backgrounds in areas other than grocery store retailing.

It is also important to realize that a retail chain can successfully occupy several positions at once in the space depicted in Figure 2, by presenting truly different store formats. Thus, some chains in the late 1970's operated separate divisions for limited assortment, conventional, and combination stores respectively.¹⁴² This multiple-format

¹⁴²From remarks made by Mr. Don Ritchey, Chairman of Lucky Stores, Inc.

positioning strategy, though restricted to larger chain operations, offers management the benefits of being able to serve a much wider variety of consumer segments. There is some question as to whether common distribution facilities should be utilized, and whether (and to what extent) the divisions should be identified with one another. These and other "mechanics" of offering several store formats simultaneously will become more refined during the 1980's.

The Role of Industry Trade Associations

Throughout the current study, respondents referred to trade association activities primarily in a context of political representation. Dominant responses to questions concerning the industry's means of insulating itself from external influences dealt with active involvement in the political process, particularly by trade associations in a lobbying context. This in fact was the trend for the industry's largest trade associations, in the late 1970's, to their strengthened lobbying efforts. In this respect, it is interesting to note that the trade associations' missions have become more to represent the industry and act on its behalf in confronting external influences, balanced with the more traditional missions of coordinating internal activities such as trade shows, conventions, workshops, and the like. With political pressures upon the industry in the late 1970's, such as charges of reduced competition suggested by Marion, et. al., in 1977, there is additional incentive for the trade associations to de-emphasize programs which bring industry executives together to talk about their businesses. It is possible that such programs might be construed as being, or facilitating, activities which lessen competition. Thus, it appears for two

reasons that the primary mission of industry trade associations in the 1980's will be one of representation in the political arena.

In the current study, several of the Academicians in the sample mentioned another important contribution which can be made by industry trade associations--continued sponsorship of research and the dissemination of results to members. Finally, study participants suggested that trade associations can play a more significant role in standardization efforts, particularly with respect to shipping container dimensions and modularization possibilities using multiples of these dimensions. Trade associations could in this instance provide an information gathering and disseminating function in defining the industry's desires and requirements for standardization, and then could represent the industry in negotiations with manufacturers.

Conclusions and Recommendations

The grocery retailing industry is complex, multi-echeloned, multifaceted, interactive, enormous, and heavily influenced by exogenous variables. For these reasons, it was suggested in Chapter I that a forecasting technique at once more qualitative than complex econometric methods, and less reliant on trends than time series forecasts be utilized to structure the research. The selection of the Delphi method was most logical under these conditions.

Evaluation of the Delphi Method

In many respects, the mechanics of a "properly conducted" Delphi study are cumbersome and expensive. In the current study, Round 1 questionnaire administration and the initial selection of participants was largely the responsibility of the research staff at Progressive

Grocer magazine. In spite of this assistance with Round 1, the mechanics of the current study seemed both cumbersome and expensive. Three questionnaire rounds involve extensive communication efforts with participants. In Rounds 2 and 3 of this study, participants were sent questionnaires and follow-up postcards, and non-respondents subsequently were sent follow-up questionnaires. In addition, three questionnaire rounds require extensive coding, analysis, and summarization in order to present feedback to respondents in the succeeding round.

There was only one other "negative" aspect of the Delphi method which proved to be of consequence, and the method itself cannot be held at fault for it. Any qualitative, judgment-based study will be hard-pressed, as was this study, to provide quantitative evidence to substantiate many of its conclusions. Rather, the data represent "feelings." However, they are the pooled feelings of industry experts. Furthermore, early solicitations of these feelings were shared in subsequent questionnaire iterations and, as will be discussed below, convergence of opinion did occur. Repeatedly, the accuracy of this method of forecasting has proved comparable to that of econometric and time-series forecasts.¹⁴³ In spite of this history, and in spite of the logic of the method, its lack of "hard data" generation proved frustrating. As was discussed in Chapter III, humans tend to seek simple solutions to complex problems; perhaps the subconscious wish of this researcher was also to find simple answers with the assistance of "hard data." As this report hopes to have made clear, the answers are not simple.

¹⁴³Linstone and Turoff, op. cit., p. 16.

It should be realized, of course, that "hard data" do not guarantee a good forecast. There can be false comfort in quantitative results drawn from speculative, inaccurate, or uninformed sources. In this context, although the current forecast is based largely on the "feelings" of industry experts, there should be little question that it accurately reflects these feelings. In this respect, the Delphi method proved quite satisfactory. A number of additional positive aspects of the Delphi method as experienced in the current study are deserving of mention:

First, consensus does occur. Table 21 provides overall vote distributions for each of the fifteen events investigated in all three iterations of the questionnaire. Note that in the majority of cases consensus increased with each questionnaire round. This demonstrates that quite basically, the Delphi method works; sharing feedback data with respondents does effect a change toward consensus in the distribution of judgments in the succeeding round.

Second, although the subject matter of the study certainly was of interest to respondents whose professional careers are intimately associated with the industry, the Delphi method itself was partially responsible for the high level of participant cooperation. In particular, the feedback mechanism doubtless was educational for respondents, who were able to examine the total distribution of judgments about event statements before casting their votes for the next round. In Round 3 questionnaires, respondents also were provided with single paragraph summaries of the open-ended comments solicited in Round 2 to explain the logic behind the judgments. One possible explanation for the high questionnaire return rate in Round 3 (80 percent overall) is that this

Table 21. Vote Distributions by Round for Fifteen Event Statements

EVENT NUMBER	EVENT NAME	VOTE DISTRIBUTIONS BY ROUND - TOTALS				ACAD/CEO SPLIT	DEGREE OF CONSENSUS
		"VOTE"	ROUND 1	ROUND 2	ROUND 3		
1	Limited Assortment Stores	By 1984 By 1989 After 1990 Never	49% 21% 10% 20%	65% 9% 13% 13%	68% 12% 10% 10%	Slight	Strong Consensus
2	Convenience Stores	By 1984 By 1989 After 1990 Never	11% 23% 22% 44%	13% 17% 20% 50%	8% 22% 25% 45%	None	Slight Reverse
3	Food-away-from-home	By 1984 By 1989 After 1990 Never	14% 30% 19% 37%	9% 27% 17% 47%	5% 29% 20% 46%	Major	Slight Reverse
4	Brand Loyalty	By 1984 By 1989 After 1990 Never	44% 14% 5% 37%	43% 20% 0% 37%	42% 15% 0% 43%	Slight	Split
5	Item Pricing	By 1984 By 1989 After 1990 Never	15% 39% 28% 18%	11% 50% 28% 11%	2% 75% 18% 5%	Slight	Strong Consensus
6	Data Analysts	By 1984 By 1989 After 1990 Never	34% 30% 13% 23%	6% 47% 9% 38%	2% 57% 3% 38%	Slight	Consensus
7	Quality and Service	By 1984 By 1989 After 1990 Never	48% 20% 6% 26%	27% 11% 13% 49%	22% 17% 2% 59%	Slight	Consensus
8	Meat Sales	By 1984 By 1989 After 1990 Never	22% 21% 15% 42%	11% 22% 13% 54%	5% 26% 19% 50%	None	Slight Reverse
9	Modular Meals	By 1984 By 1989 After 1990 Never	11% 35% 28% 26%	2% 36% 32% 30%	2% 33% 35% 30%	Slight	Split-Moving Toward Consensus
10	Generic Products	By 1984 By 1989 After 1990 Never	10% 13% 12% 65%	4% 17% 11% 68%	2% 8% 14% 76%	Slight	Strong Consensus
11	Central Meat Processing	By 1984 By 1989 After 1990 Never	16% 37% 39% 8%	9% 51% 34% 6%	4% 76% 20% 0%	Slight	Strong Consensus
12	Private Label	By 1984 By 1989 After 1990 Never	20% 32% 16% 32%	4% 47% 20% 29%	3% 61% 13% 23%	None	Consensus
13	Scanning	By 1984 By 1989 After 1990 Never	24% 53% 21% 2%	17% 72% 11% 0%	18% 79% 3% 0%	None	Strong Consensus
14	Gross Margin	By 1984 By 1989 After 1990 Never	31% 32% 10% 27%	16% 16% 7% 61%	3% 19% 7% 71%	Slight to Moderate	Strong Consensus
15	Sales per Manhour	By 1984 By 1989 After 1990 Never	47% 39% 8% 6%	35% 59% 6% 0%	11% 85% 2% 2%	None	Strong Consensus

sharing of information may have sparked considerable interest among participants in the study.

In this respect, it is hoped that the current study has helped to generate new levels of interest about the industry's future. If this proves to be the case, the Delphi method is deserving of considerable credit as a significant communication vehicle.

Despite the negative aspects of the Delphi method discussed above, the overall evaluation of the technique is "very good." Given the complex nature of the grocery retailing industry, it is doubtful that any other forecasting methodology will prove to be more feasible or valuable for some time to come.

Accuracy of the Predictions

The research described in this report drew heavily from a comprehensive review of literature related to the topic, and from original research conducted over three Delphi iterations of questionnaires to industry experts. Thousands of responses, and hundreds of comments were elicited about various aspects of the industry's future.

Overall, there was evidence of consensus in the findings at two levels. First, as described above, the primary data revealed consensus on most of the topic areas selected for investigation, particularly as the research progressed through Round 3. Secondly, the predictions following from these data complement, for the most part, the predictions of previous industry forecasts discussed in Chapter II.

Together, these two levels of general consensus should enhance confidence in the reliability of this study's predictions, i.e., that another rigorously constructed industry forecast would predict essentially the same future. This consensus also might be expected to

increase the ultimate accuracy of the forecast. However, it should be recognized that the future of the industry is extremely vulnerable to external influences such as economic conditions or governmental intervention, and that at the end of the 1970's, many of these influences were highly uncertain and frequently changing. Major unanticipated shifts in these variables would result in significantly different scenarios from those described earlier in this chapter.

Also, forecasts may have self-defeating and self-fulfilling aspects. In this respect, a forecast which warns of doom, and which thereby motivates efforts by which doom is averted, would prove highly inaccurate but quite successful insofar as value to the industry is concerned. Martino argued, for example, that the value of a forecast lies not in its ultimate correctness, but rather,

. . . must be based upon its contribution in providing information to a decision making process. In many instances, the decision maker can exert some degree of control over the outcome of a particular forecasted condition. Hence, he may take actions tending to make the forecast incorrect whenever a discrepancy exists between the particular outcome forecasted and his desired outcome.¹⁴⁴

Hopefully, the predictions of this study will prompt corporate research efforts toward construction of optimal strategy plans for the 1980's. Even if the strategies that do succeed in the 1980's are not those suggested in this report, it is hoped that this study will have proved useful in motivating and directing some of the research efforts upon which successful strategies will have been based.

¹⁴⁴ Martino, in Linstone and Turoff, op. cit., p. 26.

Suggestions for Further Research

The current study has uncovered a number of areas deserving of further research about the industry's future. The coverage of topic areas in the questionnaires was necessarily limited, and many of the data generated are far from conclusive, being in fact contradictory (i.e., split vote distributions) or provocative (i.e., yielding additional research questions). Following are a few of many possible suggestions for further research.

Inflation Impacts. In general, the study reveals how little was known in 1979 about the impact of real, or perceived, or anticipated high rates of economic inflation upon consumer attitudes and behavior. Doubtless these are areas which will receive extensive research attention in the 1980's. Much of this research should be focused in the area of food products and eating habits.

Generic Products. The eventual impact of generic products should be investigated by forecasting the equilibrium market shares in various product categories. Further, although there is evidence to suggest that it is former users of manufacturer brands who have switched to generics more than private label users, it is plausible that there is a two-stage brand switching process at work.¹⁴⁵ In other words, as a reaction to inflation there has been a decline in overall brand loyalty such that while some consumers have switched from manufacturer to private labels, even more have switched from private labels to generics. While a complete explanation would probably involve both possibilities, little consideration has been given to this alternative possibility.

¹⁴⁵Murphy and Laczniaak, op. cit., p. 13.

Meat. The future of meats and meat distribution systems holds many facets deserving of integrated study. Several of the respondents in Round 3 of the current study felt that Americans will slowly shift their diet habits away from meat, particularly red meat, as prices become too high relative to substitute foods, and as health consciousness in the population encourages consumption of foods possessing superior perceived health benefits. Others in the sample disagreed, of course, but the price elasticity of demand for meat, and changing consumer perceptions about the role of red meat in a healthful diet are issues deserving of attention. Similarly, improved meat distribution methods need to be explored, and the trade-offs fully understood between an optimally efficient system (i.e., 100 percent central processing, no retail preparation) and one which maximizes customer service (i.e., customer cutting in the store). In a related context is the future for frozen meat distribution, a proposal which consumers may be unwilling to accept, even though virtually all of their negative beliefs about frozen meat appear to be perceptual in nature and not based on fact.¹⁴⁶

Store Sizes. Optimal store sizes, from a total cost and total service perspective, should be studied. In the current study, some respondents felt larger stores will be a key success strategy, while others felt that successful store sizes will be smaller in order to minimize energy costs and to serve more precise market segments.

There are myriad other worthwhile research areas pertaining to the future of the grocery retailing industry, and the above discussion has

¹⁴⁶ This topic was discussed in a seminar conducted by Professor John Allen, Food Systems Management program, Michigan State University, (October, 1978).

addressed but a few. On a more or less continuing basis, there is much research in other topics relevant to the industry being conducted by private companies, government agencies, and university scholars. Much of it pertains to the major strategic areas of concern for the 1980's, such as determining and serving customer needs, improving productivity, or extracting fuller utilization of UPC scanning data.

There is one additional suggestion for further research, however, which would be based to some degree on the findings of this study. In a dynamic industry, there is a need for frequent revisions of industry forecasts. Just as the current study has used predictions from previous forecasts as reference points and trend indications, so also should industry forecasts subsequent to the current study examine its predictions as possible input. In this respect, a subjective "moving weighted average" of the forecasts and conclusions of recent industry studies may correct for predictions which are missing the mark.

This is perhaps the greatest contribution of the current study--its potential usefulness in the construction of succeeding and more comprehensive forecasts. Not incidentally, another contribution is hoped to be the generation of increased interest in the industry's future among industry experts who participated in the study. As this report may have demonstrated, the industry is complex; interactions and impacts are multi-faceted, and the industry is profoundly affected by developments largely beyond its control. This suggests that it may be some time before a comprehensive econometric model of the industry is constructed and tested successfully. The current study and the others which have been considered in this report, can be of assistance in determining and quantifying some of the variables which would necessarily

appear in such an econometric forecasting model. In the meanwhile, however, the current study and other similar and recent studies must serve as the most comprehensive forecasts available to the industry.

APPENDIX

APPENDIX

ROUND 1 EVENT STATEMENTS AND RESPONSE DISTRIBUTIONS

	By 1984 (%)	By 1989 (%)	After 1990 (%)	Never (%)
1. Top 10 chains account for 35% of total retail food store sales (up from 29% today).	21	33	13	32
2. *Warehouse stores, limited assortment stores, and other low overhead-low price outlets double their present share of total national volume (est. 3-5% today).	49	21	10	20
3. *Convenience stores account for 10% of total industry sales (up from 4.9% today).	11	23	22	44
4. Super stores (minimum 30,000 sq. ft., \$150,000/week sales in today's dollars, extensive non foods and service depts., wide brand selection) account for 35% of retail food store sales (up from 25% today).	26	39	22	13
5. 80% of all chain supers located in urban and highly populated suburban areas (up from 70% today).	23	40	19	19
6. Due to inflation and concentration on larger units, average annual volume of chain supermarkets hits \$8 million (today's average \$4.5 million).	19	50	26	4
7. 5,000 limited assortment stores in operation (up from less than 1,000 today).	22	29	21	28
8. 40,000 supermarkets in operation (today: 33,400).	13	32	31	24
9. 40,000 convenience stores in operation (today: 32,000).	28	40	22	10
10. 25,000 supermarkets in operation (today: 33,400).	9	23	23	45
11. *Food-away-from-home accounts for 50% of total food dollars (up from 37% today).	14	30	19	36
12. *Consumer loyalty to brands declines significantly.	44	14	5	37
13. Coupon redemption by consumers (increasing for some time) falls below year-earlier total.	25	20	10	44

*Item was also included in Rounds 2 and 3.

APPENDIX (Continued)

	By 1984 (%)	By 1989 (%)	After 1990 (%)	Never (%)
14. Microwave ovens, improved convenience foods, etc. stimulate eating at home and slow the relative growth of eating out.	44	22	8	25
15. Number of weekly shopping trips declines due to job-holding women, high gasoline prices, and other factors.	86	5	1	8
16. Retailers reduce number of brands stocked per category.	59	15	6	20
17. Consumer loyalty to stores declines significantly.	43	12	5	40
18. Impulse buying increases as a result of changing shopping habits.	51	11	6	32
19. Food expenditures, for home and away from home consumption, exceed 25% of consumer disposable income (17% now).	20	22	15	42
20. Consumers spread shopping across more supermarkets.	40	10	6	44
21. Percentage of retail transactions accounted for by men doubles.	23	29	18	29
22. "Non-store buying" (via electronic or phone ordering and home delivery) accounts for 10% of total volume in one or more major markets.	8	15	40	37
23. UPC scanning-assisted improvements in shelf space allocation increases return/shelf foot by at least 15%.	35	46	14	6
24. Typical supermarkets carry 20% more items than today.	22	36	16	26
25. Store-door delivered items account for 33% of supermarket sales (up from 25% in 1979).	20	22	8	49
26.*Individual item price marking virtually eliminated.	15	39	28	19
27. Retailers make much more use of radio and TV ads. These media get 25% of total retail food ad expenditures (12% now).	19	32	21	28

*Item was also included in Rounds 2 and 3.

APPENDIX (Continued)

	By 1984 (%)	By 1989 (%)	After 1990 (%)	Never (%)
28. Use of manufacturer-supplied store display and merchandising materials increases significantly.	42	16	4	38
29. Most chains give more autonomy to store managers to encourage individualized merchandising activities geared to local neighborhood.	43	22	5	30
30.*Data analysts at chain headquarters initiate almost all merchandising and promotion programs.	33	30	13	23
31. Trend starts toward fewer hours of operation for supermarkets.	48	23	7	21
32. Most large supermarkets routinely receive drop shipments of pre-built, palletized special displays.	34	36	20	11
33. Average supermarket transaction (in today's dollars) reaches \$15.00 (today: \$10-\$11).	72	23	3	2
34.*A significantly larger number of retailers successfully use quality and service (rather than price) as primary draw.	48	20	6	26
35. Trading stamps make a comeback. More than 40% of supermarkets offer them.	10	14	10	66
36. High volume supermarkets almost universally favor bulk produce over prepackaging.	55	18	6	22
37.*Meat sales, now about 20%, drop below 15% of total store volume.	22	21	15	42
38. Fresh produce sales, now about 8%, climb to 15% of total store volume.	15	22	11	52
39. Store out-of-stock no longer a major problem.	12	4	4	80
40.*Preprocessed modular meals--TV dinners and their extensions--triple present sales.	11	35	28	27
41.*Unit sales of generic fruit and vegetable items increase to ten times their present level.	10	13	12	65

*Item was also included in Rounds 2 and 3.

APPENDIX (Continued)

	By 1984 (%)	By 1989 (%)	After 1990 (%)	Never (%)
42. Unit sales of generic paper products increase to ten times their present level.	17	20	15	48
43. Unit sales of generic soap and detergent items increase to ten times their present level.	12	15	14	58
44.*More than 25% of all fresh meat sales are in the form of centrally processed retail-ready cuts requiring no store level preparation.	16	37	39	8
45. Products designed for microwave ovens account for 10% of total food sales in supermarkets.	16	37	34	13
46. Grocery department sales fall below 40% of total store volume (down from about 50% today).	9	28	25	39
47. Boxed beef accounts for 90% of fresh beef sales.	45	34	16	5
48. General merchandise (excluding H&BA) accounts for 7.0% of total supermarket sales (up from 3.2% today).	18	42	26	14
49. Plastic packaging replaces more than 10% of the cans and bottles now on food store shelves.	17	37	26	20
50.*Private labels, including generics, double their present share of sales.	20	32	16	32
51. Many chains <u>upgrade</u> private labels, offer top-most quality merchandise in superior packaging as high-class counterpart to generics.	34	35	9	21
52. Electronic funds transfer installations in half of all supermarkets.	7	38	44	12
53. Advent of the retort pouch, aseptic packaging, radiation preservation, etc. brings significant reduction in the need for refrigeration.	3	32	55	10
54. Energy costs force major cutback in frozen food space allocation.	26	26	11	38
55.*Full-scale scanning in operation in 10,000 supermarkets (about 1,000 today).	24	53	21	2

*Item was also included in Rounds 2 and 3.

APPENDIX (Continued)

	By 1984 (%)	By 1989 (%)	After 1990 (%)	Never (%)
56. Many supermarkets use burglar proof vending machines to dispense staples during hours when the store is closed.	4	16	40	41
57. Some kind of eating facility included in one out of four large supermarkets.	25	39	23	13
58. One-quarter of all newly-opened supermarkets contain prescription pharmacies.	12	40	33	15
59. "Backroom" area of new supermarkets drops to 20% of total footage (down from about 30% for supers opened in 1979).	39	38	12	11
60. Many stores receive dairy items in wheel-in "modules" ready for insertion into the case.	34	43	18	5
61. Almost all direct-delivered merchandise is checked in and verified on electronic equipment at time of delivery.	11	39	42	8
62.*Gross margin of standard supermarkets exceeds 25%.	31	32	10	27
63. Store labor cost, as a percent of total sales in standard supers, are 50% above 1979 level.	24	39	20	17
64. Four-day work week generally observed in supermarket full-time labor force.	8	29	32	32
65. More part-time than full-time employees in supermarkets.	60	25	5	10
66. Clerks and meatcutters unionized in 40% of independent supers (up from 20-25% today).	11	24	19	46
67. Retailers' advertising expenditures double to 2% of store sales.	24	31	12	34
68. Conservation measures and new technology decrease supermarket energy usage by 25%.	30	41	22	7
69.*Supermarket sales per man hour (in constant dollars) increase by 10%.	47	39	8	6
70. National legislation requires forced deposits on beer and beverage containers.	28	34	12	25
71. Value added tax imposed at wholesale.	16	25	21	38

*Item was also included in Rounds 2 and 3.

APPENDIX (Continued)

	By 1984 (%)	By 1989 (%)	After 1990 (%)	Never (%)
72. Energy conservation regulations limit permissible hours of operation.	30	30	15	24
73. Regulations require on-shelf identification of products with suspected health hazard ingredients.	43	37	12	9
74. Regulatory agencies threaten continued existence of grocery trade associations.	14	16	9	61
75. Retail food store sales hit \$300 billion a year (1978: \$180 billion).	12	58	29	1
76. Mandatory wage and price controls in effect.	55	13	6	26
77. Backhauls in general use.	79	16	3	2
78. Manufacturers shift to FOB pricing for most products.	41	26	6	27
79. Sharp reduction of dealing by manufacturers upsets prevailing profit structure of wholesalers.	34	18	8	40
80. Gasoline rationing in effect.	65	9	4	22
81. Store calls by manufacturers' salesmen decline 25% from present level.	67	24	4	5
82. Most manufacturers extend the cash discount period on slower-moving items.	33	16	6	45
83. Consumer price index for food-at-home reaches 300 (1967: 100; 1978: 211).	47	46	6	1
84. "Real" growth improves for supermarket industry. Annual rate at 4% (1-2% today).	19	26	17	37
85. Annual rate of food price inflation drops below 5% (assume no price controls).	17	24	18	42
86. Merger of retail clerks' and meatcutters' unions, plus growing union membership penetration makes national strike of supermarket employees feasible.	27	26	15	32
87. Industry-wide computerized system in place, linking manufacturers and buying offices. Machines handle routine ordering and invoicing.	13	42	40	5
88. Profits for supermarket industry drop sharply. Extreme shortage of investment funds exists.	33	21	4	43

APPENDIX (Continued)

	By 1984 (%)	By 1989 (%)	After 1990 (%)	Never (%)
89. Independents account for 80% of food store sales in rural and outlying counties, as chains virtually abandon low-density population areas.	22	42	9	26
90. Chains increase their share of retail food store sales to 55% (currently slightly under 50%).	17	27	14	42
91. Noticeable progress in "modularization" of shipping cases.	36	49	11	3
92. Practical pallet exchange program in existence.	34	26	7	32
93. Most warehouse-to-store information is transmitted by electronic equipment that produces "hard copies" for the recipient.	30	56	12	2
94. Wholesalers' (chain and distributors') management teams include twice as many business school graduates as today.	26	53	17	4
95. Total annual sales of wholesale grocers (in today's dollars) exceed \$70 billion (that would be a 10% gain over the present \$64 billion).	73	22	3	1
96. Due to mergers and attrition, the number of full-line wholesale grocery firms drops below 1,300 (now just over 1,400, of which 950 are unaffiliated).	60	33	4	3
97. Fewer than half of top 25 chains operate their own distribution centers.	7	30	21	42
98. Number of grocery distribution centers declines 15% from present total.	24	52	20	5
99. "Supplementary warehouses" (set up to handle slower-moving items) in operation in most major markets.	22	37	21	21
100. Median number of items in wholesale distribution centers reaches 9,000 (up from 7,700 in 1979).	29	47	9	14
101. Output per man hour in grocery distribution centers improves by 10% over present level.	21	50	15	13
102. Warehouse "scratches" decline significantly. Service level of most major distribution centers exceeds 95%.	33	30	8	28

APPENDIX (Continued)

	By 1984	By 1989	After 1990	Never
	(%)	(%)	(%)	(%)
103. Private labels account for 15% of wholesalers' dollar volume (up from about 12% today).	51	28	5	16
104. Three out of four group-sponsoring wholesalers carry "generic" lines.	31	8	3	57

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