RETAIL MANAGEMENT MIX STRATEGIES OF RETAIL GROCERY ESTABLISHMENTS BELONGING TO A RETAILER-COOPERATIVE IN THE STATE OF TEXAS

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

by

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Denton, Texas

December, 1980

The purpose of this study was basically fivefold: 1) to examine the historical development and significance of the retail mix as a retail management concept; 2) to identify the nature and structure of the independent variables which make up a retail management mix; 3) to distinguish the nature and significance of each variable within the structure of the retail management mix; 4) to propose and develop an interrelated set of propositions in the form of a retail management mix for retail grocery establishments belonging to a retailer-cooperative in the state of Texas; and 5) to relate the retail management mix theory to dependent variables gross profit margin, net profit margin, gross profit return on inventory, and net profit return on inventory.

The major thrust of this study was to propose and research a retail management mix theory for retail grocery establishments belonging to a retailer-cooperative in the state of Texas. A mail questionnaire was constructed using library research, academic, and store management input. The questionnaire was designed to test the relationships between...
a selected number of independent retail management variables and four dependent indices of retailing success. These retailing variables were grouped into seven major categories. These categories were 1) service variables, 2) managerial policy variables, 3) product variables, 4) place and location variables, 5) promotion variables, 6) pricing variables, and 7) demographic variables. The selected indices of retailing success utilized in the study were gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory.

Seven hypotheses were presented for evaluation and statistical analysis. Further, sub-hypotheses were utilized to statistically analyze each pair of variables individually.

Hypotheses testing, via the Pearson correlation coefficient, indicated the following significant relationships at the .01 or .05 level between selected retailing variables and net profit return on inventory.

1. A positive relationship existed between supermarket retailing variables (grocery delivery, credit accounts, salary scale of non-supervisor employees, turnover rate of non-supervisor employees, per cent of full-time employees, use of other promotion) and NPROI.

2. A negative relationship existed between supermarket retailing variables (credit card acceptance, hours open per week, product assortment, use of non-food rack jobbers, floor selling space, use of trading stamps, use of competitive
pricing, the age of the owner/manager, retailing experience of the owner/manager) and NPROI.

3. A positive relationship existed between superette retailing variables (grocery delivery, salary scale of non-supervisor employees) and NPROI.

4. A negative relationship existed between superette retailing variables (hours open per week, floor selling space) and NPROI.

5. A positive relationship existed between convenience store retailing variables (credit card acceptance, salary scale of non-supervisor employees, use of circular promotion, use of cost-plus pricing) and NPROI.

6. No significant negative relationships existed between convenience store retailing variables and NPROI.

It was concluded that more successful supermarkets utilized the following variables: grocery delivery, credit accounts, higher salary scale for non-supervisor employees, low turnover of non-supervisor employees, higher per cent of full-time employees, and use of other promotion. More successful superettes utilized the following variables: grocery delivery and higher salary scale of non-supervisor employees. More successful convenience stores utilized the following variables: higher salary scale of non-supervisor employees, use of circular promotion, and cost-plus pricing.
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CHAPTER I

INTRODUCTION

Practitioners and academicians in the field of marketing have long wondered and theorized about various retailing variables and their impact upon organizational success. Specifically, the marketing strategy technique has long been practiced and promoted by both professional and academician marketers. In like manner, leading marketing professionals in the retailing area have theorized various combinations of marketing variables as the retailing mix.

The major thrust of this study is to propose and research a retail management mix for retail grocery establishments belonging to a retailer-cooperative in the state of Texas. The retail management mix is worthy of intense research not only for its potential benefits for the selected retailer-cooperative but also for other retail grocery establishments and the retail area of the academic world as well.

Subject of the Study

The subject of the study is the retail management mix strategies of retail grocery establishments belonging to a retailer-cooperative in the state of Texas.
Purpose of the Study

The purposes of the study are as follows:

1. To examine the historical development and significance of the retail mix as a retail management concept;
2. To identify the nature and structure of the independent variables which make up a retail management mix;
3. To distinguish the nature and significance of each variable within the structure of the retail management mix;
4. To propose and develop an interrelated set of propositions in the form of a retail management mix for retail grocery establishments belonging to a retailer-cooperative in the state of Texas;
5. To relate the retail management mix to dependent variables gross profit margin, net profit margin, gross profit return on inventory, and net profit return on inventory.

Empirically, several relationships were hypothesized among various retail mix variables and retailing success indices within a selected retail-grocer-cooperative in the state of Texas. Specifically, a model was designed which indicates the predictive relationship between several independent variables of the retailing mix and four aspects of success. (For the purposes of this study the retailing mix variables can be defined as those elements of retailing strategy deemed of utmost importance by various theorists and
academics in the field.) The dependent variables are defined as consisting of four primary indices—gross profit margin, net profit margin, gross margin return on inventory investment, and net profit return on inventory investment. Gross profit margin is defined as sales minus cost of goods sold; net profit margin is defined as gross profit margin minus expenses; GMROI is calculated via gross profit margin multiplied by stock turns; NPROI is calculated via net profit margin multiplied by stock turns.

The following hypotheses are presented for evaluation and statistical analysis.

Hypothesis One: A relationship exists between three selected service variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Two: A relationship exists between six selected managerial policy variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Three: A relationship exists between five selected product variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Four: A relationship exists between two place and location variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Five: A relationship exists between two selected promotion variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).
Background of the Problem

For this study, the members of a selected grocery retailer-cooperative supplied the primary research data. The researcher is a former retailer-member of the retailer-cooperative. His sixteen years of experience within this retailing environment contributed to the conduct of a successful scientific research study.

The retailer-cooperative is composed of 630 multi-type retail grocery establishments who jointly own and operate a wholesale grocery corporation. The corporation is operated by professional managers employed by the member stores. However, the member stores operate as individually owned independent merchants. The basic purpose of the retailer-cooperative is to act as a low-cost wholesale grocery house for the owner-retailers.

The selected retailer-cooperative is a suitable organization to test the hypotheses of this study. Each member store of the retailer-cooperative employs an individually unique retailing mix strategy. This factor is very important for the research sample of the study. Also, grocery establishments have historically been leaders in the development of trend setting merchandising and marketing strategies in the retailing industry. Progressive marketing innovations of the grocery industry have included scrambled merchandising, self-service, and the supermarket. In addition, the grocery industry has been able to operate successfully with very low
profits margins. The selected retailer-cooperative contains 630 individually owned and operated retail establishments. Therefore, the population of the selected retailer-cooperative contains an appropriate sample for the testing of the hypotheses of this study.

Scope of the Research Problem

There are a considerable number of variables affecting the profitability of a retail establishment. Moreover, each variable may be interrelated with each of the other variables. For this study, it is necessary to focus on the more important retailing variables for the statistical evaluation of the model hereafter presented.

Seven major variable classifications have been employed in which to position thirty retail management mix variables that have been selected for this statistical study.

1. Service variables.
   a. Delivery to customers.
   b. Credit to customers.
   c. Credit card acceptance

2. Managerial policy variables.
   a. Number of employees (part-time, full-time).
   b. Hours retail establishment operated each week.
   c. Retailing mix priorities of management.
   d. Salary scale of employees.
   e. Training of employees.
   f. Turnover rate of employees.

3. Product variables.
   a. Percentage of general merchandise (non-food) of inventory.
   b. Stockturn of average inventory per year.
   c. Merchandise assortment.
   d. Extent of private label merchandise.
   e. Level of use of non-food rack jobber merchandise and service.
4. Place and location variables.
   a. Floor selling space of the store.
   b. Competitive location of the retailer.

5. Promotion variables.
   a. Breakdown of promotion methods used and percentage of use per method of total.
   b. Whether trading stamps are used by the retailer.

6. Pricing variables.
   a. Competitive pricing strategy (above, meet, below competition).
   b. Extent of psychological or odd pricing techniques used.
   c. Extent of multiple pricing used.
   d. Extent of cost-plus-average pricing used.
   e. Extent of stocktown-demand (flexible) pricing used.
   f. Extent of use of suggested list prices.
   g. Extent of leader pricing.
   h. The knowledge of retail markup calculation techniques.

7. Demographic variables of owner or owner-manager.
   a. Age.
   b. Education.
   c. Sex.
   d. Work experience.

For reasons of time, questionnaire length, limited funds, and privacy of information certain retailing variables are not included in the study. These variables include the leverage factor of the retail establishment, target customers of store, store image by customers, store layout evaluation, traffic pattern of customers, buyer and supplier relationships, operation and management structure of store, fashion of merchandise, and store excitement. In addition, discounts, markdowns, promotional allowances, out-of-stock conditions, shortages, and breakdown of expenses will not be included as variables in the study.
Limitations of the Study

Any type of empirical research has built in limitations. However, surveys can result in valuable findings if correct procedures are followed. The use of a well-worded satisfactorily pretested questionnaire administered by researchers who follow sound patterns for selecting respondents can result in the collection of useful information that would otherwise be unavailable.

The mail questionnaire technique has specific advantages and disadvantages which should be thoroughly understood and carefully considered. One advantage is the postal system which offers a relatively low cost avenue for distributing and receiving questionnaires. In addition, mail questionnaires can be sent to persons in widely scattered locations covering a large geographical area. Mail questionnaires can be answered more carefully than personal or telephone questionnaires because more time can be allowed for thinking through the answer. Also, certain personal and economic data may be given more completely and accurately in an unsigned mail questionnaire.

However, there are certain specific disadvantages related to the use of the mail questionnaire. Probably the greatest limitation is the nature of the mail questionnaire. A relatively large percentage, even 50 per cent to 90 per cent of mail questionnaires, will usually not be returned. In addition, answers to certain questions may be omitted
or the questions may be incorrectly answered because they are misunderstood. Specifically, the subject matter of the research topic concerns an area of utmost privacy for many firms. Therefore, several of the questions were disguised to reduce the chances of the respondents refusing to answer questions which were critical for the success of the survey. Pointedly, these questions concerned gross profit margin, operating expenses, and sales.

The selected thirty variables were also handled in a routine and understandable manner for the target respondent. Academic terms that might only be used in a university were avoided. Therefore, by using a short, pretested questionnaire and a specified followup, incomplete questionnaires and a low return rate were avoided.

Significance of the Study

There will be two major areas effected by the results of the study. The first is the academic area of retailing. The second is the members and management of the retailer-cooperative surveyed.

The study will uncover and highlight specific retail management mix variables or groups of retail mix variables which affect gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory. Retailing texts give many different pricing strategies, retailing strategies, or pricing tools. However, the
texts give no specific pattern of use or related correlation of success with the application of these strategies and tools. In addition, the results of the survey will be made available to the management of the retailer-cooperative. The management of the retailer-cooperative can then take whatever methods are appropriate to implement educational programs or strategy changes for the benefit of the organization and the individual member stores. The result should aid the retailer-cooperative and individual member stores with future retailing mix strategy decisions.

Basic Plan of the Dissertation

The dissertation is organized and presented in the following manner. Chapter two reviews the more pertinent and significant literature in the field of marketing as a whole, retail management, retail mix strategy, and retail pricing strategy. This chapter is vital for a complete understanding of the report problem.

Chapter three is a discussion concerning the foundation, purpose, limitations, and construction of the Retail Management Mix Questionnaire (RMMQ). In addition, the procedures and methodology of the research study are covered.

Chapter four has a twofold purpose. First, the descriptive statistics of the survey are presented for verification purposes. Second, hypotheses one through seven are tested using the statistical technique of correlation analysis.
Chapter five contains a summary and the conclusions of the dissertation. All pertinent information is summarized and appropriate conclusions presented in light of the seven working hypotheses.
CHAPTER II

A REVIEW OF RETAILING STRATEGIES
AND SUCCESS CRITERIA

Since this dissertation is concerned with various marketing ideas and theories relating to the proper variables for a successful retailing mix strategy, these concepts should be explained in some detail. Specifically, this chapter of the dissertation discusses several theories existing in the literature often called the retailing mix. In addition, four important criteria of success, gross profit margin, net profit margin, gross margin return on inventory investment, and net profit return on inventory investment, are presented and explained. Finally, several empirical studies are cited which are directly or indirectly related to the objective of this study.

Selected Marketing and Retailing Concepts

A retailer is the merchant middleman who is engaged primarily in selling to the ultimate consumer. Therefore, retailing is the final part of the marketing process in which the seller and the buyer are primarily orientated to accomplishing the exchange of goods and services for the purposes of personal, family, or household use (13, pp. 700-701).
The word retail came from the French root "tailler," which means to cut. Thus, retail means to recut, cut down, or to reduce from a larger to a smaller whole. The early wholesaler bought and sold in large or whole quantities and the retail function consisted of aggregating merchandise assortments and then making them available in smaller, more usable quantities for ultimate consumers. To this day, aggregating assortments of products in anticipation of customer demand is one of the functions of the modern retailer (11, p. 17).

Retailing is a basic and integral part of modern marketing. The marketing management concept which was first defined and practiced during the 1960's was further augmented by the retailing management concept of the 1970's. The marketing management concept is defined as a company-wide consumer orientation with the objective of achieving long-run profits (9, p. 17). Therefore, the marketing management concept emphasizes the following components: 1. a consumer orientation, 2. a profit objective, and 3. integration of the marketing functions under a key corporate executive. The retailing management concept further expands the marketing management concept with more consumer orientation, focus on profitability, plus sensitivity to social trends, value changes, and social response (13, pp. 5-9).

The modern retailer must also practice marketing strategy planning. As is well known, marketing strategy includes two
distinct and yet interrelated parts. The first part consists of a selection of one or more target markets to which the marketer will attempt to sell his products or services. This target market or markets would consist of a fairly homogeneous group of customers to whom the marketer would wish to appeal. The second part of the strategy is the creation of a marketing mix which the marketer would combine in order to satisfy the target group or groups. Modern marketing defines these controllable variables as product, place, promotion, and price (14, pp. 35; 75-80).

Modern retailing further expands the marketing mix with an augmented retailing mix. Joseph B. Mason and Morris L. Mayer list the components of the retailing mix as

1. The product variable, which includes merchandise management and accounting for merchandise effectiveness,

2. Buyer and supplier relationships,

3. Pricing,

4. Promotion,

5. Place, which includes location and site analysis,

6. Operating policies and accounting for operating effectiveness,

7. Human resources management (13, p. 10).

Robert F. Hartley, in contrast, considers the retailing mix to be composed of the following components:

1. Convenience of shipping (time, place, effort),

2. Merchandise assortment—breadth and depth,
3. Quality and fashion level of merchandise,
4. Prices,
5. Services,
6. Store excitement (8, pp. 73-77).

However, Ronald Gist considers the retailing mix as a unique combination of location, store layout, organization, promotion, pricing, service, merchandise assortment, and buying (5, pp. 65-66).

Similarly, Barry Berman and Joel R. Evans categorize or classify a retailer by his or her retail strategy mix. This strategy mix being composed of product, price, service, promotion, and location variables (1, p. 50).

In like manner, Ronald Gist introduced a general conceptual framework for retail structure which applied to all types of outlets. This framework was based on margin and turnover. In Gist's analysis, margin was defined as the percentage markup at which the inventory in a store was sold. Turnover was defined as the number of times the average inventory is sold in a given year. Gist's margin-turnover classification was found to be as useful in retail strategy formulation (retailing mix) as in data reporting and analysis. The key retail strategy elements of this framework were types of merchandise sold, varieties and assortments offered, services offered, price level, type of personal selling, type of promotion, complexity of organizational structure, and locational requirements. These variables were used to place a
retail store in a four quadrant model of low turnover-high turnover and high margin-low margin (6, pp. 37-40).

William Lazer and Eugene J. Kelly consider the retailing mix to be the total package of goods and services that a store offers for sale to the public. Their retailing mix is comprised of three submixes: a goods and service mix, a communications mix, and a distribution mix. The goods and services mix includes the variables of merchandise, variety and assortment, guarantees and exchanges, customer services, credit, price lines, alterations and adjustments, delivery, parking, and store image. The communications mix includes the variables of advertising, catalogs, store layout, public relations, internal displays, personal selling, window displays, and telephone sales. Finally, the physical distribution mix includes packing, warehousing transportation, handling goods, distribution centers, and store location. This retailing mix is the composite of all the effort controlled by retail management and a reflection of the adjustment of the retail establishment to its market environment (10, pp. 34-41).

The preceding retailing mix strategies by expert marketers appear to be the most quoted in the literature. Although these theories do provide a framework for marketing discussions, little empirical evidence exists to support each combination of variables in each mix. There would seem to
be a definite need for sound empirical research to investigate underlying assumptions and relationships within each strategy.

Selected Criteria of Retailing Success

A simple model of the retail management system is depicted as

Sales - Cost of Goods = Gross Margin

Gross Margin - Expenses = Net Profit (11, p. 59).

The term gross margin of profit, many times called "Gross Margin" or "Gross Profit" is defined as the dollar difference between the total cost of goods sold and net sales (3, pp. 453-454). Gross margin or gross profit is one of the important component parts of the retail price of any product. The components of the retail price are merchandise cost, expenses, and profit. Gross margin or gross profit make up the profit and expense components. Gross profit minus expenses equal net profit. Most retail prices are determined by cost oriented markup. Markup is the difference between the cost of an item and its retail price. Markup is generally expressed as a per cent of the retail price. Markup per cent can also be calculated by using the cost as a base. Markup per cent of cost should always be differentiated from markup as a per cent of the retail price (12, pp. 302-303).
Net profit or net income is defined as gross profit minus total operating expenses. These operating expenses generally include rent expense, advertising expense, salaries expense, payroll tax expense and utilities expense. Net profit is commonly referred to as the "bottom line" by many retailers.

Merchandise or stock turnover is a productivity ratio which is defined as the number of times average inventory is sold annually. It can be computed by units, retail dollars, or cost. Turnover data are usually obtained by dividing total dollar sales volume by the average retail price value of inventory. Gross margin or gross profit dollars refers to the dollar difference per unit selling or retail price and purchase or wholesale price. Both stock turnover and gross margin can influence greatly a good's profitability (12, p. 101).

Gross Margin Return on Inventory is a single comprehensive productivity ratio which allows retail management to look at stock turnover and gross margin percentage at the same time. The GMROI concept allows retail management to review inventory results from a return on investment perspective. The classic method to state GMROI is

$$\text{GMROI} = \frac{\text{Gross Margin Dollars}}{\text{Net Sales}} \times \frac{\text{Net Sales}}{\text{Average Inventory Investment}}$$

Daniel J. Sweeney's method of stating this ratio reflects GMROI as the product of gross margin, per cent of sales, and of the sales-to-average-retail-inventory ratio (turnover):
GMROI \_ \frac{\text{Gross Margin Dollars}}{\text{Net Sales}} \times \frac{\text{Net Sales}}{\text{Average Retail Inventory Investment}} (15, \text{pp. 60-68}).

Gross Margin return on retail inventory investment might not be considered in a strict sense a return on investment, but since many retailers maintain a retail book inventory figure perpetually or use the retail method of inventory, retail value GMROI can be calculated more frequently using the more easily obtained turnover component.

Therefore, gross margin return on inventory investment equals stock turnover times profitability (gross profit/net sales):

\[
\text{Gross Margin Return on Inventory Investment} = \frac{\text{Net Sales}}{\text{Average Inventory (Retail)}} \times \frac{\text{Gross Profit}}{\text{Net Sales}}
\]

\[
= \frac{\text{Gross Profit}}{\text{Average Inventory (Retail)}}
\]

Accordingly, net profit return on inventory investment (NPROI) would be a logical extension of this retail productivity ratio. The ratio would be stated as

\[
\text{Net Profit Return on Inventory Investment} = \frac{\text{Net Sales}}{\text{Average Inventory (Retail)}} \times \frac{\text{Net Profit}}{\text{Net Sales}}
\]

\[
= \frac{\text{Net Profit}}{\text{Average Inventory (Retail)}}
\]

Thus, net profit return on inventory investment equals stock turnover times profitability (net profit/net sales). This ratio reflects the same basic components of the classic duPont system of return on investment (16, pp. 260-262).
The core of the duPont ROI ratio is determined by multiplying earnings as a per cent of sales by turnover of total assets (investment). This relationship between turnover and profit margins is stated as: R (Return on Investment) = M (Margin on Sales) x T (Sales turnover)

Where

\[ R = \frac{\text{Net Income}}{\text{Total Assets (Investments)}} \]

\[ M = \frac{\text{Net Income}}{\text{Net Sales}} \]

\[ T = \frac{\text{Net Sales}}{\text{Total Assets (Investment)}} \]

Therefore, the four above mentioned indices of retailing success (gross profit margin, net profit margin, GMROI, NPROI) appear to be the most valuable productivity ratios. For the average retailer these ratios are more calculable from available information.

Empirical Studies of Retail Mix Strategies

An increasing number of studies have appeared in recent years concerning experimental methods in retailing. However, it would seem that only a few of these studies deal specifically with overall retail management strategy practices. Possibly a reason for this phenomenon is the pressures for performance placed on retail management. Retailers are more interested in experiments that help them solve immediate problems than in theoretical experiments which offer general findings for marketing theory. Retail management criteria and cooperation reflects the usefulness of the experiment to
provide immediate answers to everyday problems. In addition, it is generally easier to isolate a few individual factors for analysis rather than the entire retailing mix strategy along with external environmental factors (4, pp. 47-62).

Nevertheless, there have been a few retail experiments dealing with certain retailing mix variables and their effect on specific dependent variables such as gross profit margin. For example, R. Ted Will in his "Causation of Gross Margin Percentage Differences between Intrafirm Discount Stores" (17, pp. 61-71) examined selected variables that influence gross margin percentage performance as found in a large national discount firm. Two stores within the chain were selected for comparison. Four variables were found to influence gross margin. These were markdowns, freight, shortages, and purchase markup. However, the first three variables proved to have only a direct effect upon gross margin. Neither had an indirect, cumulative, or other effect upon gross margin. The major differences in gross margin between the two stores were freight, competitive pressures, and product mix of hard goods versus soft goods (17, pp. 61-71).

Kenneth D. Halsey in his unpublished dissertation, "A Comparison of Selected Franchised and Independent Businesses --Their Success and Profitability in the State of Nebraska" (7), compared franchised retail operations to similar independent retailers on the basis of their relative success and
profitability. Financial information was gathered on 204 businesses representing five major classifications. Fourteen variables were tested as to their impact on the dependent variable success, which was defined as return on equity. The primary objective was to statistically determine if there was a significant difference between franchised and independent businesses in regard to the dependent variable. The findings suggest that it was significantly more profitable to have invested in a franchised business than to have invested in an independent business. However, ten of the other thirteen variables were found to be statistically insignificant in terms of their ability to predict return on equity. The predictive variables included investment in an existing business, financial leverage, and subjective success rating of an experienced SBA Loan Services Officer (7).

And finally, Gerald L. Crawford in his unpublished dissertation, "An Analysis of Management Factors that May Contribute to the Success or Failure of Selected Small Retailers" (2), studied four types of retail establishments (grocery, eating, drug, general merchandise) to determine the prominent factors that relate to success or failure. The retailers were classified as successful or unsuccessful on subjective and objective criteria. The two groups were then compared to 29 dependent variables. The successful and unsuccessful firms were significantly different in terms of 16 of the variables. These variables included such factors as location,
use of accountants, pay range of clerks, retailer's previous retail experience, and frequency of adding new accounts. There were no significant differences between successful and unsuccessful firms with 13 of the variables. These variables included such factors as age of the firm, use of advertising, use of loss-leaders, use of special consultants, and attitude, personal manner and physical appearance of the retailer (2).

The lack of empirical evidence supporting an acceptable holistic strategy of retailing has led two authors to question the validity of many retailing relationships. Specifically, Doyle and Gidengil after an extensive review of the literature conclude:

If experimentation is to make a contribution to retailing, progress will have to be made in integrating them into the management decision process. Such a process starts not with techniques, but first with the identification and analysis of the problems and opportunities facing the firm (4, pp. 58-59).

Summary of Chapter

The first section of this chapter discussed several marketing and retailing concepts. Next, a brief definition of retailing was presented. Then, the relationship of the marketing concept and the retailing management concept was discussed. Marketing strategy and the two distinct areas of this planning device was also explained. In like manner, the retailing mix was presented using various outstanding marketers' versions of this retailing strategy concept.
The second section of the chapter discussed selected criteria of retailing success. A simple model of the retail management system was presented. In like manner, a short explanation of gross profit and net profit was communicated. Next, merchandise and stock turnover was discussed relating this concept in combination with gross profit to a good's profitability.

Further, the classic method of GMROI was shown in comparison with Sweeney's retail GMROI using sales-to-average-retail-inventory ratio instead of average inventory investment at cost. Similarly, NPROI was shown as a logical extension of GMROI (retail). In like manner, the duPont ROI productivity ratio was used to justify this concept.

Finally, the last section of the chapter presented several empirical studies of retail mix strategies. First, a short summary of R. Ted Will's examination of variables that influence gross margin percentage differences within a large national discount firm was presented. Next, a review of Kenneth D. Halsey's comparison of franchised retail operations and similar independent retailers was conveyed. The significant and insignificant variables were listed. Then, a summary of Gerald L. Crawford's study of four types of retail establishments and his determination of prominent factors of success or failure was communicated. And finally, a statement by Doyle and Gidengil concerning empirical studies in the field of retailing strategy was presented.
Having presented the theories and research findings surrounding the entire concept under investigation, the next chapter concerns the methodology of this dissertation study. Specifically discussed are questionnaire construction, pre-test, collection of data, and preparation of data.
CHAPTER BIBLIOGRAPHY


CHAPTER III

METHODOLOGY OF THE RESEARCH STUDY

As presented in Chapter II various theories exist which attempt to explain the most effective strategies for a proper mix of retailing variables. Using these basic concepts as a guide, this section of the dissertation attempts to identify those variables which could predict management success. First, the construction and theoretical basis of the research questionnaire is discussed. Next, the pre-test and data collection process are presented. And finally, the statistical method of analysis is explained in light of the seven hypotheses.

Construction of the Retail Management Mix Questionnaire

To determine the direct influence of various retailing mix variables upon gross profit margin or net profit margin is indeed a complex undertaking. To be sure that all the retail mix variables operating within a retail establishment could have some effect concerning GMROI and NPROI further increases the difficulty of the research. In addition, it is virtually impossible to identify all the variables affecting the profitability of a retail establishment. Compounding the situation is the probability that any
retailing variable can affect or interrelate with one or more variables of a retail management mix at any time or place.

Thus, for the purpose of this study, it is necessary to focus on the most important retailing variables for the statistical evaluation of the model hereafter presented. For this study, it was necessary to limit the research to thirty major retail mix variables for reasons of time, questionnaire length, limited funds, and privacy of information.

The selected variables of the study were chosen through a careful review of the existing classical literature of retailing. In addition, advice and consultation was received from academicians and selected retail grocery managers of the subject retailer-cooperative. Plus, the twenty years of retail management experience of the researcher also aided the determination process.

For the purposes of classification, seven major variable or factor areas have been selected for evaluation through the RMMQ.* The first major classification contains the service variables of the retail establishments included in the statistical study. These service variables are delivery to customers, credit to customers, and credit card acceptance. Questions number 22, 23, and 24 in the RMMQ pertain to these service variables.

*For a complete copy of the RMMQ, see Appendix A.
The second major classification contains the retailer's managerial policy variables. Managerial policy variables included in the study are number of employees (part-time, full-time), hours retail establishment operated a week, retailing mix priorities of management, salary scale of employees, training of employees, and turnover rate of employees. Questions number 6, 8, 27, 29, 30, and 31 in the RMMQ pertain to these managerial policy variables.

The third major classification contains the product variables. Product variables included in the study are percentage of general merchandise of total inventory, stock-turn of average inventory per year, merchandise assortment, extent of private label merchandise, and level of use of non-food rack jobber merchandise and service. Questions number 25, 26, 32, 33, and 34 in the RMMQ pertain to these product variables.

The fourth major classification contains the place and location variables. These variables include floor selling space of the store and competitive situation of the retail establishment. Questions number 7 and 9 in the RMMQ pertain to these place and location variables.

The fifth major classification contains the promotion variables. These variables contain a breakdown of promotion methods used and percentage of use per method of total. In addition, promotion variables include whether or not trading stamps are utilized by the retail establishment. Questions
number 19 and 21 in the RMMQ pertain to these promotion variables.

The sixth major classification contains the pricing variables of the study. They include competitive pricing strategy (above, meet, below competition), extent of psychological or odd pricing techniques used, extent of multiple pricing used, extent of cost-plus-average pricing used, extent of stockturn-demand (flexible) pricing used, extent of use of suggested list prices, extent of leader pricing, and the knowledge of retail markup calculation technique. Questions number 11, 13, 14, 15, 16, 17, 20, and 18 in the RMMQ pertain to these pricing variables.

The seventh major classification contains the demographic variables of the retail establishments of the statistical study. These variables include the age, education, sex and work experience of the responding retail manager. Questions number 2, 3, 4, and 5 of the RMMQ pertain to these demographic variables.

**Service Variables**

Many ingredients of the retailing mix of a retail establishment could come under the broad umbrella of "service." For the purposes of this study, only three of the variables under consideration will be classified as service variables. The first of these service variables is delivery to customers. Delivery of customer purchases is a necessary service for some types of retail establishments. For other retailers,
services as a means of product differentiation. For some food retailers, delivery of food purchases to the customer's homes can have both good and bad results. The good consequences are a means of product differentiation which the chain supermarket cannot provide. The bad consequences are the added expense of additional labor, telephones, and delivery costs. Of course, charging a fee for delivery discourages its use where it is not really necessary. Further, this practice gives the appearance that the "take-with" customer is not subsidizing the customer who insists on delivery. Retailers are often pressured not to charge extra for a delivery service. This service, however, must then be added into the overall cost structure of the firm. Thus, cash-and-carry customers pay for a portion of the delivery service. Recently the cost of delivery has increased rapidly because of increasing fuel and labor costs. Also, suburban delivery expenses have become increasingly costly. Delivery systems can be store owned or independently owned. "Typically, the retailer will either lease an automobile for such purposes or pay an employee a mileage allowance to use his or her automobile" (11, p. 523).

Offering delivery service to customers can be a competitive tool that can be used to create a unique image for a retailer. Many customers depend on public transportation and older or physically disabled consumers are likely to respond favorably to a retailer's delivery service. Therefore,
delivery service can be an important part of the retailing mix in reaching specific market segments. Delivery can also expand a retailer's sales if the delivery person is alert and can recognize additional consumer needs (10, p. 489). In the final analysis, if the decision to offer delivery to customers is made, the kind (free or fee), owned or leased, and geographical scope must be determined only after a careful cost/benefit analysis regarding the advantage to the total retail management mix strategy of the retail establishment.

Consumer credit in many retail stores is now almost considered an institution. Credit is probably one of the most important services which a retailer can offer his customers. "Over 80 per cent of all citizens now possess some type of credit card, and more than 50 per cent of these have a Wards, Sears, or Penney's card" (11, p. 518). Credit is not only used as a strategy to increase sales by stimulating installment buying but also impulse buying. Moreover, purchasers who use credit seem to be less price conscious than those consumers who use cash only. Consumers generally use either store charge accounts or bank credit cards for their credit purchases (11, p. 519). Retail food stores who give credit to their customers generally run open accounts either by the week or month. Supermarkets and retail food stores have resisted the use of bank cards at least in part because their low profit margins make it
difficult to afford the discount they would have to pay on the transaction. However, discounters and some retailers have been placing their charge programs with outsiders who purchase the receivables for cash and run the entire credit operation (11, p. 523).

Retailers have discovered that credit can be a useful factor that can be used both as a merchandising tool and a source of profit. Customer convenience in paying for an item can be as important a retailing mix variable as advertising, personal selling, promotion, or location. In addition, the availability of credit may be the major difference concerning the decision between one store over another. Some advantages of credit include the following.

1. A more personal relationship can be maintained with credit customers.
2. Credit customers are likely to be more loyal than cash customers.
3. Credit customers tend to be more interested in quality and service than in price.
4. Good will is built up and maintained more easily when credit is used.
5. Goods can be exchanged and adjustments made with greater ease.
6. Credit records provide valuable market information.
7. The firm's return on investment can increase if credit stimulates sales (10, p. 483).
However, the extension of credit by a retail firm costs money. The retail establishment's capital is tied up in merchandise bought by charge customers. Furthermore, if the retailer is financing his inventory, the interest is added to the cost of the merchandise. In addition, there will always occur some loses from bad debts. Moreover, credit customers feel more at liberty to abuse the privilege of returning goods previously purchased. And finally, credit increases operation and overhead costs of the retail establishment.

Nevertheless, many retailers believe that credit extension is both necessary and attractive. It would seem that to many target consumers, the retail management mix variable "credit" is considered important enough even for the additional costs that it might entail. The research study covers both the use of credit accounts and the use of bank cards. The inclusion of both variables in the RMMQ would seem to be most appropriate considering the current present use of credit and bank cards by the buying consumer.

**Retail Management Policy Variables**

The second major classification area of the RMMQ contains six critical retailing managerial policy variables. The first variable in this category concerns the ratio of part-time employees to full-time employees in a retail establishment. The second variable in this category pertains
to the number of hours the retail establishment is open per week. Robert Hartley considers the convenience of shopping as one of his six components of the retailing mix (7, p. 73). From the consumer's viewpoint, convenience involves time, place, and effort. A store which is open every night and also on Sunday is certainly more convenient than one open only from 8:00 a.m. to 6:00 p.m. If a store has longer shopping hours and requires less effort for shopping, convenience could be considered a definite retailing mix variable. In like manner, the hours a retail establishment is open and the number of part-time employees, in combination with full-time employees, could also be considered a retailing mix variable. Therefore, these two variables, number of employees (part-time, full-time) and the hours a retail establishment is operated each are interrelated to a certain extent.

In most cases, the more hours a retail establishment is operated a week, the greater the need for part-time employees. In addition, many retail establishments have peaks and valleys of customer traffic and sales. Specific promotional events can also require additional staffing of employees. The changing life styles and reduced working hours of potential customers have also required longer hours of operations for the average retailer. These long hours and irregular customer traffic have forced most
retailers to use many part-time employees. This decision can be of benefit to the retailer if he uses carefully selected and properly trained individuals. There are available many potential employees who only want to work part-time and at specific hours of the day or week. This reservoir of likely employees not only contains high school and college students but also highly competent housewives and retired full-time employees who only desire part-time work. A recent study of available employees indicates that retired workers, homemakers, and unemployed 16 to 21 year-olds represent thirty million potential part-time workers (14, p. 131). In addition, statistics quoted in a recent Forbes article indicate that part-time workers (less than 30 hours per week) now make up 18 per cent of the total work force (1, p. 58).

There are also specific operation cost advantages which are associated with the use of part-time employees. These advantages include the following.

1. Fringe benefit savings. Fringes are not normally extended to part-timers.

2. Absentee cost reduction. Unlike full-time employees, part-time employees operate generally under the "no work, no pay" rule.

3. Performance advantages. Studies by a mass-assembly department of a Southeast firm reported a seven per cent higher output and a twelve per cent lower scrap rate when
it compared the production of part-time and full-time workers (14, pp. 131-132).

4. Turnover costs of employees reduced. By having part-time work available, full-time workers who voluntarily leave may elect to remain on in a part-time basis.

5. Scheduling advantages. Part-timers can be used instead of paying overtime to full-time employees.

6. Call-in flexibility. Full-time employees who are absent for reasons for sickness, vacations, jury duty, training sessions, etc., can be replaced by a trained part timer (14, pp. 130-133).

Although there are the disadvantages of more hiring, more training, more paperwork, the added expenses in FICA and unemployment taxes, the use of part-time employees in the retail work field seems to be expanding. For example, more than half the employees of Sears Roebuck are now classified part-time. In addition, ninety per cent of McDonald's employees would be classified as part-time (1, p. 58). Therefore, the questions concerning the hours the retail establishment is open per week and the use of part-time employees would be most appropriate in the managerial policy variable category of the RMMQ.

The third variable in the managerial policy category pertains to the retailing mix priorities of the retailer. Each retailer must correctly appraise his target customer or groups of target customers and then adjust his retailing
mix accordingly. This question in the research study will reflect the priorities which the retailer places on each retail variable area for his particular business.

Robert Hartley, as noted in Chapter II, considers the major retail variables to be convenience of shopping, merchandise assortment (breadth and depth), quality and fashion level of merchandise, prices, services, and store excitement (7, pp. 73-80). Barry Berman and Joel R. Evans consider the retailing mix to be composed of the variables product, price, service, promotion, and location (3, p. 51). On the other hand, William H. Bolen considers the retailing mix to be composed of the variables product, place, promotion, price, and personality (4, p. 27).

For the purposes of this study, the variables of price (in comparison to competition), customer service, advertising and store promotion, store location and physical plant, product assortment, and store personnel have been selected as the optimum and major retailing mix variables for the chosen target retailers researched. In question number 27 of the RMMQ, each retailer is requested to rank the listed retailing variables one through six indicating the order of importance the variable is considered relative to the retail establishment's strategic marketing decisions.

The fourth variable in the managerial policy category pertains to the salary scale of the regular and part-time employees not including supervisors. The retailer is asked
whether his salary scale is above average for retail stores of the trade area, average for the trade area, or if he only pays minimum wage.

It has been implied that a major reason why people change jobs is to get more money. However, there have been numerous studies which found that steady work, opportunity for advancement, pleasant associates, good supervision, and desirable working conditions were listed by workers as even more important than pay (8, pp. 218-219). Generally speaking however, a well-planned method of compensation will provide incentives to work and learn by rewarding the employee for a job well done. As a whole, all employees like to feel that they are getting a fair day's pay for a fair day's work. Any good retail employee compensation plan should provide incentive, be simple, be easy to administer, should provide a "living wage," should provide regular and prompt payment, and should be fair (4, p. 286).

However, many retailing establishments practice one of three wage policies. They either pay minimum wage (below-market wage policy), average for trade area (market wage policy), or above average for retail stores of the trade area (above-market wage policy) (5, pp. 454-455). Therefore, the salary scale of regular and part-time employees (not including supervisors) is considered most appropriate as a variable in the managerial policy category of the RMMQ.
The fifth variable in the managerial policy category pertains to the training of employees (non-supervisors) in the retail establishment researched. The retail manager is asked whether the retail establishment has a special training program for a specified period, or whether there is on-the-job training supervised by a regular employee or supervisor, or whether there is no training program, only learning while performing the job.

In the area of retailing, the objective of training is to improve worker performance and morale with the long run objectives of improved profits and better customer satisfaction. Many large retail establishments have formal training programs with at least a portion of the program performed through a centralized training department. There can also be some on-the-job training or decentralized training by the actual job supervisor. Smaller retailing establishments tend to perform informal or decentralized training of employees. Generally, the larger the retailing establishment, the more complicated the training program since the increase in size brings many types of employees with more job differentiation. In addition, a larger retailer with a high percentage of part-time employees may require a more extensive training program (8, pp. 216-217).

The further expansion of large retail establishments, small chain organizations, and the increase in the percentage of part-time employees of the work force would seem to
indicate the appropriate inclusion of the amount of training of new work personnel (non-supervisors) as a variable in the managerial policy category.

The sixth and final variable in the managerial policy category pertains to the turnover rate of employees (non-supervisors) in the retail establishments in the research study. The retail manager is asked whether employees tend to stay with the retail establishment for two or more years, or whether employees tend to stay from six months to two years with the retail establishment, or whether employees stay less than six months of employment with the retail store establishment.

Personnel turnover refers to the number of employees leaving a retail establishment's employment during the course of a year. Many retailers have been plagued by high employee turnover. In some cases, the turnover rate has been 50 per cent or higher (8, p. 212). High employee turnover not only adds to the cost of hiring and training but it also results in lower productivity plus reduced employee loyalty and morale. Therefore, the inclusion of the turnover rate of employees (non-supervisors) as a variable in the managerial policy category of the RMMQ seems to be appropriate.

**Product Variables**

The third major classification area of the RMMQ contains five decisive product variables of retailing. The
first variable concerns the percentage of general merchandise of the total inventory of a retail grocery establishment. Usually, general merchandise carries a higher gross profit margin than food products. Therefore, a higher percentage of general merchandise in the total inventory of a retail establishment could possibly reflect in a higher overall gross profit margin. Examples of general merchandise carried by a retail grocery store would include health and beauty aids, drugs, and hardware.

A procedure for the addition of general merchandise or non-food products within the product mix of a retail grocery establishment is the marketing strategy of "scrambled merchandising." Scrambled merchandising means the practice of firms increasing the width of assortment by adding non-traditional or unrelated lines of merchandise to the basic inventory of a store. There are three major reasons for this retailing strategy. First, retailers are seeking to attract broader target markets and like to cater to a larger portion of overall family needs. Second, unrelated or non-traditional merchandise may be fast-selling or have high gross profit margins. Third, present day consumers are attracted to one-stop buying (3, p. 53). Therefore, the inclusion of the per cent of a retail establishment's inventory which could be classified as general merchandise would seem to be an appropriate variable in the product category of the RMMQ.
The second variable of the product category pertains to the approximate stock-turns of the total inventory of the research retail grocery establishment. Merchandise or stock turnover is a productivity ratio which is defined as the number of times average inventory is sold annually. It can be computed by units, retail dollars, or cost. Turnover data are usually obtained by dividing total dollar sales volume by the average retail price value of inventory. As previously stated in Chapter II, gross margin or gross profit dollars refers to the dollar difference per unit selling or retail price and purchase or wholesale price. Both stock turnover and gross margin can influence greatly a product's or retail establishment's profitability (10, p. 101). Therefore, the stock turn ratio of the total inventory of a retail establishment would be an appropriate variable for the product category of the RMMQ.

The third variable in the product category pertains to the store wide product assortment of the retail establishment researched. The retail manager is asked whether his merchandise inventory contains a large assortment of all types of merchandise, an average assortment, or just a minimum assortment.

Robert Hartley lists merchandise assortment, breadth and depth, as one of his six major categories of the retailing mix (8, pp. 118-120). A retail store with many lines and departments of merchandise has breadth of
assortment. A retail store with a narrow line is called a specialty store. Depth of assortment refers to the diversity of colors, styles, sizes, and prices a retail store offers in a given line. This depth of assortment is given as one of the major reasons for the popularity of specialty stores. In the food store area, convenience stores rarely have depth of assortment. Larger retail grocery stores vary in their extent of merchandise depth. The store-wide product assortment of the retail establishments researched seems to be a most appropriate variable of the product category of the RMMQ.

The fourth variable in the product category of the RMMQ concerns the extent of use by the retailer of private label merchandise. The retail manager is asked whether his store has heavy use of private label merchandise (all lines of Shurfine, etc., merchandise in inventory), moderate use of private label merchandise (average use of Shurfine, etc., merchandise in inventory), or whether the retail establishment has little or no private label merchandise (Shurfine, etc.) in stock. Many retailers often feature items which carry a private brand instead of featuring manufacturer labels. These brands are typically offered at below-the-market prices made possible because of the absence of promotion costs associated with selling manufacturer brands. In addition, private brands generally cost the retailer less than manufacturer brands therefore allowing a possible
greater gross margin per sale (11, p. 396). Therefore, the extent of use of private label merchandise by the surveyed retailer seems to be an appropriate variable of the product category of the RMMQ.

The fifth variable in the product category of the RMMQ concerns the level of use of non-food rack jobber merchandise and service by the retail establishment researched. The retail manager is asked whether the retail store has a heavy use, average use, or minimum use of this merchandise and service area.

There has been an increase in this product and service area during the past few years (8, p. 305). Even though the retail establishment makes a lower gross profit margin with this type merchandise, there is a decrease in the operating costs (ordering, merchandising, etc.) and an increase in product assortment—breadth and depth. Rack jobbers came into prominence as many retailers attempted to cut costs by adopting self-service and hiring fewer employees. Specifically in the supermarket area, rack jobbers have taken over the task of stockkeeping and order taking for such non-food products as notions, stationery, housewares, and hosiery. In addition, many rack jobbers even supply their own display racks. All the retailer has to supply is the space for the display rack (8, p. 305). Therefore, the extent of use by a retailer of non-food rack
jobber merchandise and service would seem to be an appropriate variable in the product category of the RMMQ.

Place and Location Variables

The fourth major classification area of the RMMQ contains two decisive place and location variables. The first variable of the category concerns the floor selling space of the retail establishment researched. The retail buyer responds to more than just product or service. It has been pointed out that one dimension of in-store customer buying behavior is the environment of the store itself. The retail store is a bundle of cues and messages which communicate to prospective buyers. The retail store or selling space creates moods and activates the intentions of the potential customer (9, p. 43).

In addition to atmospherics, space productivity ratios are frequently used in retailing as a measure to judge the success or failure of a store or department. Also, the allocation of store space is often made on the basis of the sales productivity of various product lines (11, p. 513). The space-productivity ratio is the sales per square foot of a selling area of a department or store. Moreover, there are retail operating space ratios which are made available on a regular basis by various retail publications and trade associations. These ratios can be utilized for comparison purposes by most retailers (8, p. 167). Therefore, the
variable concerning the floor selling space of the surveyed retail establishment would seem to be a most appropriate variable of the place and location category of the RMMQ.

The second variable of the place and location category of the RMMQ concerns the competitive situation of the retail establishment surveyed. The retail manager is asked to rate his competitive situation as either weak, below average, moderate, strong, or vigorous. Specific listed criteria are listed to aid in the selection of the appropriate situation.

On the whole, all retail establishments are affected in one way or another by their real or imagined competitive situation. The selected retailing strategy of the retail establishment is generally a product of this perceived competitive situation which the retail store is a part of. Essentially, there is a constant search for a differential advantage in the retailing world. If differential advantage is accomplished, then the firm has achieved some degree of distinctiveness from its competitors. This advantage may be due to store location, store image, services offered, brands or products offered, special customer appeals, etc. (7, pp. 48-49). In any case, the perceived or actual competitive situation could influence the basic retailing strategy of the retail establishment. In addition, the competitive situation is never static. Competition can take many forms including price, hours, location, new retail
institutions, product innovations, and changes in consumer expectations (11, p. 174). Therefore, the inclusion of the competitive situation of the surveyed retail establishment as a variable in the place and location category of the RMMQ is considered to be appropriate.

**Promotion Variables**

The fifth major classification area of the RMMQ contains two major decision variables of promotion in a retail establishment. The first variable contains a breakdown of the most frequently used methods of promotion in retailing. The retail manager is asked to indicate by percentage of use the specific methods his retail establishment utilizes in its promotional activities. Promotional methods listed are newspaper, pure advertising news sheet, television, radio, circulars, premiums, other, and no business promotion. Since promotion is one of the four major controllable tools of any marketing mix, this variable is considered to be essential to the promotion category of the RMMQ.

The second variable of the promotion category concerns the use or non-use of trading stamps by the surveyed retail establishment. The retail manager is asked whether the retail establishment offers trading stamps—yes or no.

Trading stamps are not a new promotion item to retailers. Supermarkets at one time were the biggest users of trading stamps. At one time during the 1960's between 60 and 70 per cent of all stamps were distributed by supermarkets...
(8, p. 399). However, by the 1970's, the use of trading stamps by all retailers was on the decline. One reason was the cost of stamps. Two per cent of total sales are, as a general rule, the cost of stamps. In addition, supermarkets in the 1970's were attempting to cut prices to the bone. Moreover, many stores found that the competitive effectiveness of trading stamps was decreasing (8, p. 400). However, many retail stores have still retained trading stamps. Therefore, the question of whether a retail establishment continues to offer trading stamps seems to be a most appropriate variable for the promotion category of the RMMQ.

**Pricing Variables**

The sixth major classification area contains the pricing variables of the RMMQ. The first variable pertains to the competitive pricing strategy of the retail establishment surveyed. The retail manager is asked whether the retailer's strategy is to price above, meet, or below its competition. Essentially, price decisions can affect competition. In other words, what importance is given to price competition can have a great effect on a retailers competitive situation. The retailer may price above the market. This can be successfully done if the products are considered to be specialty goods or if the retail establishment is strongly differentiated. Frequently used differentiation methods are credit, location, and time convenience.
Finally, retailers with a highly prestigious image may elect to charge above-the market prices (11, pp. 395-396).

The retailer may choose to price at the market level. The majority of retailers tend to offer merchandise at prices which are comparable to the prices of their competition. Retail establishments in this pricing area tend to seek outlet differentiation through product, place, and promotion variables (11, p. 396).

And finally, the retailer may choose to price below the market. Retailers who offer below-the-market prices are typically retailers with low overhead and high volume. Discounters are good examples of this type of operation. The major product differentiation tool of this area of competition is price (11, pp. 395-396). The variable concerning the competitive pricing strategy of the surveyed retailer would seem to be a basic pricing decision area. Therefore, this variable would be an appropriate addition to the pricing category of the RMMQ.

The second variable in the pricing category of the RMMQ concerns the extent of psychological or odd pricing techniques practiced by the surveyed retailer. The retailer is given a choice of five percentage levels of use by the retail establishment. The retailer is asked to choose the percentage level which his retail outlet utilizes this practices on the average.
An odd pricing strategy occurs when retail prices are set at levels below even dollar figures. Certain types of prices have long been held to have a special psychological effect on consumers. Further, "retailers have long been enamored of the psychological appeal that odd prices have in stimulating sales" (8, p. 331). Retailers assume that odd prices are more attractive to customers because the few cents below the whole numbers will be perceived as a considerably lower price. However, there has been little actual confirmation of this practice. Mason and Meyer state that "most of the previous research on odd-even pricing has focused on sales effects and not on perceptual distortions or price illusions associated with odd-even pricing" (11, p. 397). However, since psychological or odd pricing techniques are and have been practiced to a great extent, it seems appropriate that this variable is included in the pricing category of the RMMQ.

The third variable in the pricing category of the RMMQ concerns the extent of multiple pricing techniques practiced by the surveyed retailer. The retailer is given a choice of five percentage levels of use by the retail establishment. The retailer is asked to choose the percentage level which his retail outlet utilizes this practice on the average.

Multiple-unit pricing is a strategy whereby the retailer offers customers discounts for buying in quantity. Duncan and Hollander state that "many retailers find that this
technique, when used either as a regular practice or during special sales, builds up the quantity sold and increases dollar margin per transaction" (6, p. 414). However, multiple-unit pricing should only be used for items which the customer generally buys in large quantities. Some customers might resent being forced to buy more than they really want or need. Therefore, since multiple pricing techniques have been used by some retailers to a certain extent, it seems that this variable would be an appropriate inclusion within the category of pricing in the RMMQ.

The fourth variable in the pricing category of the RMMQ concerns the extent of cost plus a department or store fixed percentage markup practiced by the surveyed retailer. The retailer is given a choice of five percentage levels of use by the retail establishment. The retailer is asked to choose the percentage level which his retail outlet utilizes this practice on the average.

Cost plus a department or store fixed markups involve simply adding a fixed percentage to the wholesale cost of the products or services which are sold. This practice is also called "average cost pricing." Average cost pricing is attractive because it is simple and easy to implement. Because of the large number and variety of products carried, most retailers find it is difficult to allocate costs accurately to specific products. In addition, retailers are often more interested in the overall gross margin of the
entire store or department than in the gross margin or contribution margin earned by any single product. Therefore, exact costs associated with a particular product are not always considered crucial to a particular decision. Thus, retailers are willing to rely on average cost concepts as guides to price decisions (7, pp. 247-249). Accordingly, this variable seems to be appropriate in the pricing category of the RMMQ.

The fifth variable in the pricing category of the RMMQ concerns the extent of stockturn-demand (flexible) pricing practiced by the surveyed retailer. The retailer is given a choice of five percentage levels of use by the retail establishment. The retailer is asked to choose the percentage level which his retail outlet utilizes this practice on the average.

Retailers seldom price all goods with one fixed percentage. To do so can leave a firm vulnerable to varying competitive prices and customer demand. In addition, the degree of attractiveness of various items is completely ignored. Rather, retailers use a flexible or variable markup system (7, pp. 247-249). Consequently the skilled retailer attempts to mark up each item to a point which will maximize its total contribution to profit. Even though the cost of the item plus a single average markup percentage is often a useful starting point for price calculations, the determination of the actual price for the individual
item will normally require many upward and downward deviations from that average markup per department or store.

Most retailers divide their stocks into several groups and apply different markup percentages to each group (6, p. 410). This practice is one step beyond the use of a single markup for the whole store. But many retailers recognize that even this practice of dividing the products into different markup groups is not flexible enough to produce maximum profits. Therefore, for maximum profit potential, each item's markup calculation will consider demand, volume, and gross margin (7; 11, p. 248; 395). Therefore, it would seem that the variable concerning the extent of stockturn-demand (flexible) pricing utilized would be a most appropriate part of the category of pricing in the RMMQ.

The sixth variable in the pricing category of the RMMQ concerns the use by the retailer surveyed of suggested list prices of the wholesaler or manufacturer when pricing a product in the retail establishment. The retailer is given a choice of five percentage levels of use by the retail establishment. The retailer is asked to choose the percentage level which his retail outlet utilizes this practice on the average.

Manufacturer or wholesaler suggested prices (list prices) are commonplace in many merchandise categories and are followed to some extent by many retailing firms. Large
firms may only use list prices in some areas of their merchandise assortment. Smaller firms tend to follow suggested prices by the manufacturer or wholesaler to a larger extent. One advantage of following suggested list prices is the simplification of the pricing process. A second advantage is that the approach tends to help the retailer price at a profit. "The manufacturer's suggested price is inevitably based on a mark-up that is so high that even the most inefficient retailer should be able to cover costs" (2, p. 192). Therefore, manufacturers' or wholesalers' list prices bring a high degree of simplicity and a certain degree of profitability. Accordingly, this variable seems to be very appropriate in the pricing category of the RMMQ.

The seventh variable in the pricing category of the RMMQ concerns the use by the retailer surveyed of leader pricing techniques in the retail establishment. The retailer is given a choice of five percentage levels of use by the retail establishment. The retailer is asked to choose the percentage level which his retail outlet utilizes this practice on the average.

In leader pricing, a retailer advertises and sells key items in the product assortment at less than their usual profit margins. The objective of leader pricing is to increase customer traffic into the store in the hope of selling regularly priced merchandise in addition to specially priced items (11, p. 400). Leader pricing is generally
associated with the sale of frequently purchased, nationally branded, high-turnover products. There are two types of leader pricing. One is loss leaders and the second is sales lower than regular prices (3, p. 493).

In addition, since studies have shown that consumer price impressions of most items stocked in a supermarket are somewhat vague, according to Kenneth Runyon, "it is believed that price featuring of frequently purchased items, such as meats, detergents, and coffee, will persuade consumers that the overall pricing policy of the store features economy" (13, p. 363). Therefore, the extent of leader pricing seems to be a very appropriate variable in the pricing category of the RMMQ.

The eighth variable in the pricing category of the RMMQ concerns the knowledge and use of retail markup calculations. The retailer survey is asked how he calculates the retail price of a product. Two methods, per cent of cost and per cent of selling price, are illustrated. In addition, the retailer is given the option to answer that he performs no calculation of retail markup but only uses the recommended list prices of supplier wholesalers or manufacturers.

Markup is the difference between what goods are sold for and what they cost the retailer. Most retail prices are determined by a cost-oriented markup. Markup is generally expressed as a per cent of the retail price. Stores which tend to be modern in their approach to retailing favor
the retail or selling price as the base figure (4, p. 216).

William H. Bolen lists the following attributes of the selling price base.

1. Much trade data are available using this base.
2. Proper emphasis is placed on the retail price -- what the item is worth.
3. Retail figures are easier to obtain than cost data on a day-to-day basis.
4. Percentage analysis of the complete income statement on the same basis is possible since many financial operating ratios are based on sales (4, p. 216).

In addition, the selling price base method is essential if the retail method of inventory is utilized (11, pp. 368–375). However, markup percent can also be calculated by using cost as the base. But, markup percent of cost should always be differentiated from markup as a percent of the selling price.

The knowledge and proper use of retail markup calculations could possibly be considered a positive variable for an efficiently run modern supermarket. Therefore, this variable seems to be an appropriate part of the pricing category of the RMMQ.

**Demographic Variables**

The final major classification of the RMMQ pertains to the demographic variables of the retail establishment surveyed. These variables include the age, education, sex, and work experience of the responding retail manager. These variables are considered the customary demographic variables
which could be used for predicting operating success of a retail establishment.

Using the above seven classifications and their respective variables plus the four dependent variables noted in Chapter II, and a store classification question, a four page typed questionnaire was constructed containing thirty-five questions. The questionnaire was designed for fast completion, easy understanding, honesty of response, and ease of computerization (Gunning-Fog equals 10.9). The questionnaire was then ready for a sample pretest.

Pretest of the Questionnaire

The final step in the construction of the RMMQ was the pretest. Sample copies of the RMMQ and a cover letter were prepared to be pretested with a selected sample of respondents of the target universe. The cover letter asked the cooperation of the respondent and briefly explained the purpose of the questionnaire.

The subjects chosen to participate in the pretest were selected because of their recognition and knowledge of the researcher. Since the pretest was done by the personal interview method, it was thought that the respondents would fully cooperate in the questionnaire evaluation. As noted in Chapter I, the researcher had been a retailer-member of the target universe for a number of years. Ten subjects were interviewed concerning the length, wording, availability
of information, and comprehension of the questionnaire. After the pretest, the questionnaire was revised to improve readability and comprehension.

The final copy of the RMMQ and the cover letter* were then typed on five pages of 8-1/2" by 11" white paper and multiple offset copies were printed. The letter and questionnaire were then available for the collection of the research data.

Collection and Preparation of Data

Once the RMMQ had been constructed and pretested, it was used in the study to test the hypotheses set forth in the introduction of the dissertation. A study was conducted which would allow a systematic evaluation of the thirty carefully chosen retail management mix variables and their relationships to four predictive dependent variables of retailing success. These dependent variables are gross profit margin, net profit margin, gross margin return on inventory investment, and net profit return on inventory investment. This section of the dissertation looks at the procedures involved in the collection of the data.

In order to assure the validity of the study, it was decided to survey the entire universe of the selected subject organization (Affiliated Food Stores, Inc. of Dallas).

*See Appendix A and B for the final copy of the RMMQ and cover letter.
In addition, a second cover letter*, written by the general manager of the subject organization, was utilized along with the pretested cover letter. Furthermore, the general manager and top executives of the subject organization read and approved the pretested questionnaire and cover letter.

After acquiring the support and approval of the officers of the organization, a current mailing list of the member retailers of the subject organization was provided to the researcher. Within a week of receiving the mailing list, 630 questionnaires along with stamped addressed return envelopes were mailed to the member retail outlets of Affiliated Food Stores, Inc. of Dallas. The mailing list consisted of the store number, store name, and mailing address of the member retailer. Furthermore, Affiliated Food Stores, Inc. of Dallas member retailers are situated over all of Texas with the exception of far West Texas. The date the questionnaires were mailed was November 29, 1979.

The first returned questionnaires were received December 3, 1979. By the end of the tenth day, 235 returned questionnaires had been received. On December 14, 1979, the second wave of 395 questionnaires was mailed to the member retailers who had not returned questionnaires from the first wave.** The questionnaires were number coded by their

*See Appendix C for cover letter by general manager.

**See Appendix D for cover letter.
Affiliated Food Store number. In addition, each stamped addressed envelope enclosed with a questionnaire had the store number of the member retailer on it. Strict recording procedures were followed in posting the returned questionnaires to a control list of the member retailers. The final questionnaire was received February 5, 1980. At that time, 385 questionnaires had been returned. Of this total, 379 were usable for a 60 per cent return rate of the total universe.

The questionnaires were then posted on IBM coding sheets. The data were then key punched on 80 column cards. The resulting data deck consisted of 379 cases with two cards per case. Each card contained the member retailer's Affiliated Food Store number and questionnaire data of the responding subject.

After the creation of the data cards the appropriate data definition cards were key punched. Correct procedures were followed for generating and processing an SPS file (12).

Specifically, file name and run name were created along with a variable list and input format definition. At that time, testing programs were selected with the capabilities of describing the collected data as well as evaluating the relationships among all test variables. Using all 379 cases of the research study, the following SPSS subprograms and appropriate options were instigated: Descriptive Statistics
It was determined through further testing that the data would have to be subjected to factor analysis before being tested via multiple regression/correlation analysis.

Summary of the Chapter

The first section of the chapter discussed the construction and theoretical basis of the thirty independent retail management variables selected for the RMMQ. Each variable was discussed and justified for its inclusion in the RMMQ.

The second section of the chapter concerned the pretest of the RMMQ. The procedures and subjects were thoroughly noted. The third section of the chapter pertained to the collection and preparation of the data of the research study. A detailed account was given concerning the collection, coding, and preparation of the data for statistical analysis. It was noted that a 60 per cent return of the total universe surveyed was accomplished. An SPSS program was then generated to process the data according to the following subprograms: Frequencies, Pearson Correlation and Scattergram. The next chapter of the dissertation reports the results of this statistical analysis.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

ANALYSIS OF THE DATA: DESCRIPTIVE STATISTICS AND PEARSON CORRELATION

The next step in the research study is to evaluate the statistical computer results in light of the seven dissertation hypotheses. The first section of this chapter presents the descriptive statistics of the researched members of the subject organization.

Descriptive Statistics

To determine the applicability of any research finding, one must be aware of the simple characteristics. Specifically, several key descriptive statistics are presented here to evaluate the particular characteristics of this study.

As noted in Chapter I of the dissertation, four retailing indices of success were chosen as the dependent variables of the study. These indices of success are gross profit margin, net profit margin, gross profit return on inventory investment, and net profit return on inventory investment. In addition, question number 26 of the RMMQ also obtained the stock-turns per year of the researched retailer. The stock-turns per year were used with the gross profit data
and net profit data to obtain GMROI and NPROI data. Furthermore, question number 10 of the RMMQ enabled the researcher to classify the respondents into three categories—supermarkets, superettes, and convenience stores.*

The SPSS subprogram frequencies reveal that a total of 379 retail establishments participated in the research study. Of this total, 275 were classified as supermarkets, 57 were classified as superettes, and 65 were classified as convenience stores. Thus, on the whole, the sample seems to be represented by a broad and sufficient range of retail establishments belonging to a grocery retailer-cooperative.

**Selected Retailing Success Variables**

As can be seen from Table I, some key statistics are presented in regard to GPM, NPM, stock turnover rate, GMROI, and NPROI for the three retail store classifications. As Table I indicates, the average per cent of gross margin for a supermarket is 21.1 per cent. In addition the table indicates the average GPM for superettes is 23.2 per cent and 26.9 per cent for convenience stores.

Table I also indicates that the average net profit margin percentage for supermarkets of the study is 4.7 per cent. Furthermore, the table indicates that the average net profit margin percentage for superettes and convenience stores is nearly twice that of supermarkets. In addition,

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*See Appendix A for copy of RMMQ.
Table I indicates that the average stockturn rate for the average supermarket is 16.9 times a year. The stockturn rate of convenience stores reflects a turnover rate of 13.3 which is nearly as great as that of supermarkets.

**TABLE I**

SELECTED RETAILING SUCCESS VARIABLES

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>% Gross Profit Margin</th>
<th>% Net Profit Margin</th>
<th>Inventory Turnover Per Year</th>
<th>% Gross Margin ROI</th>
<th>% Net Profit ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>21.1</td>
<td>4.7</td>
<td>16.9</td>
<td>347</td>
<td>72.9</td>
</tr>
<tr>
<td>Superettes</td>
<td>23.3</td>
<td>7.2</td>
<td>11.4</td>
<td>269</td>
<td>83.5</td>
</tr>
<tr>
<td>Convenience</td>
<td>26.9</td>
<td>8.1</td>
<td>13.3</td>
<td>357</td>
<td>103.7</td>
</tr>
</tbody>
</table>

The next section of Table I concerns the percentage of gross margin return of inventory investment for the retail establishments in the research study. The table reflects that supermarkets and convenience stores have similar GMROI percentages but that superettes have an average GMROI of 269 per cent. Possibly the lower inventory turnover rates of superettes might be the reason for some of the difference in GMROI rates. However, in contrast, whereas Table I indicates that the average net profit return on inventory investment is 103.7 per cent for convenience stores, the average NPROI for supermarkets is only 72.9 per cent. In addition,
the average NPROI for superettes is 83.5 per cent. These figures possibly reflect the differences in average net profit margins of the three classifications, especially supermarkets. The higher percentage of NPROI for convenience stores reflects high inventory turnover rates in combination with high net profit margins for this classification area.

**Selected Service Variables**

Table II reflects the three service variables of the research study. The first section of Table II reflects the percentage of retail outlets who provide grocery delivery to their customers. The table indicates that about one third of all superettes and convenience stores provide delivery service for merchandise sold while approximately 20 per cent of supermarkets provide this service variable.

In addition, Table II indicates that nearly 60 per cent of superettes provide their customers with the service variable of charge accounts. This information is in contrast to the 32 per cent of supermarkets which provide this service variable. Table II also indicates that nearly 13 per cent of convenience stores accept bank cards (VISA, Mastercharge). Again this information is in contrast to the low acceptance percentage of bank cards by superettes and supermarkets.
The acceptance of credit cards is a new trend in the retail grocery area. The higher average gross profit margin by convenience stores might have allowed a larger percentage of this classification to practice this new service variable. In addition, the 4.3 percentage of supermarkets who accept credit cards possibly reflects some of the discount stores who took part in the research survey. They were listed under the supermarket classification.

### TABLE II

SELECTED SERVICE VARIABLES

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Grocery Delivery % Yes</th>
<th>Credit Accounts % Yes</th>
<th>Credit Cards % Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>19.4</td>
<td>32.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Superettes</td>
<td>32.1</td>
<td>58.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Convenience</td>
<td>33.9</td>
<td>43.5</td>
<td>12.9</td>
</tr>
</tbody>
</table>

**Management Policy Variables**

Table III of the chapter reflects the five managerial policy variables of the research study. The first section of the table indicates the average hours a retail establishment is open a week. As expected, convenience stores operate longer hours than the other two classifications. However, their average is only 97.2 hours per week. The number of hours that superettes and supermarkets are
operated reflects nearly the same average. There is just a 4 hour average difference between the 2 classifications. In addition, these 2 classifications are less than 20 hours below the average weekly hours open by convenience stores.

The next section of Table III concerns the percentage ratio of part-time employees to full-time employees in a retail establishment. In addition, the table indicates the percentage of employees who work less than 35 hours but more than 20 hours a week and the percentage of employees who work 20 hours or less a week. Essentially, Table III indicates no significant difference in the percentage makeup of full-time to part-time employees in the three classifications. The percentage ratio of full-time employees is 61 per cent for all 3 categories. Table III indicates only a 4 per cent difference in the supermarket use of part-time employees who work less than 35 hours but more than 20 hours a week.

The next section of Table III concerns the salary scale of regular and part-time employees (excluding supervisors) of the researched retailing establishments. The table reflects the average percentage of retailers whose salary scale is above average for retail stores of the trade area, average for the trade area, or if the retailer only pays minimum wage. Table III indicates that for all three classifications of retailers the highest percentage reflects a salary scale which is considered to be average for the trade
<table>
<thead>
<tr>
<th>Type of Store</th>
<th>% Having Employees Stay 1/2-2 yrs</th>
<th>% Having Employees Stay 2 yrs+</th>
<th>Training of Non-Supervisory Employees</th>
<th>% Paying Minimum Wage</th>
<th>% Paying Average</th>
<th>% Paying above Average</th>
<th>Full/Part-Time Employees</th>
<th>Full-time</th>
<th>Part-time hours between 20-35</th>
<th>Full-time less than 20 hours</th>
<th>Average Hours Open Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarket</td>
<td>3.2</td>
<td>49.6</td>
<td>47.2</td>
<td>25.6</td>
<td>72.0</td>
<td>2.4</td>
<td>13.9</td>
<td>76.9</td>
<td>9.2</td>
<td>10.6</td>
<td>28.0</td>
</tr>
<tr>
<td>Superette</td>
<td>14.3</td>
<td>28.6</td>
<td>57.1</td>
<td>35.1</td>
<td>64.9</td>
<td>0.0</td>
<td>22.8</td>
<td>66.7</td>
<td>10.5</td>
<td>14.5</td>
<td>24.4</td>
</tr>
<tr>
<td>Convenience</td>
<td>14.5</td>
<td>40.3</td>
<td>45.2</td>
<td>29.0</td>
<td>67.7</td>
<td>3.2</td>
<td>29.0</td>
<td>59.7</td>
<td>11.3</td>
<td>15.1</td>
<td>23.4</td>
</tr>
</tbody>
</table>
area. Moreover, the table indicates that nearly 77 per cent of the supermarkets surveyed have a salary scale which is average for the trade area.

The fourth major section of Table III concerns the training of employees (non-supervisors) in the retail establishments of the study. The table reflects the average percentage of retailers who have a special training program for a specified period, have on the job training, supervised by a regular employee or supervisor, or have no training program--only learning while performing the job. Table III indicates that all classifications of retailers surveyed have a high percentage of job training supervised by a regular employee or supervisor. The percentages in the section range from 65 per cent to 72 per cent of the total sample surveyed. However, the table does indicate that 35 per cent of the superettes surveyed have no training program but only learning while performing the job. In addition, the data indicate that only a minimum percentage of all the retailers surveyed have a special training program for a specific period of time.

The final section of Table III concerns the turnover rate of employees (non-supervisors) of the retailers researched. The table reflects the average percentage of retailers whose employees tend to stay with the outlet for two or more years, tend to stay six months to two years, or stay less than six months of employment with the retailer.
The data indicate that a high percentage of employees of all classifications tend to stay for two or more years of employment with an outlet. The data for supermarkets indicate a balance between the two categories. Superette data seem to indicate that a higher percentage of outlets in this classification tend to keep their employees two years or more.

Selected Product and Merchandising Variables

Table IV reflects the four product variables of the research study. The first section of Table IV indicates the average percentage of total inventory of each retail classification which is devoted to general merchandise. The table shows that both superettes and convenience stores maintain an average 25 per cent of inventory in general merchandise whereas supermarkets maintain an average 18 per cent. Since general merchandise traditionally carries a higher than average gross profit margin, these figures might indicate one of the reasons why supermarket (Table I) gross profit margin figures were slightly lower than superettes and convenience stores.

The second section of Table IV concerns the store-wide product assortment of the retail establishments surveyed. The table reflects the percentage of stores who maintain a large assortment of all types of merchandise (many brands, sizes, etc.), maintain only an average assortment (3 to 5
### Table IV: Selected Product and Merchandising Variables

<table>
<thead>
<tr>
<th>General Merchandise as a Per Cent of Total Inventory</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Store-wide Product Assortment</td>
<td></td>
</tr>
<tr>
<td>% Having Large Assortment</td>
<td></td>
</tr>
<tr>
<td>% Having Average Assortment</td>
<td></td>
</tr>
<tr>
<td>% Having Minimum Assortment</td>
<td></td>
</tr>
<tr>
<td>Use of Private Label Merchandising</td>
<td></td>
</tr>
<tr>
<td>% Using Heavily</td>
<td></td>
</tr>
<tr>
<td>% Using Moderately</td>
<td></td>
</tr>
<tr>
<td>% Using Little or None</td>
<td></td>
</tr>
<tr>
<td>Use of Non-Food Rack-Jobbers</td>
<td></td>
</tr>
<tr>
<td>% Using Heavily</td>
<td></td>
</tr>
<tr>
<td>% Using Moderately</td>
<td></td>
</tr>
<tr>
<td>% Using Little</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Store</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td></td>
</tr>
<tr>
<td>Superettes</td>
<td></td>
</tr>
<tr>
<td>Convenience</td>
<td></td>
</tr>
</tbody>
</table>

74
in all product types), or only maintain a minimum assortment of merchandise (2 or less in each product type). The table indicates that only a minimum percentage of superettes and convenience stores maintain a large assortment of all types of merchandise in their basic inventory. Furthermore, the table indicates that only 17 per cent of supermarkets maintain a large assortment of all types of merchandise. The table reflects that most supermarkets maintain an inventory which has an average product assortment (3 to 5 in all product types). However, in contrast the table indicates that most convenience stores only maintain a minimum assortment of product types within their basic inventory.

The next section of Table IV concerns the extent of use by the researched retailers of private label merchandise. The table reflects the percentage of stores who have heavy use of private label merchandise (all lines of Shurfine, etc.) in inventory, have moderate use of private label (Shurfine) merchandise in inventory, or have little or no private label merchandise in inventory. The table indicates that supermarkets have the highest percentage of stores which have a heavy use of private label merchandise. In contrast, convenience stores have the highest percentage of stores with little or no private label merchandise in inventory. The table also indicates that better than 50 per cent of superettes have moderate use of private label merchandise.
The final section of Table IV concerns the level of use of non-food rack jobber merchandise and service by the researched retail establishments. The table reflects the percentage of stores who have heavy use (more than 7 rack jobbers), average use (5 to 7 rack jobbers), or minimum use (less than 5 rack jobbers) of this merchandise and service area. The table indicates that a high percentage of all the stores in all three classifications have a minimum use of this merchandise and service area.

**Place and Location Variables**

Table V reflects two place and location variables. The first section of the table concerns the average square feet of floor selling space of the researched retail establishments. The table indicates that the average square feet of floor selling space of the surveyed supermarkets is 10,167 feet. In addition, the table does indicate that there is only a 600 square foot difference in the average superette and convenience store.

The next section of Table V concerns the management perceived competitive situation of the retailing establishments researched. The table reflects the rating of trade area competitive situation by the surveyed retailer. The table indicates the percentage of managers who rate their competitive situation as either weak, below average, moderate, strong, or vigorous. The table reflects that most of
TABLE V
PLACE AND LOCATION VARIABLES

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Avg. Square Feet of Floor Selling Space</th>
<th>Per Cent Rating Their Trade Area Competition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Weak</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>10,167</td>
<td>5.5</td>
</tr>
<tr>
<td>Superettes</td>
<td>2,946</td>
<td>8.8</td>
</tr>
<tr>
<td>Convenience</td>
<td>2,315</td>
<td>12.5</td>
</tr>
</tbody>
</table>
the stores in all classifications rate their situation as either strong or vigorous. However, 32 per cent of superettes did rate their competitive situation as average.

Selected Promotion Variables

Table VI reflects the promotion variables of the research study. The first section of Table VI concerns the use of trading stamps by the surveyed retailing establishments. The table indicates the percentage of stores of each classification which uses trading stamps as a promotion technique. As Table VI indicates, 38 per cent of supermarkets give trading stamps and zero convenience stores utilize this promotion variable. In addition only a minimum number of superettes utilize this promotion variable.

The next section of Table VI concerns the percentage breakdown of the total promotion efforts of the surveyed retailing establishments. The table indicates by percentage the average use of specific promotion methods by the researched retailers. The table reflects that supermarkets concentrate most of their promotion efforts with either newspapers or circulars. The table indicates that most superettes either utilize newspapers or have no promotional effort. In addition, most convenience stores either use other promotion methods or have no promotion effort.
### TABLE VI
SELECTED PROMOTION VARIABLES

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Average Per Cent of Total Promotion Efforts</th>
<th>Per Cent Giving Trading Stamps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
<td>Other</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>3.5</td>
<td>6.0</td>
</tr>
<tr>
<td>Superettes</td>
<td>22.8</td>
<td>11.3</td>
</tr>
<tr>
<td>Convenience</td>
<td>36.9</td>
<td>22.4</td>
</tr>
</tbody>
</table>
These other promotion methods could be store front promotions or in-store promotion tools.

Selected Pricing Variables

Table VII reflects the pricing variables of the research study. The first section of Table VII concerns the competitive pricing strategy of the researched retailers. The table indicates the percentage of surveyed stores of each classification who either price above, with, or below their competition. The table indicates that most of the stores of all three classifications meet the pricing strategies of their competition. Furthermore, 75 per cent of the supermarkets surveyed meet the pricing strategies of their competition.

The next section of Table VII concerns the knowledge and use of retail markup calculations by the surveyed retailers. The table indicates the percentage of each classification of retailers who either calculate the price of a product as a per cent of cost, per cent of selling price, or who perform no calculation but only use recommended list prices of supplier wholesalers or manufacturers. As indicated, the table reflects that most of the retailers of all three classifications use the per cent of selling price method. However, the survey indicates that 33 per cent of the supermarkets surveyed use the cost method. This is
| Various Pricing Techniques Used the Majority of the Time | Type of Store         | Competitive Pricing Strategy | Per Cent Who Price above Competition | Per Cent Who Price at Competition | Per Cent Who Price below Competition | Per Cent Who Use Cost as Base | Per Cent Who Use Price as Base | Per Cent Who Use Recommended Price | Per Cent Who Use Psychological Pricing | Per Cent Who Use Multiple Pricing | Per Cent Who Use Cost-Plus Pricing | Per Cent Who Use Stock-Turn Pricing | Per Cent Who Use Suggested List Pricing | Per Cent Who Use Leader Pricing |
|--------------------------------------------------------|-----------------------|-----------------------------|-------------------------------------|-----------------------------------|-------------------------------------|---------------------------------|---------------------------------|-----------------------------------|--------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Supermarkets                                           |                      |                             |                                     |                                   |                                     |                                 |                                 |                                   |                                      |                                     |                                   |                                   |                                    |                                   |                                    |
| Suburban Store                                         |                      |                             |                                     |                                   |                                     |                                 |                                 |                                   |                                      |                                     |                                   |                                   |                                    |                                   |                                    |
| Convenience Store                                      |                      |                             |                                     |                                   |                                     |                                 |                                 |                                   |                                      |                                     |                                   |                                   |                                    |                                   |                                    |
|                                                        | 68.2                  | 65.0                        | 64.3                                | 63.9                              | 63.9                                | 63.9                            | 63.9                            | 63.9                              | 63.9                                 | 63.9                                | 63.9                              | 63.9                            | 63.9                            | 63.9                            |
surprising since the selling price method is considered to be the modern retailing method of pricing.

The next section of Table VII concerns the percentage of retailers surveyed who use psychological or odd pricing techniques the majority of the time in their retail outlets. All three classifications indicate a very high percentage use of this pricing technique. The percentages range from 75 to 80 per cent. The next section of the table concerns the percentage of surveyed retailers who use multiple pricing techniques in the pricing of the products sold by the retail outlet. The table indicates that only a small percentage of superettes and convenience stores utilize this pricing technique the majority of the time. Furthermore, the table indicates that only 33 per cent of supermarkets use this technique the majority of the time.

The next section of Table VII concerns the percentage of retailers researched who utilize a cost plus a department or store fixed percentage markup when pricing products the majority of the time. The table indicates that only a third of the superettes and convenience stores practice this pricing technique. However, the table does indicate that 45 per cent of the supermarkets do practice this technique the majority of the time. Further, the next section of Table VII reflects the percentage of retailers surveyed who practice stockturn-demand (flexible) pricing the majority of the time when pricing products of the retail establishment.
The table indicates 50 per cent of the supermarkets and convenience stores surveyed practice this technique the majority of the time.

In like manner, the next section of the table concerns the percentage of retailers who use suggested list prices of the wholesaler or manufacturer when pricing a product in the retail establishment. The table indicates that 65 per cent of the researched supermarkets and superettes utilize this technique the majority of the time. In contrast, the table indicates that only 38 per cent of the surveyed convenience stores practice this technique the majority of the time.

Finally, the last section of Table VII concerns the percentage of surveyed retailers who utilize leader pricing techniques in their retail outlets the majority of the time. The table indicates that a high percentage of supermarkets utilize this pricing technique the majority of the time. On the other hand, the table indicates that a small percentage of convenience stores utilize this technique the majority of the time.

**Demographics of the Owner-Managers**

Table VIII reflects selected demographic variables of the owner/managers of the retail establishments in the research study. The first section of the table concerns the average age of owner/managers. The average age of the
respondents ranged from 39 to 43 for all classifications. The next section pertains to the average years of retailing experience of the owner/managers. The years of experience ranged from 12 to 16 years. However, the average years of retailing experience were more for supermarket operators.

The next section of Table VIII concerns the education of the owner/managers of the retail establishments surveyed. The table indicates that the majority of respondents in the superette and convenience store classification had a high school education or less. In addition, the table indicates that 57 per cent of the owner/managers of supermarkets have college credits.

**TABLE VIII**

SELECTED DEMOGRAPHICS OF THE OWNER/MANAGER

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Avg. Age</th>
<th>Avg. Years of Experience</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Per Cent High School Graduate or Less</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>39</td>
<td>15.5</td>
<td>43.2</td>
</tr>
<tr>
<td>Superettes</td>
<td>42.6</td>
<td>14.3</td>
<td>54.5</td>
</tr>
<tr>
<td>Convenience</td>
<td>40.9</td>
<td>12.5</td>
<td>50.8</td>
</tr>
</tbody>
</table>
Perceived Importance of Selected Retailing Variables

Table IX reflects the perceived importance of a selected group of retailing variables by the surveyed retailers of the research study. Each retailer ranked the six listed retailing variables one through six indicating the order of importance the variable is considered relative to the retail establishments strategic marketing decisions. The table indicates the average ranking of importance by each classification by the researched retailers.

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Customer Service</th>
<th>Price</th>
<th>Store Personnel</th>
<th>Promotion</th>
<th>Store Location</th>
<th>Product Assortment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>1*</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6**</td>
</tr>
<tr>
<td>Superettes</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Convenience</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

*1 = Most Important.  
**6 = Least Important.

Accordingly, the table indicates that all three classifications ranked customer service as the most important variable. Supermarkets ranked price second, while convenience stores ranked this variable as fifth in importance.
Store personnel was ranked third by both supermarkets and convenience stores. In addition, store personnel was ranked second in importance by superettes. Accordingly, store location was ranked second by convenience stores. However, in contrast, supermarkets ranked promotion fourth and product assortment sixth in perceived importance. These two variables would seem to be ranked lower than the general conception of supermarket strategy.

Hypothesis Testing Via the Pearson Correlation Coefficient

Even though descriptive statistics can be meaningful and important in a research study, they indicate little about the relationship among the research variables. For this type of analysis one must use inferential statistics. A popular inferential statistic available to define relationships between various test variables is the Pearson product moment coefficient. This statistic is used as the criterion to either accept or reject the seven hypotheses of the research study.

The Pearson product moment coefficient basically answers two important questions in empirical research. What kind of relationship exists between two test variables and how good the relationship is between two test variables (1). For example, if one variable changes in the opposite direction from the other, then a negative relationship exists between
the two test variables. On the other hand, if one variable changes in the same direction as the other, then there is a positive relationship between the two. The strength of the relationship is determined by the amount of relative influence one variable has on another. Yet, this relative influence might not be the basis or purpose of the relationship. However, the Pearson product moment coefficient can provide a significant amount of useful information as to the possible relationship of one variable to another. Even though there can be stated no direct cause-and-effect between two variables, the statistical measure can indicate the relative relationship, strength, and probability of chance occurrence between two test variables.

**Hypotheses One Through Seven**

For testing hypothesis one through seven the appropriate data were subjected to the SPSS Subprograms Pearson Correlation (2, pp. 281-288) and Scattergram (2, pp. 293-299). The testing of each hypothesis and results follow below.

**Hypothesis One - Selected Service Variables**

Hypothesis One: A relationship exists between three selected service variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

The data analysis of Hypothesis One is indicated within Table X of the research study. For the purposes of this
study, the surveyed respondents are classified as either supermarket, superette, or convenience store. In addition, sub-hypotheses, as stated in the null form, are utilized for the analysis of the selected retailing variable for each classification and the retailing success variable—net profit return on inventory investment.

**Null Hypothesis 1-A:** No relationship exists between supermarket grocery delivery and net profit return on inventory.

The data analysis indicates, referring to Table X, a Pearson correlation coefficient of .15 between grocery delivery and net profit return on inventory investment which is statistically significant. Therefore, null hypothesis 1-A is rejected. In addition, there is a Pearson coefficient of .26 between grocery delivery and net profit margin, which is also statistically significant. Even though the relationships between grocery delivery and GPM and GMROI are not statistically significant, the positive significance of NPM and NPROI would seem to indicate grocery delivery as a possible success variable for supermarket retailing strategy.

**Null Hypothesis 1-B:** No relationships exist between superette grocery delivery and net profit return on inventory.

As seen in Table X, the Pearson coefficient of .36 indicates a strong significant relationship between grocery delivery and net return on inventory investment. Therefore, null hypothesis 1-B is rejected. Moreover, there is a
Pearson correlation coefficient of .26 between grocery delivery and NPM which is statistically significant. Therefore, the data would seem to indicate that grocery delivery might be a positive retailing strategy variable for supermarkets.

**TABLE X**

**RELATIONSHIPS BETWEEN SELECTED SERVICE VARIABLES AND FOUR INDICES OF RETAILING SUCCESS**

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Grocery Delivery</th>
<th>Credit Accounts</th>
<th>Credit Cards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supermarkets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.04</td>
<td></td>
<td>.18**</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.26**</td>
<td>.32**</td>
<td>.03</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.02</td>
<td>.20**</td>
<td>-.24**</td>
</tr>
<tr>
<td>Net ROI</td>
<td>.15*</td>
<td>.36**</td>
<td>-.12*</td>
</tr>
<tr>
<td><strong>Superettes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.01</td>
<td>-.27*</td>
<td>.05</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.26*</td>
<td>.17</td>
<td>-.09</td>
</tr>
<tr>
<td>GMROI</td>
<td>.18</td>
<td>-.22</td>
<td>-.08</td>
</tr>
<tr>
<td>Net ROI</td>
<td>.36**</td>
<td>.06</td>
<td>-.11</td>
</tr>
<tr>
<td><strong>Convenience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.31**</td>
<td>-.35**</td>
<td>.07</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.15</td>
<td>.11</td>
<td>.15</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.22</td>
<td>.01</td>
<td>.29*</td>
</tr>
<tr>
<td>Net ROI</td>
<td>.13</td>
<td>.22</td>
<td>.37**</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01

Null Hypothesis 1-C: No relationship exists between convenience store grocery delivery and net profit return on inventory.

The data analysis indicates, referring to Table X, a Pearson correlation coefficient of .13 between convenience
store grocery delivery and net profit return on inventory investment. This coefficient is not statistically significant. Therefore, null hypothesis 1-C is accepted. In addition, there is a Pearson coefficient of -.31 between grocery delivery and GPM, which is statistically significant. Accordingly, the data would seem to indicate that grocery delivery is not a positive retailing variable for a convenience store strategy. The increased use of grocery delivery has a negative association with GPM.

Null Hypothesis 1-D: No relationship exists between supermarket credit accounts and net profit return on inventory.

As seen in Table X, the Pearson coefficient of .36 indicates a strong positive significant relationship between credit accounts and net return on inventory investment. Therefore, null hypothesis 1-D is rejected. In addition, the data analysis reflected in the table also shows a statistical significant relationship between GPM, NPM, GMROI, and the retailing variable—supermarket credit accounts. Therefore, the data analysis would seem to indicate that credit accounts could be considered a possible retailing variable for supermarket strategy.

Null Hypothesis 1-E: No relationship exists between superette credit accounts and net profit return on inventory.

Again referring to Table X, the data analysis indicates an insignificant Pearson correlation coefficient of .06 between credit accounts and net profit return on inventory
investment. Thus, null hypothesis 1-F is accepted. Moreover, there is also a significant Pearson coefficient of -.27 between credit accounts and GPM. Therefore, this data would seem to indicate a negative aspect concerning the increased use of the retailing variable credit accounts by superettes in their retailing strategy.

Null Hypothesis 1-F: No relationship exists between convenience store credit accounts and net profit return on inventory.

As seen in Table X, the Pearson statistic reports an insignificant relationship of .22 between credit accounts and NPROI. Therefore, null hypothesis 1-F is accepted. Furthermore, there is a Pearson coefficient of -.35 between credit accounts and GPM which is statistically significant. Thus, this data seem to indicate that credit accounts should possibly not be considered a positive retailing mix variable for convenience store strategy. Specifically, the data indicate that additional credit accounts have a negative relationship with GPM.

Null Hypothesis 1-G: No relationship exists between supermarket credit card acceptance and net profit return on inventory.

Referring to Table X, the data analysis indicates a Pearson correlation coefficient of -.12 between credit card acceptance and net profit return on inventory investment, which is statistically significant. Thus, null hypothesis 1-G is rejected. In contrast, there is a Pearson coefficient of .18 between credit card acceptance and GPM, which
is statistically significant. However, the data analysis between credit card acceptance and GMROI indicates a coefficient of -.24. Therefore, the data seem to indicate that credit card acceptance might possibly not be a constructive retailing mix variable for supermarket strategy. Specifically, the data indicate that an increased acceptance of credit cards can have a negative relationship with GMROI and NPROI.

Null Hypothesis 1-H: No relationship exists between superette credit card acceptance and net profit return on inventory.

As seen in Table X, the Pearson statistic reports an insignificant relationship of -.11 between credit card acceptance and NPRPI. Therefore, null hypothesis 1-H is accepted. Moreover, since the data analysis reflects no statistically significant relationship between CPM, NPM, GMROI, and credit card acceptance, the data seem to indicate that this retailing mix variable would not be a positive strategy variable for superettes.

Null Hypothesis 1-I: No relationship exists between convenience store credit card acceptance and net profit return on inventory.

Finally, looking back at Table X, the data analysis indicates a correlation coefficient of .37 between credit card acceptance and NPROI, which is statistically significant. Therefore, null hypothesis 1-I is rejected. In addition, the data analysis indicates a coefficient of .29 between credit card acceptance and GMROI, which is also
statistically significant. Thus, the data would seem to indicate that credit card acceptance could possibly be considered a positive retailing mix variable for convenience store strategy.

**Hypothesis Two - Retailing Management Policy Variables**

Hypothesis Two: A relationship exists between six selected managerial policy variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

The data analysis of Hypothesis Two is indicated within Table XI of the research study. For the purposes of the study, the surveyed respondents are classified as either supermarket, superette, or convenience store. In addition, sub-hypotheses, as stated in the null form, are utilized for the analysis of the selected retailing variable for each classification and the retailing success variable--net profit return on inventory investment.

Null Hypothesis 2-A: No relationship exists between supermarket hours open per week and net profit return on inventory.

As seen in Table XI, the Pearson coefficient of -.19 indicates a statistically significant negative relationship between hours open per week and NPROI. Therefore, null hypothesis 2-A is rejected. In addition, there is a Pearson coefficient of -.12 between hours open per week and NPM which is statistically significant. However, the data do
### TABLE XI

**RELATIONSHIPS BETWEEN SELECTED POLICY VARIABLES AND FOUR INDICES OF RETAILING SUCCESS**

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Hours Open/Week</th>
<th>Salary Scale of Non-Supervisory Employees</th>
<th>Turnover of Non-Supervisory Employees</th>
<th>Per Cent Full-Time Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supermarkets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.01</td>
<td>.08</td>
<td>.01</td>
<td>.18**</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.12*</td>
<td>.03</td>
<td>.23**</td>
<td>.16**</td>
</tr>
<tr>
<td>GMROI</td>
<td>.04</td>
<td>.14*</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.19**</td>
<td>.14*</td>
<td>.22**</td>
<td>.16**</td>
</tr>
<tr>
<td><strong>Superettes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.46**</td>
<td>.12</td>
<td>-.53**</td>
<td>-.12</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.14</td>
<td>.13</td>
<td>.02</td>
<td>-.12</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.06</td>
<td>.23*</td>
<td>-.16</td>
<td>.03</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.32**</td>
<td>.23*</td>
<td>.09</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Convenience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.46**</td>
<td>.35**</td>
<td>-.21*</td>
<td>.20*</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.05</td>
<td>.38**</td>
<td>.06</td>
<td>-.04</td>
</tr>
<tr>
<td>GMROI</td>
<td>.33**</td>
<td>.59**</td>
<td>.06</td>
<td>.27*</td>
</tr>
<tr>
<td>Net ROI</td>
<td>.11</td>
<td>.56**</td>
<td>.09</td>
<td>-.04</td>
</tr>
</tbody>
</table>

* *p < .05.  
** *p < .01.
indicate a negative relationship as hours open per week are increased.

Null Hypothesis 2-B: No relationship exists between superette hours open per week and net profit return on inventory.

Referring to Table XI, the data analysis indicates a Pearson coefficient of -.32 between hours open per week and NPROI which is statistically significant. Therefore, null hypothesis 2-B is rejected. In contrast, there is a Pearson coefficient of .46 between hours open per week and GPM which is also statistically significant. Thus, the data seem to indicate that as hours open per week increases, there is a positive relationship with GPM. However, the data also seem to indicate that as hours open per week increase, there is a negative association with NPROI.

Null Hypothesis 2-C: No relationship exists between convenience store hours open per week and net profit return on inventory.

The data analysis indicates a coefficient, again referring to Table XI, of .11 between hours open per week and NPROI, which is not statistically significant. Therefore, null hypothesis 2-C is accepted. However, the data do indicate a Pearson coefficient of .46 between hours open per week and GPM which is significant. In addition, the data also indicate a statistically significant Pearson coefficient of .33 between hours open per week and GMROI. Table XI provides insufficient data to determine why NPM and NPROI are not statistically significant.
Null Hypothesis 2-D: No relationship exists between the supermarket salary scale of non-supervisor employees and net profit return on inventory.

As seen in Table XI, the Pearson correlation coefficient indicates a relationship of .14 between the salary scale of non-supervisor employees and net profit return on inventory which is statistically significant. Therefore, null hypothesis 2-D is rejected. Moreover, there is a coefficient of .14 between the salary scale of non-supervisor employees and GMROI which is also statistically significant. Thus, the data seem to indicate that an increase in the salary scale of non-supervisor employees can be one of many retailing variables which can positively predict GMROI and NPROI.

Null Hypothesis 2-E: No relationship exists between the superette salary scale of non-supervisor employees and net profit return on inventory.

Referring to Table XI, the data analysis indicates a significant Pearson coefficient of .23 between the salary scale of non-supervisor employees and NPROI. Therefore, null hypothesis 2-E is rejected. In addition, there is a coefficient of .23 between the salary scale of non-supervisor employees and GMROI, which is also statistically significant. Thus, the data seem to indicate that there is a positive relationship between this retailing variable and GMROI and NPROI.

Null Hypothesis 2-F: No relationship exists between the convenience store salary scale of non-supervisor employees and net profit return on inventory.
As seen in Table XI, the Pearson coefficient of .56 indicates a strong positive significant relationship between the salary scale of non-supervisor employees and NPROI. Therefore, null hypothesis 2-F is rejected. In addition, the data analysis reflected in the table also shows a strong positive and statistically significant relationship between the salary scale of non-supervisor employees and GPM, NPM plus GMROI.

Null Hypothesis 2-G: No relationship exists between supermarket turnover rate of non-supervisor employees and net profit return on inventory.

Again referring to Table XI, the data analysis indicates a significant Pearson coefficient of .22 between the turnover rate of non-supervisor employees and NPROI. Therefore, null hypothesis 2-G is rejected. Furthermore, there is a coefficient of .23 between the above mentioned retailing variable and NPM, which is also statistically significant. Thus, the data seem to indicate a positive relationship between the retailing variable and two success indices--NPM and NPROI.

Null Hypothesis 2-H: No relationship exists between superette turnover rate of non-supervisor employees and net profit return on inventory.

As seen in Table XI, the Pearson statistic reports a relationship of .09 between the turnover rate of non-supervisor employees and NPROI which is not statistically significant. Therefore, null hypothesis 2-H is accepted. In addition, there is a Pearson coefficient of -.53 between the above mentioned retailing variable and GPM. Thus, the
data indicate a negative relationship concerning GPM, which is considered significant.

Null Hypothesis 2-I: No relationship exists between convenience store turnover rate of non-supervisor employees and net profit return on inventory.

Again referring to Table XI, the data analysis indicates no statistical significance in the Pearson coefficient of .09 between the turnover rate of non-supervisor employees and NPROI. Therefore, null hypothesis 2-I is accepted. At the same time, the data analysis does indicate a significant coefficient of -.21 between the above mentioned retailing variable and GPM. However, this statistical significant data are negative and only pertains to GPM.

Null Hypothesis 2-J: No relationship exists between supermarket per cent of full-time employees and net profit return on inventory.

As seen in Table XI, the data analysis indicates a statistical significant Pearson coefficient of .16 between per cent of full-time employees and NPROI. Therefore, null hypothesis 2-J is rejected. In addition, the data analysis also indicates strong statistically significant Pearson coefficients between the retailing variable and two success indices—GPM and NPM. Thus, the data seem to indicate that a high percentage of full-time employees can influence to a certain extent GPM, NPM, and NPROI in supermarkets.

Null Hypothesis 2-K: No relationship exists between superette per cent of full-time employees and net profit return on inventory.
Referring to Table XI, the data analysis indicates no statistically significant Pearson coefficient between the per cent of full-time employees and NPROI. Therefore, null hypothesis II-K is accepted.

Null Hypothesis 2-L: No relationship exists between convenience store per cent of full-time employees and net profit return on inventory.

Finally, looking back at Table XI, the data analysis indicates a Pearson coefficient of -.04 between per cent of full-time employees and NPROI, which is not statistically significant. Therefore, null hypothesis 2-L is accepted. However, the data analysis does indicate positive statistically significant Pearson coefficients between the retailing variable and two indices of retailing success—GPM and GMROI.

Hypothesis Three - Selected Product Variables

Hypothesis Three: A relationship exists between five selected product variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

The data analysis of Hypothesis Three is indicated within Table XII of the research study. For the purposes of the study, sub-hypotheses, as stated in the null form, are utilized for the analysis of the selected retailing variable for three classifications of retailers and retailing success variable—net profit return on inventory investment.
TABLE XII

RELATIONSHIPS BETWEEN SELECTED PRODUCT VARIABLES AND FOUR INDICES OF RETAILING SUCCESS

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Merchandise</th>
<th>Assortment</th>
<th>Use of Private Label</th>
<th>Use of Non-Food Rack Jobbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.21**</td>
<td>-.08</td>
<td>-.16**</td>
<td>.01</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.14*</td>
<td>-.18**</td>
<td>-.09</td>
<td>-.16**</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.26**</td>
<td>-.01</td>
<td>-.05</td>
<td>.08</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.10</td>
<td>-.18**</td>
<td>-.06</td>
<td>-.12*</td>
</tr>
<tr>
<td>Superettes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.39**</td>
<td>-.23*</td>
<td>-.58**</td>
<td>.40**</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.20*</td>
<td>-.10</td>
<td>-.09</td>
<td>-.05</td>
</tr>
<tr>
<td>GMROI</td>
<td>.10</td>
<td>-.10</td>
<td>-.14</td>
<td>.10</td>
</tr>
<tr>
<td>Net ROI</td>
<td>.02</td>
<td>-.14</td>
<td>-.02</td>
<td>-.11</td>
</tr>
<tr>
<td>Convenience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.30**</td>
<td>-.30**</td>
<td>-.43**</td>
<td>-.04</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.02</td>
<td>.12</td>
<td>-.01</td>
<td>-.08</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.22*</td>
<td>-.23*</td>
<td>-.28*</td>
<td>-.34**</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.13</td>
<td>-.07</td>
<td>-.03</td>
<td>-.21</td>
</tr>
</tbody>
</table>

*p < .05.
**p < .01.
Null Hypothesis 3-A: No relationship exists between supermarket use of general merchandise and net profit return on inventory.

As seen in Table XII, the data analysis indicates no statistically significant Pearson coefficient between the use of general merchandise and NPROI. Therefore, null hypothesis 3-A is accepted. However, the data analysis does indicate positive statistically significant coefficients between the retailing variable and two indices of retailing success—GPM and NPM. In addition, there is a Pearson coefficient of -.26 between the retailing variable and GMROI which is also statistically significant. Even though the data indicate positive relationships between the retailing variable and two success indices, the data reflect negative relationships between the variable and two other success indices—GMROI and NPROI.

Null Hypothesis 3-B: No relationship exists between superette use of general merchandise and net profit return on inventory.

Referring to Table XII, the Pearson statistic reports an insignificant relationship of .02 between the use of general merchandise and NPROI. Therefore, null hypothesis 3-B is accepted. However, the data analysis indicates positive statistically significant coefficients between the retailing variable and two retailing success indices—GPM and NPM.

Null Hypothesis 3-C: No relationship exists between convenience store use of general merchandise and net profit return on inventory.
Again referring to Table XII, the data analysis indicates no statistically significant Pearson coefficient between the use of general merchandise and NPROI. Therefore, null hypothesis 3-C is accepted. However, the data analysis does indicate a positive statistically significant coefficient of .30 between the variable and GPM. In addition, there is a coefficient of -.22 between the variable and GMROI which is also statistically significant.

Null Hypothesis 3-D: No relationship exists between supermarket product assortment and net profit return on inventory.

As seen in Table XII, the Pearson statistic reports a relationship of -.18 between product assortment and NPROI, which is statistically significant. Therefore, null hypothesis 3-D is rejected. In addition, the data analysis indicates a coefficient of -.18 between the variable and NPM, which is also statistically significant. Thus, the data seem to indicate that there is a negative relationship between the variable and the two indices of retailing success. Essentially, the data seem to indicate that the more general merchandise in inventory, the less NPM and NPROI.

Null Hypothesis 3-E: No relationship exists between superette product assortment and net profit return on inventory.

Referring to Table XII, the data analysis indicates a Pearson coefficient of -.14 between product assortment and NPROI, which is not statistically significant. Therefore,
null hypothesis 3-E is accepted. In addition, the data analysis indicates a coefficient of -.23 between the retailing variable and GPM, which is statistically significant.

Null Hypothesis 3-F: No relationship exists between convenience store product assortment and net profit return on inventory.

Again referring to Table XII, the data analysis indicates no statistically significant Pearson coefficient between product assortment and NPROI. Therefore, null hypothesis 3-F is accepted. However, the data analysis indicates negative statistically significant coefficients between the retailing variable and two retailing success indices--GPM and GMROI.

Null Hypothesis 3-G: No relationship exists between supermarket use of private label merchandise and net profit return on inventory.

As seen in Table XII, the Pearson coefficient of -.06 indicates a statistically insignificant relationship between the use of private label merchandise and NPROI. Therefore, null hypothesis 3-G is accepted. However, the data analysis does indicate a statistically significant coefficient of -.16 between the retailing variable and GPM.

Null Hypothesis 3-H: No relationship exists between superette use of private label merchandise and net profit return on inventory.

Referring to Table XII, the data analysis indicates a Pearson correlation coefficient of -.02 between the use of private label merchandise and NPROI, which is not statistically significant. Therefore, null hypothesis 3-H
is accepted. On the other hand, the data analysis indicates a statistically significant coefficient of \(-.58\) between the retailing variable and GPM.

Null Hypothesis 3-I: No relationship exists between convenience store use of private label merchandise and net profit return in inventory.

Again referring to Table XII, the data analysis indicates no statistically significant Pearson coefficient between the use of private label merchandise and NPROI. Therefore, null hypothesis 3-I is accepted. However, the correlation analysis does indicate negative statistically significant Pearson coefficients between the retailing variable and two indices of retailing success—GPM and GMROI.

Null Hypothesis 3-J: No relationship exists between supermarket use of non-food rack jobbers and net profit return on inventory.

As seen in Table XII, the Pearson coefficient of \(-.12\) indicates a statistically significant relationship between the use of non-food rack jobbers and NPROI. Therefore, null hypothesis 3-J is rejected. In addition, the data analysis indicates a coefficient of \(-.16\) between the retailing variable and NPM which is also statistically significant. Thus, the data seem to indicate a negative relationship between the variable and these two retailing success indices. An increased use of non-food rack jobber merchandise and service predicts a negative relationship with NPM and NPROI.
Null Hypothesis 3-K: No relationship exists between superette use of non-foot rack jobbers and net profit return on inventory.

Referring to Table XII, the Pearson coefficient reports a relationship of -.11 between the use of non-food rack jobbers and NPROI, which is not statistically significant. Therefore, null hypothesis 3-K is accepted. However, the data analysis does report a statistically significant coefficient of .40 between the retailing variable and GPM.

Null Hypothesis 3-L: No relationship exists between convenience store use of non-food rack jobbers and net profit return on inventory.

Finally, looking back at Table XII, the data analysis indicates a Pearson coefficient of -.21 between use of non-food rack jobbers and NPROI, which is not statistically significant. Therefore, null hypothesis 3-L is accepted. However, the data analysis does indicate a coefficient of -.34 between the retailing variable and GMROI, which is statistically significant.

Hypothesis Four - Selected Place and Location Variables

Hypothesis Four: A relationship exists between two place and location variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

The data analysis of Hypothesis Four is indicated within Table XIII of the research study. For the purposes of the study, sub-hypotheses, as stated in the null form,
are utilized for the analysis of the selected retailing variable for three classifications of retailers and the retailing success variable—net profit return on inventory investment.

Null Hypothesis 4-A: No relationship exists between supermarket floor selling space and net profit return on inventory.

As seen in Table XIII, the data analysis indicates a moderate Pearson coefficient of \(-0.26\) between floor selling space and NPROI, which is statistically significant. Therefore, null hypothesis 4-A is rejected. In addition, the data analysis also indicates a statistically significant coefficient of \(-0.31\) between the retailing variable and NPM.

Null Hypothesis 4-B: No relationship exists between superette floor selling space and net profit return on inventory.

Referring to Table XIII, the Pearson statistic reports a relationship of \(-0.26\) between floor selling space and NPROI, which is statistically significant. Therefore, null hypothesis 4-B is rejected. In addition, the data analysis indicates statistically significant negative Pearson coefficients between the retailing variable and two indices of retailing success—GPM and GMROI.

Null Hypothesis 4-C: No relationship exists between convenience store floor selling space and net profit return on inventory.

Again referring to Table XIII, the Pearson statistic reports a relationship of \(-0.03\) between floor selling space and NPROI, which is not significant. Therefore, null
### TABLE XIII
RELATIONSHIP BETWEEN LOCATION VARIABLES AND FOUR INDICES OF RETAILING SUCCESS

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Floor Selling Space</th>
<th>Perceived Competitiveness of Retail Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.09</td>
<td>-.17**</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.31**</td>
<td>-.12*</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.10</td>
<td>-.01</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.26**</td>
<td>-.01</td>
</tr>
<tr>
<td>Superettes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.32**</td>
<td>-.02</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.11</td>
<td>-.26*</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.30*</td>
<td>-.13</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.26*</td>
<td>-.08</td>
</tr>
<tr>
<td>Convenience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.20*</td>
<td>.09</td>
</tr>
<tr>
<td>Net Profit</td>
<td>.20*</td>
<td>-.28*</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.07</td>
<td>.01</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.03</td>
<td>-.07</td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.

Hypothesis 4-C is accepted. However, the data analysis does indicate statistically significant positive coefficients between the retailing variable and two retailing success indices—GPM and NPM.

Null Hypothesis 4-D: No relationship exists between supermarket perceived competitiveness of retail location and net profit return on inventory.

As seen in Table XIII, the data analysis indicates a Pearson coefficient of -.01 between perceived...
competitiveness of retail location and NPROI, which is not statistically significant. Therefore, null hypothesis 4-D is accepted. However, the data analysis does indicate statistically significant negative coefficients between the retailing variable and two indices of retailing success—GPM and NPM.

Null Hypothesis 4-E: No relationship exists between superette perceived competitiveness of retail location and net profit return on inventory.

Again referring to Table XIII, the data analysis indicates no statistically significant Pearson coefficient between perceived competitiveness of retail location and NPROI. Therefore, null hypothesis 4-E is accepted. Nevertheless, the data analysis does report a statistically significant coefficient of -.26 between the retailing variable and NPM.

Null Hypothesis 4-F: No relationship exists between convenience store perceived competitiveness of retail location and net profit return on inventory.

Finally, referring back to Table XIII, the Pearson statistic reports a relationship of -.07 between perceived competitiveness of retail location and NPROI, which is not statistically significant. Therefore, null hypothesis 4-F is accepted. However, the data analysis does indicate a coefficient of -.28 between the retailing variable and NPM which is statistically significant.
Hypothesis Five - Selected Promotion Variables

Hypothesis Five: A relationship exists between two selected promotion variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

The data analysis of Hypothesis Five is indicated within Table XIV of the research study. For the purposes of the study, sub-hypotheses, as stated in the null form, are utilized for the analysis of the selected retailing variable for three classifications of retailers and the retailing success variable—net profit return on inventory investment.

As seen in Table XIV, the data analysis indicates a Pearson coefficient of -.14 between the use of trading stamps and NPROI, which is statistically significant. Therefore, null hypothesis 5-A is rejected. In addition, the data analysis also indicates statistically significant negative coefficients between the retailing variable and retailing success indices—GPM and NPM. Thus, the data seem to predict that an increase in the use of trading stamps can have a negative relationship with GPM, NPM, and NPROI.

Null Hypothesis 5-B: No relationship exists between superette use of trading stamps and net profit return on inventory.

Referring to Table XIV, the Pearson statistic reports a relationship of .10 between the use of trading stamps and NPROI, which is not significant. Therefore, null
<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Trading Stamps</th>
<th>Newspapers</th>
<th>News Sheet</th>
<th>Television</th>
<th>Radio</th>
<th>Circulaires</th>
<th>Premiums</th>
<th>Other</th>
<th>No Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.10*</td>
<td>-.10*</td>
<td>.03</td>
<td>-.07</td>
<td>-.10</td>
<td>.07</td>
<td>-.10</td>
<td>.10</td>
<td>.07</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.19**</td>
<td>.02</td>
<td>-.05</td>
<td>-.07</td>
<td>-.03</td>
<td>-.12*</td>
<td>-.07</td>
<td>.15**</td>
<td>.19**</td>
</tr>
<tr>
<td>GARROI</td>
<td>.06</td>
<td>-.07</td>
<td>-.17**</td>
<td>-.02</td>
<td>.02</td>
<td>.06</td>
<td>-.02</td>
<td>.16**</td>
<td>-.04</td>
</tr>
<tr>
<td>Net ROY</td>
<td>-.14*</td>
<td>.01</td>
<td>-.08</td>
<td>-.04</td>
<td>.02</td>
<td>-.07</td>
<td>-.04</td>
<td>.18**</td>
<td>.05</td>
</tr>
<tr>
<td>Superettes</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.22*</td>
<td>-.10</td>
<td>.08</td>
<td>-.07</td>
<td>.49**</td>
<td>-.11</td>
<td>.09</td>
<td>.13</td>
<td>-.09</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.09</td>
<td>-.06</td>
<td>-.11</td>
<td>.01</td>
<td>.03</td>
<td>-.05</td>
<td>-.05</td>
<td>.32**</td>
<td>-.02</td>
</tr>
<tr>
<td>GARROI</td>
<td>.02</td>
<td>-.21</td>
<td>.07</td>
<td>.08</td>
<td>.08</td>
<td>-.01</td>
<td>.05</td>
<td>-.04</td>
<td>.05</td>
</tr>
<tr>
<td>Net ROY</td>
<td>.10</td>
<td>-.15</td>
<td>-.09</td>
<td>-.02</td>
<td>-.11</td>
<td>.01</td>
<td>-.02</td>
<td>.11</td>
<td>.11</td>
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<tr>
<td>Convenience</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>NA</td>
<td>.01</td>
<td>-.02</td>
<td>.01</td>
<td>.08</td>
<td>-.08</td>
<td>-.01</td>
<td>-.06</td>
<td>.08</td>
</tr>
<tr>
<td>Net Profit</td>
<td>NA</td>
<td>-.12</td>
<td>.07</td>
<td>.05</td>
<td>.02</td>
<td>.13</td>
<td>-.09</td>
<td>-.10</td>
<td>.13</td>
</tr>
<tr>
<td>GARROI</td>
<td>NA</td>
<td>-.09</td>
<td>-.21</td>
<td>-.11</td>
<td>-.03</td>
<td>.09</td>
<td>.14</td>
<td>-.11</td>
<td>.02</td>
</tr>
<tr>
<td>Net ROY</td>
<td>NA</td>
<td>-.05</td>
<td>-.15</td>
<td>-.04</td>
<td>-.08</td>
<td>.22*</td>
<td>-.01</td>
<td>-.06</td>
<td>.05</td>
</tr>
</tbody>
</table>

*p < .05.

**p < .01.
hypothesis 5-B is accepted. However, the data analysis does indicate a statistically significant coefficient of -.22 between the retailing variable and GPM.

Null Hypothesis 5-C: No relationship exists between supermarket use of newspaper promotion and net profit return on inventory.

As seen in Table XIV, the data analysis indicates a Pearson coefficient of .01 between the use of newspaper promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-C is accepted. However, the data analysis does indicate a statistically significant coefficient of -.10 between the retailing variable and GPM.

Null Hypothesis 5-D: No relationship exists between superette use of newspaper promotion and net profit return on inventory.

Referring to Table XIV, the Pearson statistic reports a relationship of -.15 between the use of newspaper promotion and NPROI, which is not significant. Therefore, null hypothesis 5-D is accepted.

Null Hypothesis 5-E: No relationship exists between convenience store use of newspaper promotion and net profit return on inventory.

Again referring to Table XIV, the data analysis indicates a Pearson coefficient of -.05 between the use of newspaper promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-E is accepted.

Null Hypothesis 5-F: No relationship exists between supermarket use of news sheet promotion and net profit return on inventory.
As seen in Table XIV, the Pearson statistic reports a relationship of -.08 between the use of news sheet promotion and NPROI, which is not significant. Therefore, null hypothesis 5-F is accepted. However, the data analysis does indicate a coefficient of -.17 between the retailing variable and GMROI, which is statistically significant.

Null Hypothesis 5-G: No relationship exists between superette use of news sheet promotion and net profit return on inventory.

The data analysis indicates, referring to Table XIV, an insignificant Pearson coefficient of -.09 between the use of news sheet promotion and NPROI. Therefore, null hypothesis 5-G is accepted.

Null Hypothesis 5-H: No relationship exists between convenience store use of news sheet promotion and net profit return on inventory.

As seen in Table XIV, the data analysis indicates a coefficient relationship of -.15 between the use of news sheet promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-H is accepted.

Null Hypothesis 5-I: No relationship exists between supermarket use of television promotion and net profit return on inventory.

Referring to Table XIV, the data analysis indicates a coefficient of -.04 between the use of television promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-I is accepted.

Null Hypothesis 5-J: No relationship exists between superette use of television promotion and net profit return on inventory.
Again referring to Table XIV, the data analysis indicates no statistically significant coefficient between the use of television promotion and NPROI. Therefore, null hypothesis 5-J is accepted.

Null Hypothesis 5-K: No relationship exists between convenience store use of television promotion and net return on inventory.

As seen in Table XIV, the Pearson coefficient of -.04 indicates a statistically insignificant relationship between the use of television promotion and NPROI. Therefore, null hypothesis 5-K is accepted.

Null Hypothesis 5-L: No relationship exists between supermarket use of radio promotion and net profit return on inventory.

Referring to Table XIV, the data analysis indicates a Pearson coefficient of .02 between the use of radio promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-L is accepted.

Null Hypothesis 5-M: No relationship exists between superette use of radio promotion and net profit return on inventory.

Again referring to Table XIV, the data analysis indicates no statistically significant Pearson coefficient between the use of radio promotion and NPROI. Therefore, null hypothesis 5-M is accepted. However, the data analysis does indicate a coefficient of .49 between the retailing variable and GPM, which is statistically significant.

Null Hypothesis 5-N: No relationship exists between convenience store use of radio promotion and net profit return on inventory.
As seen in Table XIV, the data analysis indicates a coefficient of -.08 between the use of radio promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-N is accepted.

Null Hypothesis 5-0: No relationship exists between supermarket use of circular promotion and net profit return on inventory.

Referring to Table XIV, the data analysis indicates a Pearson coefficient of -.07 between the use of circular promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-0 is accepted. However, the data analysis does indicate a coefficient of -.12 between the retailing variable and NPM which is statistically significant.

Null Hypothesis 5-P: No relationship exists between superette use of circular promotion and net profit return on inventory.

Again referring to Table XIV, the data analysis indicates no statistically significant Pearson coefficient between the use of circular promotion and NPROI. Therefore, null hypothesis 5-P is accepted.

Null Hypothesis 5-Q: No relationship exists between convenience store use of circular promotion and net profit return on inventory.

As seen in Table XIV, the Pearson statistic reports a relationship of .22 between the use of circular promotion and NPROI, which is statistically significant. Therefore, null hypothesis 5-Q is rejected.
Null Hypothesis 5-R: No relationship exists between supermarket use of premium promotion and net profit return on inventory.

Referring to Table XIV, the data analysis indicates a Pearson coefficient of -0.04 between the use of premium promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-R is accepted.

Null Hypothesis 5-S: No relationship exists between superette use of premium promotion and net profit return on inventory.

Again referring to Table XIV, the data analysis indicates no statistically significant Pearson coefficient between the use of premium promotion and NPROI. Therefore, null hypothesis 5-S is accepted.

Null Hypothesis 5-T: No relationship exists between convenience store use of premium promotion and net profit on inventory.

As seen in Table XIV, the data analysis reflects no statistically significant Pearson coefficient between the use of premium promotion and NPROI. Therefore, null hypothesis 5-T is accepted.

Null Hypothesis 5-U: No relationship exists between supermarket use of other promotion and net profit return on inventory.

Referring to Table XIV, the data analysis indicates a Pearson coefficient of 0.18 between the use of other promotion and NPROI, which is statistically significant. Therefore, null hypothesis 5-U is rejected. In addition, the data analysis reflects significant coefficients between the use of other promotion and retailing success.
indices—NPM and GMROI. Thus, the data seem to predict positive contributions to NPROI, NPM, and GMROI with an increase in other promotion variables, which could include store front promotions or in-store promotion tools.

Null Hypothesis 5-V: No relationship exists between superette use of other promotion and net profit return on inventory.

Again referring to Table XIV, the data analysis indicates no statistical significance in the Pearson coefficient of .11 between the use of other promotion and NPROI. Therefore, null hypothesis 5-V is accepted. However, the data analysis does indicate a significant coefficient of .32 between the retailing variable and NPM.

Null Hypothesis 5-W: No relationship exists between convenience store use of other promotion and net profit return on inventory.

As seen in Table XIV, the data analysis indicates no statistically significant Pearson coefficient between the use of other promotion and NPROI. Therefore, null hypothesis 5-W is accepted.

Null Hypothesis 5-X: No relationship exists between supermarket use of no promotion and net profit return on inventory.

Referring to Table XIV, the data analysis indicates a coefficient of .05 between no promotion and NPROI, which is not statistically significant. Therefore, null hypothesis 5-X is accepted. However, the data analysis does reflect a coefficient of .19 between no promotion and NPM, which is statistically significant.
Null Hypothesis 5-Y: No relationship exists between superette use of no promotion and net profit return on inventory.

Referring to Table XIV, the data analysis indicates no statistical significance in the Pearson coefficient of .11 between the use of no promotion and NPROI. Therefore, null hypothesis 5-Y is accepted.

Null Hypothesis 5-Z: No relationship exists between convenience store use of no promotion and net profit return on inventory.

Finally, referring again to Table XIV, the data analysis indicates no statistically significant Pearson coefficient between the use of no promotion and NPROI. Therefore, null hypothesis 5-Z is accepted.

**Hypothesis Six - Selected Pricing Variables**

Hypothesis Six: A relationship exists between eight selected pricing variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

The data analysis of Hypothesis Six is indicated within Table XV of the research study. For the purposes of the study, sub-hypotheses, as stated in the null form, are utilized for the analysis of the selected retailing variable for three classifications of retailers and retailing success variable--net profit return on inventory investment.

Null Hypothesis 6-A: No relationship exists between supermarket use of competitive pricing and net profit return on inventory.
As seen in Table XV, the data analysis indicates a Pearson coefficient of -.17 between the use of competitive pricing and NPROI, which is statistically significant. Therefore, null hypothesis 6-A is rejected. In addition, the data analysis indicates statistically significant negative coefficients between the retailing variable and retailing success indices—GPM and GMROI.

Null Hypothesis 6-B: No relationship exists between superette use of competitive pricing and net profit return on inventory.

Referring to Table XV, the Pearson statistic reports a relationship of -.15 between the use of competitive pricing and NPROI, which is not significant. Therefore, null hypothesis 6-B is accepted. However, the data analysis does indicate a statistically significant coefficient of .39 between the retailing variable and GPM.

Null Hypothesis 6-C: No relationship exists between convenience store use of competitive pricing and net profit return on inventory.

Again referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of competitive pricing and NPROI. Therefore, null hypothesis 6-C is accepted.

Null Hypothesis 6-D: No relationship exists between supermarket use of psychological pricing and net profit return on inventory.

As seen in Table XV, the data analysis indicates a Pearson coefficient of -.05 between the use of psychological
### TABLE XV

**RELATIONSHIP BETWEEN SELECTED PRICING VARIABLES AND FOUR INDICES OF RETAILING SUCCESS**

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Competitive Pricing</th>
<th>Psychological Pricing</th>
<th>Multiple Pricing</th>
<th>Cost-Plus Pricing</th>
<th>Stock-Turn Pricing</th>
<th>Suggested List Pricing</th>
<th>Leader Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supermarkets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.16**</td>
<td>.01</td>
<td>.05</td>
<td>-.12*</td>
<td>.05</td>
<td>-.11*</td>
<td>-.17**</td>
</tr>
<tr>
<td>Net Profits</td>
<td>-.05</td>
<td>-.10</td>
<td>-.01</td>
<td>-.12*</td>
<td>-.07</td>
<td>-.02</td>
<td>-.24**</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.21**</td>
<td>-.01</td>
<td>.12*</td>
<td>.13*</td>
<td>.05</td>
<td>.12*</td>
<td>.07</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.17**</td>
<td>-.05</td>
<td>.06</td>
<td>-.02</td>
<td>-.02</td>
<td>.07</td>
<td>-.07</td>
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<tr>
<td><strong>Superette</strong></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>GPM</td>
<td>.39**</td>
<td>.17</td>
<td>-.23*</td>
<td>-.41**</td>
<td>.01</td>
<td>-.66**</td>
<td>-.07</td>
</tr>
<tr>
<td>Net Profits</td>
<td>.04</td>
<td>-.18</td>
<td>.05</td>
<td>-.12</td>
<td>.11</td>
<td>-.26*</td>
<td>.08</td>
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<tr>
<td>GMROI</td>
<td>-.04</td>
<td>.08</td>
<td>-.13</td>
<td>.06</td>
<td>.13</td>
<td>-.27*</td>
<td>-.14</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.15</td>
<td>-.15</td>
<td>-.04</td>
<td>.16</td>
<td>.13</td>
<td>-.08</td>
<td>-.14</td>
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<td><strong>Convenience</strong></td>
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<td></td>
</tr>
<tr>
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<td>.12</td>
<td>-.05</td>
<td>-.19</td>
<td>-.26*</td>
</tr>
<tr>
<td>Net Profits</td>
<td>-.06</td>
<td>.17</td>
<td>-.02</td>
<td>.26*</td>
<td>.07</td>
<td>.01</td>
<td>.13</td>
</tr>
<tr>
<td>GMROI</td>
<td>.06</td>
<td>.07</td>
<td>-.20</td>
<td>.19</td>
<td>.09</td>
<td>-.23*</td>
<td>-.14</td>
</tr>
<tr>
<td>ROI</td>
<td>.07</td>
<td>.15</td>
<td>-.04</td>
<td>.33**</td>
<td>.14</td>
<td>-.08</td>
<td>.19</td>
</tr>
</tbody>
</table>

* *p < .05.
** p < .01.
pricing and NPROI, which is not statistically significant. Therefore, null hypothesis 6-D is accepted.

Null Hypothesis 6-E: No relationship exists between superette use of psychological pricing and net profit return on inventory.

Referring to Table XV, the data analysis indicates no statistical significance in the Pearson coefficient of -.15 between the use of psychological pricing and NPROI. Therefore, null hypothesis 6-E is accepted.

Null Hypothesis 6-F: No relationship exists between convenience store use of psychological pricing and net profit return on inventory.

Again referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of psychological pricing and NPROI. Therefore, null hypothesis 6-F is accepted.

Null Hypothesis 6-G: No relationship exists between supermarket use of multiple pricing and net profit return on inventory.

As seen in Table XV, the data analysis indicates a Pearson coefficient of .06 between the use of multiple pricing and NPROI, which is not statistically significant. Therefore, null hypothesis 6-G is accepted. However, the data analysis does indicate a Pearson coefficient of .12 between the retailing variable and GMROI, which is significant.

Null Hypothesis 6-H: No relationship exists between superette use of multiple pricing and net profit return on inventory.
The data analysis indicates, again referring to Table XV, a Pearson coefficient of -.04 between the use of multiple pricing and NPROI, which is not statistically significant. Therefore, null hypothesis 6-H is accepted. However, the data analysis does indicate a statistically significant coefficient of -.23 between the retailing variable and GPM.

**Null Hypothesis 6-I: No relationship exists between convenience store use of multiple pricing and net profit return on inventory.**

Again referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of multiple pricing and NPROI. Therefore, null hypothesis 6-I is accepted. However, the data analysis does indicate a coefficient of -.27 between the retailing variable and GPM, which is statistically significant.

**Null Hypothesis 6-J: No relationship exists between supermarket use of cost-plus pricing and net profit return on inventory.**

As seen in Table XV, the data analysis indicates a Pearson coefficient of -.02 between the use of cost-plus pricing and NPROI, which is not statistically significant. Therefore, null hypothesis 6-J is accepted. However, the data analysis does indicate significant Pearson coefficients between the retailing variable and retailing success indices --GPM, NPM, and GMROI.

**Null Hypothesis 6-K: No relationship exists between superette use of cost-plus pricing and net profit on inventory.**
Referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of cost-plus pricing and NPROI. Therefore, null hypothesis 6-K is accepted. However, the data analysis does indicate a statistically significant coefficient of -0.41 between the retailing variable and GPM.

Null Hypothesis 6-L: No relationship exists between convenience store use of cost-plus pricing and net profit return on inventory.

Again referring to Table XV, the data analysis indicates a moderate significant Pearson coefficient of 0.33 between cost-plus pricing and NPROI. Therefore, null hypothesis 6-L is rejected. In addition, the data analysis indicates a coefficient of 0.26 between the retailing variable and NPM, which is also statistically significant. Thus, the data seems to indicate a positive relationship with NPM and NPROI as the use of cost-plus pricing is increased.

Null Hypothesis 6-M: No relationship exists between supermarket use of stock-turn pricing and net profit return on inventory.

As seen in Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of stock-turn pricing and NPROI. Therefore, null hypothesis 6-M is accepted.

Null Hypothesis 6-N: No relationship exists between superette use of stock-turn pricing and net profit return on inventory.
Referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of stock-turn pricing and NPROI. Therefore, null hypothesis 6-N is accepted.

Null Hypothesis 6-O: No relationship exists between convenience store use of stock-turn pricing and net profit return on inventory.

Again referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of stock-turn pricing and NPROI. Therefore, null hypothesis 6-O is accepted.

Null hypothesis 6-P: No relationship exists between supermarket use of suggested list prices and net profit return on inventory.

As seen in Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of suggested list prices and NPROI. Therefore, null hypothesis 6-P is accepted. However, the data analysis does indicate statistically significant Pearson coefficients between the retailing variable and the retailing success indices—GPM and GMROI.

Null Hypothesis 6-Q: No relationship exists between superette use of suggested list prices and net profit return on inventory.

Referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of suggested list prices and NPROI. Therefore, null hypothesis 6-Q is accepted. However, the data analysis does indicate statistically significant negative Pearson
coefficients between the retailing variable and the retailing success indices--GPM, NPM, and GMROI.

Null Hypothesis 6-R: No relationship exists between convenience store use of suggested list prices and net profit return on inventory.

Again referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of suggested list prices and NPROI. Therefore, null hypothesis 6-R is accepted. However, the data analysis does indicate a Pearson coefficient of -.23 between the retailing variable and GMROI.

Null Hypothesis 6-S: No relationship exists between supermarket use of leader pricing and net profit return on inventory.

As seen in Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of leader pricing and NPROI. Therefore, null hypothesis 6-S is accepted. However, the data analysis does indicate statistically significant negative Pearson coefficients between the retailing variable and retailing success indices--GPM and NPM.

Null Hypothesis 6-T: No relationship exists between superette use of leader pricing and net profit return on inventory.

Again referring to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of leader pricing and NPROI. Therefore, null hypothesis 6-T is accepted.
Null Hypothesis 6-U: No relationship exists between convenience store use of leader pricing and net pricing and net profit return on inventory.

Finally, referring back to Table XV, the data analysis indicates no statistically significant Pearson coefficient between the use of leader pricing and NPROI. Therefore, null hypothesis 6-U is accepted. However, the data analysis does indicate a statistically significant Pearson coefficient of -.26 between the retailing variable and GPM.

Hypothesis Seven - Selected Demographic Variables

Hypothesis Seven: A relationship exists between four selected demographic variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit on inventory).

The data analysis of Hypothesis Seven is indicated within Table XVI of the research study. For the purposes of the study, sub-hypotheses, as stated in the null form, are utilized for the analysis of the selected retailing variable for three classifications of retailers and the retailing success variable—net profit return on inventory investment.

Null Hypothesis 7-A: No relationship exists between the age of the owner/manager of a supermarket and net profit return on inventory.

As seen in Table XVI, the data analysis indicates a Pearson coefficient of -.16 between the age of the owner/manager of a supermarket and NPROI, which is statistically significant. Therefore, null hypothesis 7-A is rejected.
In addition, the data analysis also indicates statistically significant negative Pearson coefficients between this retailing variable and retailing success indices—NPM and GMROI. Thus, the data seem to predict that an increase in the age of owner/managers can have a negative association with NPM, GMROI, and NPROI.

Null Hypothesis 7-B: No relationship exists between the age of the owner/manager of a superette and net profit return on inventory.

Referring to Table XVI, the data analysis indicates no statistically significant Pearson coefficient between the age of the owner/manager and NPROI. Therefore, null hypothesis 7-B is accepted. However, the data analysis does indicate statistically significant negative Pearson coefficients between the retailing variable and retailing success indices—GPM and NPM.

Null Hypothesis 7-C: No relationship exists between the age of the owner/manager of a convenience store and net profit return on inventory.

Again referring to Table XVI, the data analysis indicates no statistically significant Pearson coefficient between the age of the owner/manager and NPROI. Therefore, null hypothesis 7-C is accepted. However, the data analysis does indicate a coefficient of -.41 between the retailing variable and GPM, which is statistically significant.

Null Hypothesis 7-D: No relationship exists between the retailing experience of the owner/manager of a supermarket and net profit return on inventory.
### TABLE XVI

RELATIONSHIP BETWEEN SELECTED DEMOGRAPHICS OF THE OWNER/MANAGER AND FOUR INDICES OF RETAILING SUCCESS

<table>
<thead>
<tr>
<th>Type of Store</th>
<th>Age</th>
<th>Retailing Experience</th>
<th>Formal Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.04</td>
<td>.02</td>
<td>.01</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.12*</td>
<td>-.20**</td>
<td>-.03</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.19**</td>
<td>-.14*</td>
<td>.06</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.16*</td>
<td>-.20**</td>
<td>.10</td>
</tr>
<tr>
<td>Superettes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.37**</td>
<td>-.14</td>
<td>.44**</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.24*</td>
<td>-.17</td>
<td>.24**</td>
</tr>
<tr>
<td>GMROI</td>
<td>.15</td>
<td>.13</td>
<td>-.03</td>
</tr>
<tr>
<td>Net ROI</td>
<td>.17</td>
<td>-.01</td>
<td>-.04</td>
</tr>
<tr>
<td>Convenience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPM</td>
<td>-.41**</td>
<td>-.50**</td>
<td>.24*</td>
</tr>
<tr>
<td>Net Profit</td>
<td>-.07</td>
<td>-.10</td>
<td>-.07</td>
</tr>
<tr>
<td>GMROI</td>
<td>-.11</td>
<td>-.19</td>
<td>.27*</td>
</tr>
<tr>
<td>Net ROI</td>
<td>-.02</td>
<td>-.06</td>
<td>.11</td>
</tr>
</tbody>
</table>

*P < .05.

**P < .01.

As seen in Table XVI, the data analysis indicates a Pearson coefficient of -0.20 between the retailing experience of the owner/manager and NPROI, which is statistically significant. Therefore, null hypothesis 7-D is rejected.

In addition, the data analysis also indicates statistically significant negative Pearson coefficients between the retailing variable and retailing success indices--NPM and GMROI. Thus, the data seems to predict that an increase
in years of retailing experience can be a negative prediction of NPM, GMROI, and NPROI.

Null Hypothesis 7-E: No relationship exists between the retailing experience of the owner/manager of a superette and net profit return on inventory.

Referring to Table XVI, the data analysis indicates no statistically significant Pearson coefficient between the retailing experience of the owner/manager and NPROI. Therefore, null hypothesis 7-E is accepted.

Null Hypothesis 7-F: No relationship exists between the retailing experience of the owner/manager of a convenience store and net profit return on inventory.

Again referring to Table XVI, the data analysis indicates no statistically significant Pearson coefficient between the retailing experience of the owner/manager and NPROI. Therefore, null hypothesis 7-F is accepted. However, the data analysis does indicate a coefficient of -.50 between the retailing variable and GPM, which is statistically significant.

Null Hypothesis 7-G: No relationship exists between the formal education of the owner/manager of a supermarket and net profit return on inventory.

As seen in Table XVI, the data analysis indicates no statistically significant Pearson coefficient between the formal education of the owner/manager and NPROI. Therefore, null hypothesis 7-G is accepted.

Null Hypothesis 7-H: No relationship exists between the formal education of the owner/manager of a superette and net profit return on inventory.
Referring to Table XVI, the data analysis indicates no statistically significant Pearson coefficient between the formal education of the owner/manager and NPROI. Therefore, null hypothesis 7-H is accepted. However, the data analysis does indicate statistically significant positive Pearson coefficients between the retailing variable and retailing success indices—GPM and NPM.

Null Hypothesis 7-I: No relationship exists between the formal education of the owner/manager of a convenience store and net profit return on inventory.

Finally referring again to Table XVI, the data analysis indicates no statistically significant Pearson coefficient between the formal education of the owner/manager and NPROI. Therefore, null hypothesis 7-I is accepted. However, the data analysis does indicate statistically significant positive Pearson coefficients between the retailing variable and retailing success indices—GPM and GMROI.

Summary

The key descriptive statistics were presented in an effort to evaluate the sample characteristics of the surveyed respondents of the research study. The study's respondents were broken down into the following classifications: supermarkets, superettes, and convenience stores. In addition, four retailing indices of success were chosen as the dependent variables of the study. These indices of success were gross profit margin, net profit margin,
gross profit return on inventory investment, and net profit return on inventory investment. Moreover, the researched retailing variables were positioned into seven major variables or factor areas. These category areas were classified as follows:

1. Service variables
2. Managerial policy variables
3. Product variables
4. Place and location variables
5. Promotion variables
6. Pricing variables
7. Demographic variables of owner or owner/manager.

Tables I through IX were discussed concerning the descriptive statistics of the research study. The data were then subjected to the SPS subprogram Pearson correlation for rejection or acceptance of the seven hypotheses of the study. Tables X through XVI were utilized to report the results of the data analysis. For the purposes of the study, sub-hypotheses, as stated with null form, were utilized for the analysis of the selected retailing variable -- net profit return on inventory investment. The following null hypotheses were rejected.

Null Hypothesis 1-A: No relationship exists between supermarket grocery delivery and net profit return on inventory.
Null Hypothesis 1-B: No relationship exists between superette grocery delivery and net profit return on inventory.

Null Hypothesis 1-D: No relationship exists between supermarket credit accounts and net profit return on inventory.

Null Hypothesis 1-G: No relationship exists between supermarket credit card acceptance and net profit return on inventory.

Null Hypothesis 1-I: No relationship exists between convenience store credit card acceptance and net profit return on inventory.

Null Hypothesis 2-A: No relationship exists between supermarket hours open per week and net profit return on inventory.

Null Hypothesis 2-B: No relationship exists between superette hours open per week and net profit return on inventory.

Null Hypothesis 2-D: No relationship exists between the supermarket salary scale of non-supervisor employees and net profit return on inventory.

Null Hypothesis 2-E: No relationship exists between the superette salary scale of non-supervisor employees and net profit return on inventory.

Null Hypothesis 2-F: No relationship exists between the convenience store salary scale of non-supervisor employees and net profit return on inventory.

Null Hypothesis 2-G: No relationship exists between supermarket turnover rate of non-supervisor employees and net profit return on inventory.

Null Hypothesis 2-J: No relationship exists between supermarket per cent of full-time employees and net profit return on inventory.

Null Hypothesis 3-D: No relationship exists between supermarket product assortment and net profit return on inventory.
Null Hypothesis 3-J: No relationship exists between supermarket use of non-food rack jobbers and net profit return on inventory.

Null Hypothesis 4-A: No relationship exists between supermarket floor selling space and net profit return on inventory.

Null Hypothesis 4-B: No relationship exists between superette floor selling space and net profit return on inventory.

Null Hypothesis 5-A: No relationship exists between supermarket use of trading stamps and net profit return on inventory.

Null Hypothesis 5-Q: No relationship exists between convenience store use of circular promotion and net profit return on inventory.

Null Hypothesis 5-U: No relationship exists between supermarket use of other promotion and net profit return on inventory.

Null Hypothesis 6-A: No relationship exists between supermarket use of competitive pricing and net profit return on inventory.

Null Hypothesis 6-L: No relationship exists between convenience store use of cost-plus pricing and net profit return on inventory.

Null Hypothesis 7-A: No relationship exists between the age of the owner/manager of a supermarket and net profit return on inventory.

Null Hypothesis 7-D: No relationship exists between the retailing experience of the owner/manager of a supermarket and net profit return on inventory.

The following null hypotheses were accepted.

Null Hypothesis 1-C: No relationship exists between convenience store grocery delivery and net profit return on inventory.

Null Hypothesis 1-E: No relationship exists between superette credit accounts and net profit return on inventory.
Null Hypothesis 1-F: No relationship exists between convenience store credit accounts and net profit return on inventory.

Null Hypothesis 1-H: No relationship exists between superette credit card acceptance and net profit return on inventory.

Null Hypothesis 2-C: No relationship exists between convenience store hours open per week and net profit return on inventory.

Null Hypothesis 2-H: No relationship exists between superette turnover rate of non-supervisor employees and net profit return on inventory.

Null Hypothesis 2-I: No relationship exists between convenience store turnover rate of non-supervisor employees and net profit return on inventory.

Null Hypothesis 2-K: No relationship exists between superette per cent of full-time employees and net profit return on inventory.

Null Hypothesis 2-L: No relationship exists between convenience store per cent of full-time employees and net profit return on inventory.

Null Hypothesis 3-A: No relationship exists between supermarket use of general merchandise and net profit return on inventory.

Null Hypothesis 3-B: No relationship exists between superette use of general merchandise and net profit return on inventory.

Null Hypothesis 3-C: No relationship exists between convenience store use of general merchandise and net profit return on inventory.

Null Hypothesis 3-E: No relationship exists between superette product assortment and net profit return on inventory.

Null Hypothesis 3-F: No relationship exists between convenience store product assortment and net profit return on inventory.
Null Hypothesis 3-G: No relationship exists between supermarket use of private label merchandise and net profit return on inventory.

Null Hypothesis 3-H: No relationship exists between superette use of private label merchandise and net profit return on inventory.

Null Hypothesis 3-I: No relationship exists between convenience store use of private label merchandise and net profit return on inventory.

Null Hypothesis 3-K: No relationship exists between superette use of non-food rack jobbers and net profit return on inventory.

Null Hypothesis 3-L: No relationship exists between convenience store use of non-food rack jobbers and net profit return on inventory.

Null Hypothesis 4-C: No relationship exists between convenience store floor selling space and net profit return on inventory.

Null Hypothesis 4-D: No relationship exists between supermarket perceived competitiveness of retail location and net profit return on inventory.

Null Hypothesis 4-E: No relationship exists between superette perceived competitiveness of retail location and net profit return on inventory.

Null Hypothesis 4-F: No relationship exists between convenience store perceived competitiveness of retail location and net profit return on inventory.

Null Hypothesis 5-B: No relationship exists between superette use of trading stamps and net profit return on inventory.

Null Hypothesis 5-C: No relationship exists between supermarket use of newspaper promotion and net profit return on inventory.

Null Hypothesis 5-D: No relationship exists between superette use of newspaper promotion and net profit return on inventory.
Null Hypothesis 5-E: No relationship exists between convenience store use of newspaper promotion and net profit return on inventory.

Null Hypothesis 5-F: No relationship exists between supermarket use of news sheet promotion and net profit return on inventory.

Null Hypothesis 5-G: No relationship exists between superette use of news sheet promotion and net profit return on inventory.

Null Hypothesis 5-H: No relationship exists between convenience store use of news sheet promotion and net profit return on inventory.

Null Hypothesis 5-I: No relationship exists between supermarket use of television promotion and net profit return on inventory.

Null Hypothesis 5-J: No relationship exists between superette use of television promotion and net profit return on inventory.

Null Hypothesis 5-K: No relationship exists between convenience store use of television promotion and net profit return on inventory.

Null Hypothesis 5-L: No relationship exists between supermarket use of radio promotion and net profit return on inventory.

Null Hypothesis 5-M: No relationship exists between superette use of radio promotion and net profit return on inventory.

Null Hypothesis 5-N: No relationship exists between convenience store use of radio promotion and net profit return on inventory.

Null Hypothesis 5-O: No relationship exists between supermarket use of circular promotion and net profit return on inventory.

Null Hypothesis 5-P: No relationship exists between superette use of circular promotion and net profit return on inventory.

Null Hypothesis 5-R: No relationship exists between supermarket use of premium promotion and net profit return on inventory.
Null Hypothesis 5-S: No relationship exists between superette use of premium promotion and net profit return on inventory.

Null Hypothesis 5-T: No relationship exists between convenience store use of premium promotion and net profit return on inventory.

Null Hypothesis 5-V: No relationship exists between superette use of other promotion and net profit return on inventory.

Null Hypothesis 5-W: No relationship exists between convenience store use of other promotion and net profit return on inventory.

Null Hypothesis 5-X: No relationship exists between supermarket use of no promotion and net profit return on inventory.

Null Hypothesis 5-Y: No relationship exists between superette use of no promotion and net profit return on inventory.

Null Hypothesis 5-Z: No relationship exists between convenience store use of no promotion and net profit return on inventory.

Null Hypothesis 6-B: No relationship exists between superette use of competitive pricing and net profit return on inventory.

Null Hypothesis 6-C: No relationship exists between convenience store use of competitive pricing and net profit return on inventory.

Null Hypothesis 6-D: No relationship exists between supermarket use of psychological pricing and net profit return on inventory.

Null Hypothesis 6-E: No relationship exists between superette use of psychological pricing and net profit return on inventory.

Null Hypothesis 6-F: No relationship exists between convenience store use of psychological pricing and net profit return on inventory.

Null Hypothesis 6-G: No relationship exists between supermarket use of multiple pricing and net profit return on inventory.
Null Hypothesis 6-H: No relationship exists between superette use of multiple pricing and net profit return on inventory.

Null Hypothesis 6-I: No relationship exists between convenience store use of multiple pricing and net profit return on inventory.

Null Hypothesis 6-J: No relationship exists between supermarket use of cost-plus pricing and net profit return on inventory.

Null Hypothesis 6-K: No relationship exists between superette use of cost-plus pricing and net profit return on inventory.

Null Hypothesis 6-M: No relationship exists between supermarket use of stock-turn pricing and net profit return on inventory.

Null Hypothesis 6-N: No relationship exists between superette use of stock-turn pricing and net profit return on inventory.

Null Hypothesis 6-O: No relationship exists between convenience store use of stock-turn pricing and net profit return on inventory.

Null Hypothesis 6-P: No relationship exists between supermarket use of suggested list prices and net profit return on inventory.

Null Hypothesis 6-Q: No relationship exists between superette use of suggested list prices and net profit return on inventory.

Null Hypothesis 6-R: No relationship exists between convenience store use of suggested list prices and net profit return on inventory.

Null Hypothesis 6-S: No relationship exists between supermarket use of leader pricing and net profit return on inventory.

Null Hypothesis 6-T: No relationship exists between superette use of leader pricing and net profit return on inventory.

Null Hypothesis 6-U: No relationship exists between convenience store use of leader pricing and net profit return on inventory.
Null Hypothesis 7-B: No relationship exists between the age of the owner/manager of a superette and net profit return on inventory.

Null Hypothesis 7-C: No relationship exists between the age of the owner/manager of a convenience store and net profit return on inventory.

Null Hypothesis 7-E: No relationship exists between the retailing experience of the owner/manager of a superette and net profit return on inventory.

Null Hypothesis 7-F: No relationship exists between the retailing experience of the owner/manager of a convenience store and net profit return on inventory.

Null Hypothesis 7-G: No relationship exists between the formal education of the owner/manager of a supermarket and net profit return on inventory.

Null Hypothesis 7-H: No relationship exists between the formal education of the owner/manager of a superette and net profit return on inventory.

Null Hypothesis 7-I: No relationship exists between the formal education of the owner/manager of a convenience store and net profit return on inventory.

The next and final chapter of the dissertation summarizes the entire research study and draws several appropriate conclusions.
CHAPTER IV

BIBLIOGRAPHY


CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this study was basically fivefold:

1. To examine the historical development and significance of the retail mix as a retail management concept;

2. To identify the nature and structure of the independent variables which make up a retail management mix;

3. To distinguish the nature and significance of each variable within the structure of the retail management mix;

4. To propose and develop an interrelated set of propositions in the form of a retail management mix for retail grocery establishments belonging to a retailer-cooperative in the state of Texas;

5. To relate the retail management mix theory to dependent variables gross profit margin, net profit margin, gross profit return on inventory, and net profit return on inventory.

Specifically, seven major hypotheses were stated to be tested via the research data collected.

Hypothesis One: A relationship exists between three selected service variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).
Hypothesis Two: A relationship exists between six selected managerial policy variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory).

Hypothesis Three: A relationship exists between five selected product variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Four: A relationship exists between two place and location variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Five: A relationship exists between two selected promotion variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Six: A relationship exists between eight selected pricing variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

Hypothesis Seven: A relationship exists between four selected demographic variables and four indices of retailing success (gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory).

A review of the literature revealed several theories concerning optimum variable makeup of the retailing mix. These theories and variables were discussed and revealed in the first section of Chapter Two of the dissertation. In addition, four important criteria of retailing success were discussed and justified. The presented retailing success criteria were gross profit margin, net profit margin, gross margin return on inventory investment, and
net profit return on inventory investment. Finally several empirical studies were presented which pertained directly or indirectly to the stated objectives of the research study. These studies included R. Ted Will's examination of variables that influence gross margin percentage differences within a large national discount firm. In addition, a review of Kenneth D. Halsey's comparison of franchised retail operations and similar independent retailers was conveyed. Next a summary of Gerald L. Crawford's study of four types of retail establishments and his determination of prominent factors of success or failure was communicated. And finally, a statement by Doyle and Gidengil concerning empirical studies in the field of retailing strategy was presented.

The first section of Chapter Three concerned the construction and theoretical basis of the research questionnaire of the study. For the purpose of this study, it was necessary to focus on the most important retailing variables for statistical evaluation. Therefore, for this study it was necessary to limit the research to thirty major retail mix variables for reasons of time, questionnaire length, limited funds, and privacy of information.

In addition, for purposes of classification, seven major variable or factor areas were selected for evaluation through the Retail Management Mix Questionnaire. The first major classification contained the service variables of the
retail establishments of the statistical study. These service variables included delivery to customers, credit to customers, and credit card acceptance. The second major classification contained the retailer's managerial policy variables. Managerial policy variables included in the study were number of employees (part-time, full-time), hours retail establishment operated a week, retailing mix priorities of management, salary scale of employees, training of employees, and turnover rate of employees.

The third major classification contained the product variables of the study. Product variables included in the study were percentage of general merchandise of total inventory, stockturn of an average inventory per year, merchandise assortment, extent of private label merchandise, and level of use of non-food rack jobber merchandise and service.

The fourth major classification contained the place and location variables of the study. These variables included floor selling space of the store and competitive situation of the retail establishment. The fifth major classification contained the promotion variables of the study. These variables contained a breakdown of promotion methods used and percentage of use per method of total. In addition, the promotion variables included whether or not trading stamps were utilized by the retail establishment.
The sixth major classification contained the pricing variables of the study. These variables included competitive pricing strategy (above, meet, below competition), extent of psychological or odd pricing techniques used, extent of multiple pricing used, extent of cost-plus-average pricing used, extent of stockturn-demand (flexible) pricing used, extent of use of suggested list prices, extent of leader pricing, and the knowledge of retail markup calculation technique. And finally, the seventh major classification contained the demographic variables of the owner/managers of the research study. These variables included the age, education, sex, and work experience of the responding retail manager.

The next section of Chapter Three concerned the pre-test and data collection process of the research study. And finally, the last section of the chapter concerned the coding and preparation of the data for statistical analysis.

An SPSS program was generated to process the data according to the following subprograms: Frequencies, Pearson Correlation and Scattergram. Chapter Four of the dissertation reported the results of this statistical analysis.

Hypotheses One Through Seven

The first section of Chapter Four presented the descriptive statistics of the researched members of the subject
organization. As noted in Chapter I of the dissertation, four retailing indices of success were chosen as the dependent variables of the study. These indices of success were gross profit margin, net profit margin, gross margin return on inventory, and net profit return on inventory. In addition, the respondents were classified into three categories—supermarkets, superettes, and convenience stores. Moreover, the SPS subprogram Frequencies revealed that a total of 379 retail establishments participated in the research study. The total universe of the selected retailer-cooperative contained 630 retail establishments. The total of 379 respondents contained 257 supermarkets, 57 superettes, and 65 convenience stores.

The second section of Chapter Four discussed the analyses of the research data via SPS subprogram Pearson correlation.

**Hypothesis One—Selected Service Variables**

Hypothesis one was concerned with evaluating the relationship between three selected service variables and four selected indices of retailing success. The three selected service variables were grocery delivery, credit accounts, and acceptance of credit cards.

The data analysis of the relationship between grocery delivery and the four indices of retailing success indicated that successful supermarkets and superettes, as defined by
a higher NPROI, utilized this retailing variable. However, the data analysis indicated no success relationship between grocery delivery and NPROI for convenience stores.

The data analysis of the relationship between credit accounts and the four indices of retailing success indicated that successful supermarkets, as defined by a higher NPROI, utilized this retailing variable. However, the data analysis indicated no success relationship between credit accounts and NPROI for superettes and convenience stores.

The data analysis of the relationship between the acceptance of credit cards and the four indices of retailing success indicated that successful convenience stores, as defined by a higher NPROI, utilized this retailing variable. Further, the data analysis of the relationship between the retailing variable and NPROI indicated that less successful supermarkets utilized acceptance of credit cards. However, the data analysis indicated no success relationship between the variable and NPROI for superettes.

In summary, the data analysis of the relationships between grocery delivery, credit accounts, and the four indices of retailing success indicated that successful supermarkets, as defined by a higher NPROI, employed these service variables to a greater extent within their retailing mix. Therefore, these retailing variables could possibly be recommended as components of a supermarket
retailing mix. In addition, the data analysis of the relationship between grocery delivery and the four indices of retailing success indicated that successful superettes employed this service variable to a greater extent within their retailing mix. Therefore, this retailing variable could possibly be recommended as a component of a superette retailing mix. Further, the data analysis of the relationship between credit card acceptance and the four indices of retailing success indicated that successful convenience stores utilized this service variable to a greater extent within their retailing mix. Therefore, this variable could possibly be recommended as a component of a convenience store retailing mix.

**Hypothesis Two--Selected Management Policy Variables**

Hypothesis two was concerned with evaluating the relationship between four selected retailing management policy variables and four selected indices of retailing success. The four selected retailing management policy variables were hours open per week, salary scale of non-supervisor employees, turnover rate of non-supervisor employees, and per cent of full-time employees.

The data analysis of the relationship between the number of hours open per week and the four indices of retailing success indicated that less successful supermarkets and superettes, as defined by a lower NPROI, emphasized this
retailing variable. The data analysis indicated an inverse relationship between hours open per week and NPROI for less successful supermarkets and superettes. The data analysis indicated no success relationship between hours open per week and NPROI for convenience stores.

The data analysis of the relationship between the salary scale of non-supervisor employees and the four indices of retailing success indicated that successful supermarkets, superettes, and convenience stores, as defined by a higher NPROI, utilized this retailing variable. The more successful retailers had a salary scale above average for retail stores of the trade area.

The data analysis of the relationship between the turnover rate of non-supervisor employees and the four indices of retailing success indicated that successful supermarkets, as defined by a higher NPROI, utilized this retailing variable. The successful supermarkets had a low turnover rate of non-supervisor employees. In contrast, the data analysis indicated no success relationship between the retailing variable and NPROI for superettes and convenience stores.

The data analysis of the relationship between the percent of full-time employees and the four indices of retailing success indicated that successful supermarkets, as defined by a higher NPROI, utilized this retailing variable. The more successful supermarkets had a higher percent of
full-time employees. However, the data analysis indicated no success relationship between the retailing variable and NPROI for superettes and convenience stores.

In summary, the data analysis of the relationship between the salary scale of non-supervisor employees, turnover rate of non-supervisor employees, per cent of full-time employees, and the four indices of retailing success indicated that successful supermarkets, as defined by a higher NPROI, employed these managerial policy variables to a greater extent within their retailing mix. Therefore, these retailing variables could possibly be recommended as components of a supermarket retailing mix. In addition, the data analysis of the relationship between the salary scale of non-supervisor employees and the four indices of retailing success indicated that successful superettes and convenience stores, as defined by a higher NPROI, employed this managerial policy variable to a greater extent within their retailing mix. Therefore, this retailing variable could possibly be recommended as a component of a superette or a convenience store retailing mix.

Hypothesis Three—Selected Product Variables

Hypothesis three was concerned with evaluating the relationship between four selected product variables and four selected indices of retailing success. The four selected product variables were use of general merchandise,
amount of product assortment, use of private label merchandise, and use of non-food rack jobbers.

The data analysis of the relationship between product assortment and the four indices of retailing success indicated no success relationship as defined by a higher NPROI, between the retailing variable and NPROI for supermarkets, superettes, and convenience stores.

The data analysis of the relationship between the amount of product assortment and the four indices of retailing success indicated no success relationship as defined by a higher NPROI between the retailing variable and NPROI for superettes and convenience stores. However, the data analysis of the relationship between the amount of product assortment and NPROI indicated that less successful supermarkets, as defined by a lower NPROI, utilized this retailing variable. The data analysis indicated an inverse relationship between the amount of product assortment and NPROI.

The data analysis of the relationship between the use of private label merchandise and the four indices of retailing success indicated no success relationship, as defined by a higher NPROI, between the retailing variable and NPROI for supermarkets, superettes, and convenience stores.

The data analysis of the relationship between the use of non-food rack jobbers and the four indices of retailing success indicated that less successful supermarkets, as
defined by a lower NPROI, utilized this retailing variable. The data analysis indicated an inverse relationship between the use of non-food rack jobbers and NPROI. However, the data analysis indicated no success relationship between the use of non-food rack jobbers and NPROI for superettes and convenience stores.

**Hypothesis Four—Place and Location Variables**

Hypothesis four was concerned with evaluating the relationship between two selected place and location variables and four selected indices of retailing success. The two selected place and location variables were floor selling space and perceived competitiveness of retail location.

The data analysis of the relationship between the amount of floor selling space and the four indices of retailing success indicated that less successful supermarkets and superettes, as defined by a lower NPROI, utilized this retailing variable. The data analysis indicated an inverse relationship between the amount of floor selling space and NPROI. In contrast, the data analysis indicated no success relationship between floor selling space and NPROI for convenience stores.

The data analysis of the relationship between the perceived competitiveness of the retail location and the four indices of retailing success indicated no success relationship, as defined by a higher NPROI, between the retailing
Hypothesis Five--Promotion Variables

Hypothesis five was concerned with evaluating the relationship between nine selected promotion variables and four selected indices of retailing success. The nine selected promotion variables were use of trading stamps, use of newspaper promotion, use of news sheet promotion, use of television promotion, use of radio promotion, use of circular promotion, use of premium promotion, use of other promotion, and use of no promotion.

The data analysis of the relationship between the use of trading stamps and the four indices of retailing success indicated that less successful supermarkets, as defined by a lower NPROI, utilized this retailing variable. In addition, the data analysis indicated no success relationship between the use of trading stamps and NPROI. None of the responding convenience stores reported the use of trading stamps.

The data analysis of the relationships between the use of newspaper promotion, news sheet promotion, television promotion, radio promotion, and the four indices of retailing success indicated no success relationships, as defined by a higher NPROI, for supermarkets, superettes, and convenience stores.
The data analysis of the relationship between the use of circular promotion and the four indices of retailing success indicated that the more successful convenience stores, as defined by a higher NPROI, utilized this retailing variable. However, the data analysis indicated no success relationship between the use of circular promotion and NPROI for supermarkets and superettes.

The data analysis of the relationship between the use of premium promotion and the four indices of retailing success indicated no success relationship, as defined by a higher NPROI, between the retailing variable and NPROI for supermarkets, superettes, and convenience stores.

The data analysis of the relationship between the use of other promotion and the four indices of retailing success indicated that successful supermarkets, as defined by a higher NPROI, utilized this retailing variable. However, the data analysis indicated no success relationship between the retailing variable and NPROI for superettes and convenience stores.

The data analysis of the relationship between the use of no promotion and the four indices of retailing success indicated no success relationship, as defined by a higher NPROI, between the retailing variable and NPROI for supermarkets, superettes, and convenience stores.

In summary, the data analysis of the relationship between circular use and the four indices of retailing
success indicated that successful convenience stores, as defined by a higher NPROI, employed this promotion variable to a greater extent within their retailing mix. Therefore, this retailing variable could possibly be recommended as a component of a convenience store retailing mix. In addition, the data analysis of the relationship between the use of other promotion methods and the four indices of retailing success indicated that successful supermarkets utilized this promotion variable to a greater extent in their retailing mix. Therefore, this retailing variable (example: in-store promotion) could possibly be recommended as a component of a supermarket retailing mix.

Hypothesis Six—Pricing Variables

Hypothesis six was concerned with evaluating the relationship between seven selected pricing variables and four selected indices of retailing success. The seven selected pricing variables were the use of competitive pricing, use of psychological pricing, use of multiple pricing, use of cost-plus pricing, use of stock-turn pricing, use of suggested list prices, and use of leader pricing.

The data analysis of the relationship between the use of competitive pricing and the four indices of retailing success indicated that less successful supermarkets, as defined by a lower NPROI, utilized this retailing variable. The data analysis indicated an inverse relationship between
the extent of use of this variable and NPROI. Further, the data analysis indicated no success relationship between the use of competitive pricing and NPROI for superettes and convenience stores.

The data analysis of the relationship between the use of psychological pricing, use of multiple pricing, and the four indices of retailing success indicated no success relationship, as defined by a higher NPROI, between these retailing variables and NPROI for supermarkets, superettes, and convenience stores.

The data analysis of the relationship between the use of cost-plus pricing and the four indices of retailing success indicated that successful convenience stores, as defined by a higher NPROI, utilized this retailing variable. However, the data analysis indicated no success relationship between this variable and NPROI for supermarkets and superettes.

The data analysis of the relationships between the use of stock-turn pricing, suggested list prices, leader pricing, and the four indices of retailing success indicated no success relationships, as defined by a higher NPROI, between these retailing variables and NPROI for supermarkets, superettes, and convenience stores.

In summary, the data analysis of the relationship between cost-plus pricing and the four indices of retailing success indicated that successful convenience stores, as
defined by a higher NPROI, utilized this pricing variable to a greater extent within their retailing mix. Therefore, this retailing variable could possibly be recommended as a component of a convenience store retailing mix.

**Hypothesis Seven--Demographic Variables**

Hypothesis seven was concerned with evaluating the relationship between three selected demographic variables and four selected indices of retailing success. The three selected demographic variables were the age, retailing experience, and formal education of the surveyed owner/manager.

The data analysis of the relationship between the age of the owner/manager and the four indices of retailing success indicated that less successful supermarkets, as defined by a lower NPROI, were owned or managed by an older retailer. The data analysis indicated an inverse relationship between the age of the owner/manager and NPROI. The data analysis indicated no success relationship between the age of the owner/manager and NPROI for superettes and convenience stores.

The data analysis of the relationship between the retailing experience of the owner/manager and the four indices of retailing success indicated that less successful supermarkets, as defined by a lower NPROI, were owned or managed by a more experienced retailer. The data analysis indicated
an inverse relationship between the retailing experience of the owner/manager and NPROI. The data analysis indicated no success relationship between the age of the owner/manager and NPROI for superettes and convenience stores.

Finally, the data analysis between the formal education of the owner/manager and the four indices of retailing success indicated no success relationship, as defined by a high NPROI, for supermarkets, superettes, and convenience stores.

Thus, hypotheses testing, via the Pearson correlation coefficient, indicated the following significant relationships at the .01 or .05 level between selected retailing variables and net profit return on inventory.

1. A positive relationship existed between supermarket retailing variables (grocery delivery, credit accounts, salary scale of non-supervisor employees, turnover rate of non-supervisor employees, per cent of full-time employees, use of other promotion) and NPROI.

2. A negative relationship existed between supermarket retailing variables (credit card acceptance, hours open per week, product assortment, use of non-food rack jobbers, floor selling space, use of trading stamps, use of competitive pricing, the age of the owner/manager, retailing experience of the owner/manager) and NPROI.
3. A positive relationship existed between superette retailing variables (grocery delivery, salary scale of non-supervisor employees) and NPROI.

4. A negative relationship existed between superette retailing variables (hours open per week, floor selling space) and NPROI.

5. A positive relationship existed between convenience store retailing variables (credit card acceptance, salary scale of non-supervisor employees, use of circular promotion, use of cost-plus pricing) and NPROI.

6. No significant negative relationships existed between convenience store retailing variables and NPROI.

It was concluded that more successful supermarkets utilized the following variables: grocery delivery, credit accounts, higher salary scale for non-supervisor employees, low turnover of non-supervisor employees, higher per cent of full-time employees, and use of other promotion. More successful superettes utilized the following variables: grocery delivery and higher salary scale of non-supervisor employees. More successful convenience stores utilized the following variables: higher salary scale of non-supervisor employees, use of circular promotion, and cost-plus pricing.
Implications for Future Research

The implications for expanding the basic research study are many. First, the data could be evaluated by the statistical technique of multiple regression/correlation analysis. Although the large number of variables and their close interrelationships could complicate the data analysis, factor analysis could be used to isolate the most dominant variables. In addition, the variable data for each of the seven major classifications could be subjected to multiple regression/correlation analysis. Second, a replication of the research study could be performed with either another retailer-cooperative or a voluntary organization. The replication with another retailer-cooperative could either confirm or question the results of the original study.

In short, although the research study has contributed to a specific area of marketing to a certain extent, much more remains to be accomplished. As indicated in Chapter Two of the study, progress will have to be made in integrating experimentation into the management decision making process. Therefore, in addition to empirical research such as this, there must be more emphasis on the application and effective utilization of such research. The future success of the retailer and the free enterprise system demands it.
RETAIL MANAGEMENT MIX QUESTIONNAIRE

1. What is your job title? (Person filling out questionnaire)
   ( ) Owner-Manager
   ( ) Owner
   ( ) Manager
   ( ) Assistant Manager
   ( ) Other

2. Age of Manager or Owner-Manager of store?
   ( ) Under 25 years
   ( ) 25 to 34 years
   ( ) 35 to 44 years
   ( ) 45 to 54 years
   ( ) 55 years or over

3. Education of Manager or Owner-Manager of Store?
   ( ) Non-High School Graduate
   ( ) High School Graduate
   ( ) Some College
   ( ) Bachelors Degree
   ( ) Graduate Work or Degree

4. Sex of Manager or Owner-Manager of Store?
   ( ) Male
   ( ) Female

5. Total years experience in Retailing of Manager or Owner-Manager?
   ( ) Under 5 years
   ( ) 5 to 10 years
   ( ) 11 to 20 years
   ( ) 21 to 30 years
   ( ) 31 years or over

6. Number of employees presently employed in business
   ( ) Full-time (Employees who work 35 or more hours a week)
   ( ) Part-time (Employees who work less than 35 hours but more than 20 hours a week)
   ( ) Part-time (Employees who work 20 hours or less a week)

7. What is your approximate floor selling space? _________ square feet

8. How many hours is your business open per week? _________ hours

9. What is your trade area competitive situation?
   ( ) Weak (No chain store competition – Independent store competition minimal)
   ( ) Below average (Two to three stores but no strong competition)
   ( ) Moderate (Just a few stores competing in trade area)
   ( ) Strong (Chains plus independent stores but competition not intense)
   ( ) Vigorous (Chain stores or well run independents)

10. Do you operate:
    ( ) A large supermarket (Over $1,000,000 sales a year)
    ( ) A medium-size supermarket ($500,000 - $1,000,000 sales a year)
    ( ) A superette (Large convenience store with fresh meat, vegetables, etc.)
    ( ) A convenience store (Stop N Go, 7-11 type)
    ( ) A small neighborhood grocery (Mom & Pop store)
11. Competitive pricing strategy
   ( ) Above your competition
   ( ) Meet your competition
   ( ) Below your competition

12. What is your average markup percentage in the following areas:
   __________% Total store average
   __________% Meat and Poultry
   __________% Produce
   __________% Groceries
   __________% General Merchandise and Drugs (non-food)

13. Do you practice psychological or odd pricing techniques (99c, 69c, $1.19)
   ( ) 81% to 100% of the time
   ( ) 61% to 80% of the time
   ( ) 41% to 60% of the time
   ( ) 21% to 40% of the time
   ( ) 0% to 20% of the time

14. Do you use the multiple pricing techniques (2/89c, 3/$1.00, 2/39c)?
   ( ) 81% to 100% of the time
   ( ) 61% to 80% of the time
   ( ) 41% to 60% of the time
   ( ) 21% to 40% of the time
   ( ) 0% to 20% of the time

15. When pricing a product, do you use cost plus a department or store fixed percentage markup? (Example: 20% markup on all goods in a department)
   ( ) 81% to 100% of the time
   ( ) 61% to 80% of the time
   ( ) 41% to 60% of the time
   ( ) 21% to 40% of the time
   ( ) 0% to 20% of the time

16. When pricing a product, do you consider the stock turn of the product when deciding on markup? (Frequency of sale of goods in relationship to markup)
   ( ) 81% to 100% of the time
   ( ) 61% to 80% of the time
   ( ) 41% to 60% of the time
   ( ) 21% to 40% of the time
   ( ) 0% to 20% of the time

17. When pricing a product, do you use the suggested list price by the wholesaler or manufacturer?
   ( ) 81% to 100% of the time
   ( ) 61% to 80% of the time
   ( ) 41% to 60% of the time
   ( ) 21% to 40% of the time
   ( ) 0% to 20% of the time

18. When calculating the retail price of a product, do you most often figure markup:
   ( ) As a percent of cost (Product cost multiplied by markup percentage)
   ( ) As a percent of selling price (Product Cost divided by __________% minus markup percentage)
   ( ) Never calculate markup (Use recommended price of wholesaler or manufacturer)
19. How would you breakdown by percentage your business promotional efforts?

- % Newspaper
- % Pure Advertising News Sheet (Penny-Saver, etc.)
- % Television
- % Radio
- % Circulars
- % Premiums (dishes, etc.)
- % Other
- % No Business Promotion

= 100 % TOTAL

20. Do you practice Leader Pricing techniques? (Advertised items at cost or below cost to build customer traffic)
( ) 81% to 100% of the time
( ) 61% to 80% of the time
( ) 41% to 60% of the time
( ) 21% to 40% of the time
( ) 0% to 20% of the time

21. Do you offer Trading Stamps?
( ) Yes
( ) No

22. Do you deliver groceries to the customers' homes?
( ) Yes
( ) No

23. Do you offer credit either by the week or month?
( ) Yes
( ) No

24. Do you accept credit cards? (VISA, Master Charge)
( ) Yes
( ) No

25. What percent of your inventory would be classified general merchandise? (Drugs, Hardware, Health & Beauty, etc.)

26. What is the approximate stock-turn of your total inventory per year?

Stock turns per year (Average inventory at cost divided into total yearly sales)

27. Relative to your store marketing decisions, how would you rank the following variables in importance? Using the numerals 1 through 6 to indicate importance, use 1 to indicate the most important variable, 2 to indicate second in importance, 3 to indicate the third in importance and so on through number 6.

( ) Price (In comparison to competition)
( ) Customer Service
( ) Advertising and Store Promotion
( ) Store Location and Physical Plant
( ) Product Assortment
( ) Store Personnel

28. What percentage of each dollar in sales is needed to cover operating expenses?
29. Salary scale of regular and part-time employees (not including supervisors)
   ( ) Above average for retail stores of trade area
   ( ) Average for trade area
   ( ) Minimum wage

30. Training of new work personnel (non-supervisors)
   ( ) Special training program for specified time period
   ( ) On the job training supervised by regular employee or supervisor
   ( ) No training - learning while performing job

31. Turnover rate of employees (non-supervisors)
   ( ) Employees tend to stay with retail store position for two or more years
   ( ) Employees tend to stay from 6 months to two years with retail store position
   ( ) Employees stay less than 6 months with retail store position

32. The store-wide product assortment of the retail establishment (example: number of brands of pork & beans carried)
   ( ) Large assortment of all types of merchandise (many brands, sizes, etc.)
   ( ) Average assortment (3 to 5 in all product types)
   ( ) Minimum assortment (2 or less in each product type)

33. Use of Private Label Merchandise
   ( ) Heavy use of private label merchandise (All lines of Shurfine, etc. merchandise in inventory)
   ( ) Moderate use of private label merchandise (Average use of Shurfine, etc. merchandise in inventory)
   ( ) Little or no private label merchandise (Low amount of Shurfine, etc. merchandise in inventory)

34. Use of Non-Food Rack Jobbers by retail establishment (toy racks, pet racks, drug rack jobbers, Health & Beauty Aids, etc.)
   ( ) Heavy use by retailer of this merchandise and service area (More than 7 rack jobbers used by store)
   ( ) Average use by retailer of this merchandise and service area (5 to 7 rack jobbers used by store)
   ( ) Minimum use by retailer of this merchandise and service area (Less than 5 rack jobbers used by store)

35. What were your approximate dollar sales last year?
   ( ) $0 - $250,000
   ( ) $250,000 - $500,000
   ( ) $500,000 - $750,000
   ( ) $750,000 - $1,000,000
   ( ) Over $1,000,000

Thank you for your assistance in answering the Retail Management Mix Questionnaire. You will find an enclosed stamped reply envelope. Please return the completed questionnaire at your earliest convenience. Thank you again for your help with this research concerning the retail grocery industry.

Professor L. Lynn Judd
APPENDIX B
November 29, 1979

Dear Affiliated Food Store Manager:

We are conducting a survey to gather information concerning the retail management mix strategies of retail grocers.

It will take but a few moments of your time to answer the simple questions on the enclosed form and you might find it an informative experience.

Your answers will be kept confidential and used only in combination with others to get a composite picture. They are essential to the accuracy of our research. We enclose a stamped reply envelope for your convenience.

Thank you for your valuable assistance.

Sincerely,

Professor L. Lynn Judd
Division of Business
November 23, 1979

Dear Affiliated Retailers:

One of Affiliated's former store owners, Lynn Judd, is attending graduate school at the University of Indiana as well as serving as professor in the business school.

As part of his requirements for the PHD degree, Lynn is writing a dissertation on the subject of "Retail Food Stores and the Retailer-Owned Cooperative".

Please help him with his research by taking a few minutes to answer the enclosed questionnaire. I am sure Lynn will appreciate your help very much.

Sincerely,

Nat Gibbs
General Manager

NG: sf
December 14, 1979

Dear Affiliated Food Store Manager:

Recently we sent you a short questionnaire concerning the retail management mix strategies of retail grocers. Your answer is very important to the accuracy of our survey of Affiliated Food Store managers.

It will take only a moment to fill out and return the questionnaire in the stamped envelope enclosed. If you have already done so, many thanks. If you have not yet had a chance to answer, we should be most grateful if you would do so now. Your answers will be held in strict confidence, of course.

Thank you for your valuable assistance.

Sincerely,

[Signature]

Professor L. Lynn Judd
Division of Business
BIBLIOGRAPHY

Books


**Articles**


Unpublished Materials
