## A SURVEY OF SELECTED RETAIL STORE SYSTEMS and an evaluation of their adequacy <br> FOR DECISION MAKING

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## AND AN EVALUATION OF THEIR ADEQUACY

FOR DECISION MAKING

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## PREFACE


#### Abstract

In recent years there has been considerable criticism of several practices which are results of department-store merchandising executives using data provided by certain available systems and procedures as the basis for decision making. These practices have often been referred to as misuses.

This study was begun with the hypothesis that although many of the systems and procedures are quite consistent in their internal logic, expansions and elaborations of them often produce illogical applications and are detrimental to the aims which should be furthered by their use. In the context of this paper, expansion and elaboration of a system will refer to the practice of using information provided by the system for purposes which such information is not suitable. The purpose of this paper is to examine the utilization that is made of the information provided by selected retail store systems.

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## CHAPTER I

## INTRODUCTION

The following study reveals and examines some selected systems and procedures presently available to department store merchandising executives, while also attempting to determine degree of utilization of the data provided by these systems and procedures for the management decision making process.

Particular interest is focused on "misuses" which result from systems and procedures developed by using the resultant statistical and operational data for purposes not suitable to the type of information available.

This author began this examination with the hypothesis that although many of the systems and procedures are quite consistent in their internal logic, expansions and elaborations of them often produce illogical applications and are detrimental to the aims which should be furthered by their use.

The paper consists of two following chapters: Chapter II analyzes some of the major tools available to merchandising executives; Chapter III discusses results of a questionnaire designed to reveal the extent to which the systems and procedures were utilized by selected department stores.

The following chapter is divided into three sections entitled "The Retail Method of Inventory," "Budgeting," and "Expense Contro1." In turn
each subsection of the "Retail Method of Inventory" discusses some of the fundamental concepts and calculations which are inherent in the method's use. Advantages and disadvantages in theory resulting from utilization of the method are dealt with in the second subsection. Questions are raised concerning the continuing usefulness of this tool in the third subsection. The fourth subsection points to specific misuses which prompt the question of continuing usefulness. At least one step has been taken to make the profit information provided by the retail method of inventory more meaningful, "The Clark Contribution Plan;" this system will be discussed in the fifth subsection. The Net Profit Plan is also discussed in this section as an alternative or supplement to the Contribution plan. The section on "Budgeting" is included because of the necessity of budgeting practices. It is inconceivable that modern retailing could continue at its present degree of efficiency without considerable evaluation of past operations and detailed future planning.

Because of the importance of expense control, it has been included as the third major section of Chapter II. The importance and meaning of expense control are discussed in the first subsection of "Expense Control." A number of alternative methods of classifying expenses are presented as a second subsection. Expense Center Accounting and Production Unit Accounting are covered in the third and fourth subsections respectively--since release of the Standard Expense Center Accounting Manual in 1954, considerable interest has been directed toward these activities.

The third chapter of the study involved the use of a questionnaire developed by Mr. Robert D. Erwin of the Marketing Department at Oklahoma State University. Sixteen years of experience in both the theory and practice of retailing provide the background for developing such a ques-
tionnaire. Mr. Erwin's experiences in the field of retailing include: (1) Junior Executive Trainee for Bloomingdale's in New York City, (2) assistant buyer for Stern's in New York City, (3) a buyer and department manager of women's accessories for Rothchild's in Oklahoma City, (4) a buyer and department manager for costume jewelry and women's sportswear for Kerr's in Oklahoma City. In addition Mr. Erwin has had twelve years of teaching experience at Oklahoma State University.

The questionnaire was mailed in July and August of 1964 to 97 retail department stores throughout the United States. Thirty-nine of the stores were located in the northeast, 19 in the southeast, 15 in the centra1, 7 in the southwest, and 12 in the far western part of the United States.

The questionnaire, a letter of explanation, and a card of commitment were mailed to each store president. The letter explained a research proe ject was being conducted for the purpose of studying department store expense records and merchandising systems to determine their value as guides in decision making. The letter emphasized that completion of the questionnaire would not involve the release of any information normally considered privileged by management of retail firms. The letter stated that the questionnaire requested information concerning the type of data provided by the store's accounting and other merchandising records and an evaluation of its adequacy for decision making. It was stressed that for purposes of the study the appraisal by a major store executive of the usabi1ity of the information provided by the store's system was of primary importance. Those receiving the questionnaire were assured that all sources of information would be held in the strictest confidence. At the bottom of each letter a postscript suggested the addressee check on the enclosed card whether or not the questionnaire would be completed. The
card requested the name and position of the person who would complete the questionnaire.

Fifty-eight of these questionnaires were returned in time to be included in this study, a 60.8 percent return. Other questionnaires were received too late to be included in this part of the study.

These 58 returns included the following regions of the country. Of the 39 stores receiving questionnaires in the northeastern section of the country, 20 were answered and returned ( 51.3 percent). The 19 storesin the southeast that were sent questionnaires returned 15 of them (78 percent). From the central section, 15 of 20 questionnaires were received for an even 75 percent return. The seven stores sent questionnaires in the southwest returned five ( 71.5 percent). The stores in the far west had the smallest return figure since only four of the twelve stores returned questionnaires (33.3 percent).

It would be rather naive to assume that every technical term used in the questionnaire would be interpreted by all concerned to mean the same things. Therefore, it was anticipated that every respondent would not answer every question completely. It was also anticipated that in those cases in which one individual might answer the entire questionnaire, such an individual would be likely to find himself answering questions considerably removed from his sphere of activities. This would inhibit complete answers in some areas. Thus, certain questions requiring relatively detailed answers might be answered with considerable variations in detail, depending upon the background of the individual completing the questionnaire.

The appendix contains several tables and an explanation of the criteria used to classify stores as progressive or non-progressive.

## CHAPTER II

SELEGTED RETAIL STORE SYSTEMS

## A. Retail Method of Inventory

Concepts and Calculations in the Retail Method
This section's purpose is to give an overview of some of the basic ideas and calculations involved in using the retail method of inventory. 1

The retail method of inventory is a method of approximating for each group of related merchandise the "cost or market value, whichever is lower" without the bother of determining the market value of individual items. ${ }^{2}$

Since the groups of merchandise to which the retail method is applied should be relatively homogeneous, the method would appear to adapt well to departmental control.

The system is based on relationships between a sma11 number of percentages that are discussed below. One of the most important of these percentages is the initial markup percentage. It is the difference between the dollar cost and the dollar setail of the total merchandise handled during a given period of time divided by the dollar retail for the same period. As Wingate points out, this concept is often referred to by other names--cumulative initial markup, markup, cumulative markon, and several others.
$1_{\text {This }}$ discussion of the retail method of inventory is largely drawn from Wingate and Schaller's 14 th chapter. John W。Wingate and Elmer 0 。 Schaller, Techniques of Retai1 Merchandising (New York, 1956), pp. 245-247.

2
Ibid.

Another percentage which is of considerable importance is the complement of the markup percentage. This figure is found by subtracting the markup percentage from 100 percent. This same figure can also be obtained by dividing the total merchandise handled at dollar cost by the equivalent dollar retail figure. Wingate and Schaller provide the following example. ${ }^{3}$

TABLE I
CALCULATION OF COST COMPLEMENT

|  | Cost | Retail | $\frac{\text { Initia1 }}{\text { Markup }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Inventory at Beginning | \$20,000 | \$ 35,000 | \$15,000 |  |
| Purchases | 70,000 | 110,000 | 40,000 |  |
| Total Merchandise Handled | \$90,000 | \$145,000 | \$55,000 | 37.931\% |
| Complement of the Markup |  |  |  |  |
| Percent |  |  |  | 62.069\% |
|  |  |  |  | 100.000\% |

Retail Inventory at End Cost Inventory at End ( $\$ 40,250 \times 62.069 \%$ )

24,983
Gross Cost of Merchandise Sold
$\$ 65,017$

In this example the initial markup of $\$ 55,000$ is 37.931 percent of $\$ 145,000$. The cost complement figure of 62.069 percent may be obtained either by subtracting 37.931 percent from 100 percent or by dividing $\$ 90,000$ by $\$ 145,000$.

From this point the derivation of the cost of inventory is quite simple. Assumed in the retail method is that the markup on the remaining $\$ 40,250$ is the same as the markup on the total of $\$ 145,000$. If all items possessed the same markups and the effect of markdowns could be ignored this would be the case. Though it appears to this author that this would rarely ever be the case, Wingate and Schaller maintain that even if some
$3_{\text {Ibid. }}$.
of the total purchases have been marked up as high as 50 percent and others as low as 40 percent it may still be approximately true that both high markup goods and low markup goods are represented in the same proportion to each other in the closing inventory as they were in the beginning inventory.

The following example from Wingate and Schaller demonstrates the calculation of the total merchandise handled. ${ }^{4}$

TABLE II
CALCULATION OF TOTAL MERCHANDISE HANDLED

|  |  | Cost |  | Retail | $\frac{\text { Markup }}{\text { Percent }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inventory at Beginning |  | \$20,000 |  | \$ 35,000 |  |
| Gross Purchases from Vendors | \$72,000 |  | \$115,000 |  |  |
| Less Returns and Allowances |  |  | 4,700 |  |  |
| Net Purchases from Vendors |  | 69,000 |  | 110,300 |  |
| Transfers In | 1,000 |  | 1,600 |  |  |
| Less Transfers Out | 1,500 |  | 2,400 |  |  |
| Net Transfers Out |  | -500 |  | -800 |  |
| Transportation Charges |  | 1,500 |  |  |  |
| Additional Markups |  |  |  | 700 |  |
| Revisions of Retail |  |  |  |  |  |
| Downward Not Markdowns |  |  |  | -200 |  |
| Total Purchases Plus Additions | 70,000 |  |  | 110,000 |  |
| Total Merchandise Hand1ed | 90,000 |  |  | 145,000 | 37.931\% |

It should be made clear that there is little assurance that goods carrying different markups will be represented in closing stocks in proportion to their representation in total merchandise handled. The goods
${ }^{4}$ Ibid., p. 249.
may have different stock turnover rates. More of the lower markup goods will probably have sold, yet the closing inventory is reduced from retail to cost by an average percentage which assumes the goods have sold in the same proportion as they were represented in total merchandise handled.

Thus, it must be concluded that the retail method will give incorrect inventory valuations when high and low markup lines are combined and where goods have stock turn ratios which differ materially.

Most of the calculations in the example are self-evident. "Transfers in" are purchases from other departments and are added while "transfers out ${ }^{19}$ are sales to other departments and are handled in much the same way as are feturns to vendors. Since additional markups do not affect the cost purchase figure, they are only added to the retail purchase figure. The "revisions of retail downward" is subtracted from the retail purchases figure and largely represents downward corrections of errors in the original retail prices of purchases. These revisions do not include markdowns which result from a depreciation of the retail value of the goods.

It is possible to prepare monthly income statements even though physical inventories are not taken that often. Many stores keep "book inventory" (sometimes called a perpetual inventory) even though they may not be interested in interim income statements.

Advantages and Disadvantages in Theory
In examining some of the reported advantages and disadvantages of the retail method, Duncan and Phillips list eight specific advantages representative of those offered by most other writers. ${ }^{5}$
$5^{5}$ Delbert J。Duncan and Charles F. Phillips, Retailing Principles and Methods, Fifth ed. (Chicago, 1959), pp. 630-635.

The first advantage they offer is that the method provides "fingertip" control over profit through having the rate of markup and markdown currently known. They feel that when information is available on gross margin and markdowns, the proper action may be taken to guard the planned or desired profit margin.

The second advantage they offer is that the retail method of inventory permits an evaluation of the inventory on a conservative basis without the necessity of making a physical count of the merchandise. The reasoning for the "cost or market value, whichever is lower" is that the markup percentage which is used to figure the cost percentage is calculated after additional markups, but before markdowns.

As a third advantage Duncan and Phillips conclude that the method makes possible the taking of a physical inventory more quickly and less expensively than under the cost method.

The fourth advantage offered is that the retail method enables the retailer to take inventory on a "staggered" basis. This means that inventories of different departments may be taken at different times, thus avoiding the problems of store-wide inventories.

The fifth advantage is that the method provides a basis for information concerning stock shortages. In comparing the book inventory figure with that of the actual physical inventory, it is possible to determine the amount of stock shortages.

The sixth advantage is that the book inventory figure provides an equitable foundation on which to base insurance claims.

The seventh advantage is that the retail method of inventory reveals weaknesses in methods and procedures, focuses the attention of management on them, and thus leads to improved results. This advantage is probably
best described as a summary of several of those already offered.
Finally, Duncan and Phillips opine that the retail method of inventory furnishes a workable basis for the dollar control of merchandise. This results from the retail method's book inventory figure revealing the dollar retail value of the inventory without the necessity of a physical count.

The retail method of inventory also inherently possesses some disadvantages. It requires a greater volume of record keeping and is therefore more expensive to operate than the cost method. Another disadvantage is that the whole process is an averaging method; and, of course, averages are not always truly representative. The possible effects of high and low markup items having different stock turns has a1ready been mentioned. This possibility of a mistake in the closing inventory is the retail method's greatest disadvantage.

Has the Retail Method Outlived Its Usefulness?
Many forms of business practice have long outlived their usefulness. Is it possible that this has happened to the retail method of accounting? Several neoteric writers support this conclusion.

In an article by Ma1colm P. Mc Nair and Eleano G。May there is a discussion as to whether or not the retail method of accounting is outmoded. ${ }^{6}$ They point out that many devices of management which were at one time fresh and constructive may become encrusted with habit and tradition-so that they are actual determents to clear thinking.

They contend that the retail method of inventory has lived a long
${ }^{6}$ Ma1colm P. Mc Nair and E1eano G. May, "Pricing for Profit," Harvard Business Review, Vo1. 35 (1957).
and useful life. Though the efficiency attained by management as a result of the use or misuse of this method may not be particularly high, the system in itself developed quite logica1ly.

The following is a brief outline of the method's development. It may be assumed that the basic reason for incurring expenses is to sell merchandise. Therefore, it was natural to relate expenses to sales and to feel that a portion of each period's sales must go to cover expenses. Since profits also developed as a result of sales, it was also convenient to think of profits as a percentage of sales.

As the next step in the retail method's development and use, Mc Nair and May suggest that since expenses and profits were considered as percentages of sales, the gross margin should be figured in the same way It follows logically that if the gross margin were a percentage, then the markon should also be a percentage of sales.

The gross margin percentage was an important objective and became the principal measuring stick for judging the performance of buying and selling departments. Consequently, there was a need to plan markon in advance so that the gross margin would come out as desired at the end of the period. This type of calculation is relatively simple。 Wingate and Schaller cite a formula for the initial markup percentage. ${ }^{7}$

$$
\text { Initial Markup }{ }^{8}=\frac{E+P+A C-C D+M+S S+E+C D}{S+M+S S+E+C D}
$$

In this section a brief outline of the retail method of inventory's
${ }^{7}$ Wingate and Schaller, p. 126.
${ }^{8}$ Where $E=$ expenses, $P=$ profits, $A C=$ alteration costs, $C D=c a s h$ discounts, $M=$ markdowns, $S S=$ stock shortages, and $E+C D=$ employee and customer discounts.
development has been discussed. The question of whether or not the retail method has outlived its usefulness has also been raised. The next section will focus on some of the practices which have developed as a result of using the retail method of inventory.

## Misuses

In a previous section the advantages and disadvantages in theory of the retail method of inventory were discussed. These advantages will be fully realized only if the method is properly used. Unfortunately, as with most tools the information provided by the method can be misused. For this reason the author feels that a presentation of some of the possible misuses is necessary. Mc Nair and May discuss ten such practices specifically. ${ }^{9}$

1. Many merchandise managers have focused on the gross margin percentage as the major operating tool.
2. The planned markon percentage is used with the assumption of applicability of average costs.
3. Very little attention is given to differences in the costs generated by individual items.
4. Possible elasticities of demand are almost completely disregarded.
5. There is no distinction between fixed and variable costs.
6. The retailing of orders becomes rather mechanical, and there is the use of either the manafacturer's suggested retail price or a traditional price line of the department.
7. Net sales become the basis of expense allocation.
8. There is too much confidence in the final departmental net profit
${ }^{9}$ Mc Nair and May, p. 108.
percentages after expense allocation.
9. The buyer's compensation is often so much a function of the gross margin that he hesitates to carry any item that has a lower markon percentage than his planned figure.
10. There is much more attention focused on ratios to sales than on dollars; the convenient percentages have become crutches.

It should be made quite clear that these practices are not inherent in the methods use. Such practices result from using information provided by the retail method of inventory for purposes where such information is not applicable.

## A Step To Improve Effectiveness

In an effort to improve the retail method of accounting, one specific step was taken to get away from the practice in which too much confidence was placed in the final departmental net profit percentages after expense assignment. Garlos B. Glark, who practically fathered the retail method of inventory, was one of the first to point out its shortcomings. 10 Mr. Clark was convinced that it was not possible to look at individual departments within a store as independent producers of profits or losses. It was his belief that selling departments should be viewed as streams that pour their contribution into a common reservoir. This contribution consists of the gross margin on sales less direct expenses. For his purposes direct expenses were those that would not exist if it were not for the existence of the department. If the department were discontinued, then these expenses would cease. From this commonly produced reservoir, store-wide service activities and fixed charges were to be met; therefore,
${ }^{10}$ Carlos B. Clark, "Reservoir Concept; Its Keynote of Future Profits," Retail Ledger (1933), po 13.
net profit could be increased by either increasing the inward flow of profits or by decreasing the outward flow of expenses. ${ }^{11}$

Though the "contribution" plan was a step in the right direction, the system still had many shortcomings. Among the specific practices which have been set forth as misuses were: the continuing emphasis which management placed on sales, markon percentages, and gross margin percentages. Thus, the contribution plan did not accomplish what was needed-a real change in the thinking of merchandising people.

The next subsection is a discussion of the "Net Profit Plan." Though it is not an integral part of the retail method of inventory, it is an alternative to the "contribution plan" that was discussed in the last section. For this reason and because of its importance in the questionnaire, a brief discussion will be presented.

Net Profit Plan
The "Net Profit Plan" of expense accounting assumes that operating expenses received in a store are chargeable to one or more of the selling departments. Consequently, after the gross margin for a selling department has been determined and a portion of all the expenses of the store have been assigned to the department, it is possible to calculate the net profit for the department.

These expenses are assigned to the various departments either/or in a combination by allocation and proration. If an expense is assigned on a percentage basis of sales, it is prorated. It is allocated if it is assigned on any other basis. An expense might be allocated on the number of sales transactions, the number of articles wrapped, etc.

The direct expenses, or those incurred directly because of the activity of a particular department, pose no particular problem. However, a number of problems may be anticipated in distributing expenses that are incurred by the store as a whole.

Some contemporary authors feel two factors should be considered in assigning any indirect expense: the fairness of the method to the various departments affected and the difficulty and cost of assigning the indirect expenses by the method under consideration. 12

Often the sales volume of each department is used as the chief basis of distributing indirect expenses because it is one of the easiest methods. In many cases a better basis can be found. Anderson, Barker, and Butterworth illustrate a comprehensive table for expense distribution. ${ }^{13}$

Previous discussion which has not largely dealt: with the retail method of inventory has either been with the "net profit" or "contribution" plans. Attention will now be directed toward other tools which are available to merchandising executives.

## B. Budgeting

There are several other systems and procedures on which merchandising executives have relied as aids in decision making. Of particular importance in this area are merchandise planning, budgets, and budgetary procedures.

A plan or budget has long been thoughtessential in keeping manage-
${ }^{12}$ Ira Dennis Anderson, J. Donald Butterworth, and Clare Wright Barker, Principles of Retailing (New York, 1955), p. 592.
${ }^{13}$ Ibid., p. 593.
ment informed so that steps might be taken to eliminate any situations which might cause unprofitable operation. This plan or budget of future operations is designed to gain an advance view of income, expenses, capital outlays, etc., that are likely to occur in the chosen budget period. The "budget" attempts to furnish an advance look at the probable financial position of the chosen budget date. Controling these elements so that the results at the end of the budget period will conform to the budget or to any modifications resulting from changing conditions during the period is a principle purpose of this plan.

With such a plan for guidance, the responsible executives are able to read and use more intelligently the interim financial and operating statements. This is also true for balance sheets at the end of the periods. Possibly comparison of these current figures are more useful when the comparison is made against forecasted figures as opposed to current statistics or past results。

Be11 and Moscare11o propose three principle divisions of a budget which are interrelated and interdependent. ${ }^{14}$ Since it is necessary to prepare all three divisions of the budget in order to be certain of the accuracy of any one of the divisions and to have a comprehensive picture of the desired results, they are interdependent. The three divisions of a complete budget are as follows: (1) forecast of operations, (2) forecast of cash receipts and disbursements, and (3) forecasted balance sheets. 15 The forecasts of operations are usually prepared first and are used as a basis of preparation for the other divisions of the budget. The

[^0]discussion which follows will center on the operations budget. Since the major emphasis of this paper is not financial management, neither the cash budget nor the forecasted balance sheets will be discussed.

The operating budget is usually prepared on a departmental basis after a total preliminary budget has been prepared. The preliminary budget establishes general policies to be used in the preparation of details and departmental forecasts. This operating budget is ordinarily subdivided into an expense budget and a merchandise budget.

The expense budget is used to control expenses--so that when used in connection with the planned gross margin it will be possible to achieve the desired profit figure.

The merchandise budget reflects the details comprised in the items of sales, cost of sales, and gross margin except purchase discounts. It is subdivided into months or weeks and is prepared for each department.

The merchandise budget shows the elements of the statement of income, down to gross margin, as the management expects or desires them to be within the limits of what can be realized for each month or week during the season and in total at the close of the season. It sets up a standard of desired performance for each department. It is essential that actual performance be compared regularly with the budget, either as originally set up or as revised in the light of new conditions or of new judgments arising after the commencement of the season. ${ }^{16}$

Perhaps a little more should be said about budget revision. Budgets are likely to require revision from time to time to take account of new factors which arise, and also because of variations of actual results from plans. If sales decline from budgeted figures, then planned purchases should be decreased so that stocks may be kept within the budgeted amounts. If sales are greater than the amount that has been budgeted, then planned
${ }^{16}$ Ibid., p. 49.
purchases should be increased so that stocks may be maintained at the desired level. Special care must be taken in order to insure that arbitrary restrictions have not been imposed on purchases. Even if past purchases are equal to planned purchases, merchandise in current demand should be purchased.

## C. Expense Control

Meaning and Importance
In the last section expenses were mentioned only as having been budgeted to departments. In this section the concern shall be with expense control. Expense control in its broadest sense represents the entire activity resulting from reasonable expense operation. Anderson, Barker, and Butterworth feel that expense control includes: (1) the proper classification of expenses, (2) the equitable distribution of these expenses among the selling units, and (3) the analysis of actual expense figures in order to have a sound basis for planning reductions in any expenses that are too high or increases in any expenses where such action will result in greater profits through the effect upon sales. ${ }^{17}$

Since the purpose of most retail stores is to operate at a profit, and since profits may be improved either by increasing sales while holding expenses constant or decreasing expenses while holding sales constant, little needs to be said concerning the importance of expense control. Both of these activities are important aspects of expense control.

Expense control is not the same thing as expense cutting. It is quite possible for expense control to require and increase in an expenditure.
${ }^{17}$ Anderson, Butterworth, and Barker, p. 576.

## Classification of Expenses

The practice of grouping expenses into groups or classes according to some definite scheme is expense classification. This should be a formal practice with retailers, because it will make possible more direct control over expense items. Secondly, if the merchant wishes to make any distribution of expenses to various departments, there must be some systematic classification of expenses to use for a basis. Finally, if comparisons are to be made between departments or stores, such a system of classification is necessary.

There are two commonly used general types of expense classifications in retailing-natural classifications and functional classifications. Natural classifications are based upon the nature or kind of expense, regardless of its use or function. This would include items such as supplies, payroll, and rent. Functional expenses are classified according to the purpose or function for which they are incurred. These include buying, selling, administrative expenses, etc.

A standardized expense classification has been developed by the Controllers' Congress of the NRGDA and is widely used in department stores. This system is planned so that each expense account can be expanded or contracted to suit the size and needs of the store. This allows large stores to follow the same general procedures as small stores, only on a much more elaborate scale.

## Expense Center Accounting

A new approach to the problem of classifying retail operating expenditures was introduced by the Controllers' Congress of the NRGDA in late 1954. Expense center accounting, the newer system, is based on the pro-
position that expenditures should be assigned to the specific job of work that incurs the expense. Its basic purposes are to provide a practical arrangement of expense accounts that will foster a betcer understanding of operating costs in retail stores, to facilitate control over the expense structure as a whole, and to improve profits. ${ }^{18}$

The Standard Expense Center Accounting Manual recommends that stores be divided into four groups according to size (A, B, C, D)。 Group A is designed for the smallest stores and provides for the classification of operating expenses into seventeen natural divisions. Group B consists of eighty-two accounts which are distributed among fourteen Expense Centers. Classification for the C group establishes thirty-six Expense Centers and consists of 155 accounts. Group D consists of 235 accounts which are distributed among seventy-one Expense Centers.

## Production Unit Accounting

Since the basic purposes of production unit accounting and expense center accounting are generally the same--to afford a better understanding of operating costs, to facilitate control over expenses, and to improve profits--the two might be thought of as necessarily related. ${ }^{19}$ However, this is not necessarily the case.

In expense center accounting the specific aim is to identify the principal tasks and the costs of performing them, while production unit accounting concerns measuring productivity and evaluating performance in relation to those expense centers in which it applies. Although it is
${ }^{18}$ Standard Expense Center Accounting Manual, Presented by the Standdards Revision Committee, a sub-committee of the Controllers' Congress Standardization Committee of the NRGDA, 1954.
${ }^{19}$ Duncan and Phillips (5th ed., 1959), pp. 651-658.
possible to adapt expense center accounting without also using production unit accounting, the reverse situation is not practical.

Since production unit accounting is concerned with a basis upon which to evaluate "productivity," the first chore is to define the major elements involved in a work job. These elements include: (1) the "work load," or the amount of work to be done; (2) "productivity," or the speed with which it can be done; and (3) "effective pay rate," or the labor cost of performing the job. Each expense center which has a payroll account and where the job can be measured applies these elements.

Six fundamental principles underlie the production unit concept. The following is a brief outline of these underlying principles.

1. Stores should be identical and alike insofar as accounting treatment is concerned; but there is no need to be alike as far as methods are concerned. Thus, it is possible to be comparable without being identical.
2. All of the principal elements of the cost of the expense center should be fully evaluated.
3. The cost of doing the job of work can best be found if all homogeneous jobs and other related expenses are gathered together in one expense center.
4. Variations in procedure or differences in the manner in which the "job of work" is done are limiting factors, but the actual costs are shown.
5. The limiting factors on production are controlled largely by management.
6. Weighting is not to be employed to level out differences when comparisons are made among stores. ${ }^{20}$

20
Ibid.

If in production unit accounting there is to be a measure of performance, there must be some suitable unit of measurement. A measuring unit is the particular activity within the expense center which constitutes the work load and provides the basis for judging productivity. Measuring units are not recommended for all expense centers.

The three elements defined earlier, work load, productivity, and effective pay rate, may be put together in a simple formula: Work Load $\div$ productivity $=$ hours worked $X$ pay rate $=$ payroll expense.

Since it is virtually impossible to obtain a thorough understanding of production unit accounting in such a brief treatment, this study only proposes some indication of what is available to retailers and the continued efforts in the area of expense control.

## D. Summary and Conclusions

The purpose of the previous chapter was to make the reader somewhat familiar with some of the terms that are essential for a meaningful discussion of the questionnaire.

The author feels that a few concluding statements concerning the retail method of inventory, and an evaluation of the retail system discussed, would be helpful before proceeding to a discussion of the questionnaire.

## Retail Method of Inventory

The retail method of inventory has considerable merit. It provides a very convenient basis for the assembly of historical data and for post mortem analysis. This system's potential for estimating inventory without the bother of an actual physical count is a very significant attribute. Unfortunately, the retail method of inventory can be misused. Pro-
cedures have developed which use the data provided by this system for purposes where it is not applicable. Among these are specific practices which have been presented as misuses.

Evaluation of Retail Systems Discussed
The author is convinced that the systems discussed possess internally consistent logic. When properly used, these systems produce information that can be of considerable value.

It is true that vicious attacks have been directed toward the practices which result from using these systems. The author has concluded that these practices so attacked are not inherently produced by the systems themselves. Rather, they are often times produced by elaborations or expansions which result from misunderstanding of the systems.

Many of these practices subject to such criticisms could be corrected. This correction would be attained through management personnel obtaining a thorough understanding of the respective systems. Such management could then see that operating personnel possess the same understanding.

This author has also concluded that what is most direly needed is not new systems, but clear thinking instead. Corrective efforts should be first aimed toward such thinking, then toward the development of new systems. If development does not proceed in this order, practices might result from any new system developed which would possess the same pitfalls as practices that are presently being criticized.

This section concludes the discussion of the selected systems and procedures available to department store retailers. The next chapter will deal with results of the questionnaire concerning the utilization that is made of the information provided by these and other store systems.

## CHAPTER III

## INDICATED UTILIZATION OF INFORMATION

## PROVIDED BY SELECTED STORE SYSTEM

This chapter is concerned with results of selected areas related to store systems of the questionnaire that has been described earlier. The major areas that will be discussed are: (A) budgeting and budgetary procedures, (B) information concerning departmental profitability, (C) expense center accounting, (D) production unit accounting, and (E) a general area to be referred to as "control" These areas and their subdivisions will be discussed in the order they are listed above.

## A. Budgeting and Budgetary Procedures

Frequency and Time Period
All but one of the fifty-eight stores answering the questionnaire indicated that they budgeted expenses. Since many budgets are revised monthly or quarterly, it is extremely difficult to state the specific period for which a budget is operational. The most popular time period for the budget was six months. A rather conspicuous absence of annual budgeting should be noted. None of the stores with sales of under $\$ 20$ million used an annual budget. Though the $\$ 20-50$ group had none of its non-progressive stores budgeting annually, 16.3 percent of its progressive stores did use the annual budget. ${ }^{21}$ The over $\$ 50$ group had 10 percent
${ }^{21}$ The groups $5-10,10-20,20-50$, \& over 50 referred to are annual million dollar sales volume categories.
of its progressive stores and 4.8 percent of its non-progressives using the annual budget. ${ }^{22}$ The second most popular budgeting period to six months was the single month.

## Variable Budgeting

Many of the responses to the variable (flexible) budgeting question indicated a possible misunderstanding. A variable budget is one that changes with different levels of sales. Many of the answers indicated that the respondents felt that they were being asked if their budgets were revised. Neither of the $\$ 10-20$ group's progressive stores reported use of flexible budgeting, although 71.5 percent of this group's non-prom gressive stores did report such a practice A11 of the $\$ 20-50$ group's progressive stores used flexible budgeting, as did 40 percent of its nonprogressives. The over $\$ 50$ group had 50 percent of its progressive stores and 23.8 percent of its non-progressives using the flexible budget. The possibility of a misunderstanding would prevent any definite conclusions.

## Sales Revenue by Departments and Classifications

Al1 of the $\$ 5-10$ stores budgeted sales revenue by departments and none budgeted by merchandise classification. Only one store in the $\$ 10$ 20 group reported that it did not budget by departments; this same store did report budgeting by merchandise classifications. Consequently, all stores in this group did have departmental sales estimates available.

A11 stores in the $\$ 20-50$ category reported budgeting sales revenue by departments, and 43.7 percent of this group also reported budgeting by merchandise classifications.

[^1]The over $\$ 50$ group had four stores reporting that they did not budget by departments, but two of these four did budget by classifications. This means that two of the thirty stores in the over $\$ 50$ group do not have departmental sales estimates available. Twelve stores in this group also budget sales revenue by merchandise classifications.

The results of the questions about budgeting indicate considerably more interest in estimating sales revenue for departments than for merchandise classifications. This practice is criticized in the summary of this chapter.

## Expense Budgeting Practices

Up to this point discussion has been about revenue budgeting practices. Attention will now be focused on expense budgeting practices. This particular discussion will focus on budgeting total store expenses by natural accounts, direct expenses by selling departments, indirect expenses by selling departments, and expenses by work centers.

A11 of the \$5-10 group of stores estimated expenses by work centers and natural accounts. Only one of these stores estimated direct expenses by selling departments, and none did any type of budgeting of indirect expenses.

Al1 stores in the $\$ 10-20$ group estimated expenses by natural accounts and work centers. Five of these stores estimated direct expenses by se11ing departments, and only one estimated indirect expenses by selling departments.

Fourteen of the sixteen stores in the $\$ 20-50$ group estimated expenses by natural accounts, and fifteen of these stores estimated expenses by work centers. Eight stores in this group estimated direct expenses by selling departments, and only four attempted to estimate indirect
expenses by selling departments.
Twenty-two of the thirty stores in the over \$50 category estimated expenses by natural accounts. Twenty-five of these stores estimated expenses by work centers. Fourteen of the stores in this category estimated direct expenses for selling departments, while only seven made any estimate of indirect expenses.

The practice of estimating expenses by work centers and natural accounts is relatively widespread. About 30 percent of the stores in the larger three categories that estimated direct expenses by selling departments also followed the same practice for indirect expenses.

Extent to Which Markdowns and Stock Shortages
are Budgeted by Departments and Classifications
The percentage of stores that planned markdowns and shortages by departments remained relatively constant throughout the different sales size categories. The mean for all stores was 67.3 percent, while the individual categories varied from 62.5 percent for the $\$ 20-50$ stores to 70 percent for the over $\$ 50$ stores. The picture changes considerably as attention is focused on planning shortages and markdowns for classifications. This is a situation in which as the store size increased, the frequency of utilization of a practice decreased. The percentages were $33.3,22.2,12.5$, and 10 . percent for stores in the size categories of $\$ 5-10, \$ 10-20, \$ 20-50$, and over $\$ 50$ respective1y. P1anning markdowns and shortages gives another illustration of much more interest in departmental than classification figures.

Planning of Purchases for Departments and Merchandise Classifications
A rather significant percentage ( 89.6 percent) of all stores indica-
ted that they planned purchases by departments. The over $\$ 50$ stores had the smallest percentage of any group of stores following this practice (83.3 percent). A11 stores in the $\$ 5-10$ and $\$ 20-50$ groups planned purchases for departments.

Again, as attention is focused on merchandise classifications, a significant decrease in interest may be noticed. None of the stores in the \$5-10 group made any attempt to plan purchases by merchandise classifications. The $\$ 10-20$ group had 33.3 percent of its stores budgeting purchases by classifications. Purchases were planned for merchandise classifications by half of the stores in the $\$ 20-50$ group. The over $\$ 50$ stores had 44.8 percent of its stores following the same practice.

What appears to be an inconsistency should be noticed here. This is true for three of the four categories of stores and for the total store figures. The inconsistency pertains to the frequency of planning sales revenue for merchandise classifications as opposed to the frequency of planning purchases for the same merchandise classifications. Each of the three larger categories of stores report that they do more planning of purchases than sales revenue for merchandise classifications. Slightly more than 20.0 percent of the $\$ 10-20$ group planned sales revenue for merchandise classifications, while 33.3 percent of these stores planned purchases for the same classifications. In the $\$ 20-50$ group 43.7 percent of the stores planned sales revenue, while 50 percent planned purchases for classifications. Forty percent of the over $\$ 50$ group planned sales revenue for classifications, while 44.8 percent of these stores followed the same practice for purchases.

The figures reported for budgeting sales revenue and purchases do not appear to be consistent. It does not seem logical that purchases
would be planned unless sales had been previously planned.

Participation of Department Managers in the Budgeting Process
Interest was expressed in the extent to which department managers (both selling and non-selling) participated in the budgeting process. Of the fifty-eight stores included in this study, only one reported that it did not allow any department managers to participate. In the progressive stores all managers of non-selling departments and somewhat fewer of the selling department managers participated in the budgeting process. The situation was similar in the non-progressive stores--to the extent that more non-selling managers participated than did selling managers. The degrees of participation that were allowed appears to vary considerably.

There are a few other questions dealing with budgeting that will be treated under other headings. To this point the greatest criticism that can be made pertains to the lack of performance of budgeting activities beyond the departmental level.

The topic of discussion will now shift from budgeting information to information about departmental profitability.

## B. Information Concerning Departmental Profitability

Through the questionnaire an attempt was made to learn what information records provided concerning departmental profitability. Every store that participated in the study did compute departmental gross profit. All stores in the $\$ 5-10$ and $\$ 10-20$ groups determined gross profit minus direct expenses. Slightly more than 93.0 percent of the stores in both the $\$ 20-$ 50 and over $\$ 50$ groups figured gross profit minus direct expenses.

The number of stores figuring gross profit minus direct and allocated
expenses dropped by some extent. A11 three stores reporting in the $\$ 5-$ 10 group followed this practice, as did 44.4 percent of the $\$ 10-20$ stores. Approximately 75.0 percent of both the $\$ 20-50$ and over $\$ 50$ groups followed the same practice.

The questionnaire asked if the stores determined gross profit minus prorated expenses. A11 of the $\$ 5-10$ stores answered that they did. Approximately three-fourths of the $\mathbf{\$ 1 0 - 2 0}$ stores followed this practice as did 68.8 percent of the $\$ 20-50$ stores and 71.0 percent of the over $\$ 50$ group.

Slightly fewer of the stores computed gross profit minus direct, allocated, and prorated expenses. A11 of the $\$ 5-10$ group of stores did follow this practice. The percentages of stores doing the same dropped to 44.4 percent in the $\$ 10-20$ group; 68.8 percent in the $\$ 20-50$ stores, and 67.8 percent in the over $\$ 50$ category. This gives a total figure of 66.0 percent for all stores.

This indicates that a rather significant percentage of all stores in this study followed the net profit plan. At least 66.0 percent of the stores go through the computations. As will be seen later, some of these expenses are assigned to departments in ways that are not entirely equitable. In the questionnaire no attempt was made to determine what these departmental profit figures were used for. One of the misuses of the retail method of inventory that was specifically mentioned in Chapter II was concerned with too much confidence being placed in departmental net profit figures after expenses have been assigned. This could be happening in approximately two-thirds of the stores in this study. As the section below indicates, many of the departmental profit figures are derived by means that would almost nullify their usefulness.

Assignment of Departmental Costs
The questionnaire attempted to determine whether or not certain expenses were assigned to departments. An attempt was then made to determine if these expenses were allocated or prorated. The buying expense will be the first to be discussed. A11 of the $\$ 5-10$ stores allocated this expense. The buying expense was assigned to departments by allocation by 87.5 percent of the $\$ 10-20$ group, while 12.5 percent of these stores used proration. (These figures will not all total 100 percent since some stores used both allocation and proration in combination and other stores failed to assign their expenses). In the $\$ 20-50$ group 83.3 percent of the stores used allocation, and 8.33 percent used proration. The over $\$ 50$ group of stores had 56.0 percent allocating and 16.0 percent proration the buying expense. This would give total figures for all stores of 70.9 percent using allocation, and 12.5 percent using proration.

The second expense classification to be discussed is the occupancy (space) expense. Two-thirds of the $\$ 5-10$ group allocated this expense, and one-third prorated it. The $\$ 10-20$ group reported that one-fourth used allocation, and approximately one-half used proration. In the $\$ 20-50$ group 54.4 percent used allocation, and 33.3 percent proration. The over $\$ 50$ group had 48.0 percent using allocation, and 32.0 percent using proration. Though three of the four categories of stores used more allocation than proration, there was more utilization of the latter method than there should have been ( 35.4 percent of all stores). The practice of assigning the occupancy expense on a basis of sales appears to be most unsound. It would be extremely unusual if this expense were created in the same manner. Ordinarily, the occupancy expense accrues to the store as a fixed amount rather than a percentage of sales.

The assignments of the receiving and marking expenses appear to be even more unsound. Remember that these percentages will not necessarily total 100 percent. A11 of the $\$ 5-10$ group reported that theymused proration for assigning these expenses. The $\$ 10-20$ group reported that 25.6 percent used allocation, and 50 percent proration. Twenty-five percent of the $\$ 20-50$ stores used allocation, and about 65 percent proration. The over $\$ 50$ group of stores had 48 percent using proration. This gives total figures of 37.5 percent using allocation, and 52.1 percent using proration for the receiving and marking expenses. These practices of proration should be questioned. Proration is the easier of the two methods to apply, but also is more likely to produce inequities. A very sma11 number of highly priced items might receive a larger share of the receiving and marking expense than would a much larger group of lower valued units. This could easily be in direct contrast to the source of these expenses.

Approximately two-thirds of the $\$ 5-10$ group of stores prorated the warehousing expense, and about one-third allocated it. For this same expense 25 percent of the $\$ 10-20$ stores used allocation, and 37.5 percent used proration. In the $\$ 20-50$ group 33.3 percent of the stores allocated, and 50 percent prorated. All of the three smaller groups of stores used more proration than allocation. This changes in the over $\$ 50$ stores. This group had 48 percent using allocation, and 32.6 percent using proration. The total figures for the warehousing expenses evened out to be 39.6 percent using allocation, and 39.6 percent using proration. This appears to be another instance of excessive utilization of proration.

The ways that delivery expenses were handled presented some interesting, if not too logical, situations. The $\$ 5-10$ group probably presented
the most illogical situation of a11. A11 of these stores prorated the delivery expense. This presents the possibility of being quite unfair. The fur department would be charged the same amount for the delivery of one $\$ 1,000$ coat that the app1iance department would for the delivery of ten $\$ 100$ washing machines. It is doubtful that these two activities would create equal expenses.

Fifty percent of the $\$ 10-20$ stores used allocation for the delivery expense, and 37.5 percent of the same stores used proration. More of the $\$ 20-50$ stores handled this expense by proration than by allocation. Fifty percent of these stores used proration, while 41.6 percent used allocation.

The situation changes considerably in the over $\$ 50$ group of stores. In this group over nine times as many stores used allocation as opposed to proration.

The workroom costs were probably handled more logically than any of the others (assuming the basis for allocation is sound). All of the \$510 stores assigned these costs by allocation. Seventy-five percent of the $\$ 10-20$ group used allocation, and 12.5 percent proration. The $\$ 20-50$ group of stores had 83.3 percent using allocation, and 8.33 percent proration. The over $\$ 50$ stores reported 80 percent using allocation, and only 4.35 percent using proration.

Unfortunately, the bright picture revealed by the practices of handing the workroom costs are not carried into all the other areas. Receiving and marking, warehousing, and delivery expenses are many times improperly assigned. These excessive uses of proration provide a perfect example of a system being misused.

The results above were all concerned with allocation and proration
at the departmental leve1. The same questions were asked to determine the extent to which expenses were allocated and prorated to merchandise classifications. Almost all stores reported that they did not assign expenses to merchandise classifications.

Analysis of Cost Figures to Determine Variations
Another aspect of the questionnaire attempted to determine if cost figures such as buying, occupancy, receiving and marking, warehousing, administrative, delivery, and workroom costs were analyzed to determine variations from budget figures or other standards.

As might have been expected, budget figures were most frequently used for comparisons. This is one of the areas in which there is a significant difference in the practices of progressive and non-progressive stores. For this reason the two are analyzed separately.

Since there are no $\$ 5-10$ stores in the progressive classification, and only two in the $\$ 10-20$ group, these two categories will not be discussed. Two-thirds of the progressive stores in the $\$ 20-50$ group compared their costs with budget figures to determine variations. Eighty percent of the over $\$ 50$ classification of progressive stores followed the same practice. This gives a total of 77.8 percent of all progressive stores comparing costs with budget figures to determine variations. This practice is quite satisfactory if the budgeting process is sound and if positive steps are taken to correct variations. There is no way of knowing whether or not this is the situation.

Something over 22 percent of all progressive stores compared their costs with MOR (Departmental Merchandising and Operating Results) figures to determine variations.

MOR figures are averages calculated from the operating results of
many department stores. For this reason they should only be used as guideposts and not as goals. The practice of using these figures and budget figures together could be satisfactory if the budget figures are properly derived.

Last year's figures were used as the basis for comparisons by 16.6 percent of the progressive stores. This type of comparison is similat to others in that it should not be used alone.

The non-progressive stores indicated that they used fewer of all the possible comparisons than did the progressive stores. About 45 percent of the non-progressive stores determined variations by comparing their costs with budget figures. This 45 percent compares with about 78 percent for the same practice in progressive stores.

Something over 5 percent of the non-progressive stores compared their costs with MOR figures. This compared with a little over 11 percent for the progressive stores.

Last year's figures were used for comparison by a little over 10 percent of the non-progressive stores. This was only slightly smaller than the 16.6 percent figure for the progressive stores.

These practices present another instance where retailing might be criticized. If budget figures are going to be developed, they certainly should be used as a basis for comparison. Going beyond this, positive efforts should be made to correct the variations that do develop. Steps to correct variations are not likely to be taken unless comparisons are first made.

## C. Resu1ts Concerning Expense Center Accounting

The stores were asked if they controlled expenses by expense centers
in the non-selling activities. Of the fifty-eight stores included in this study, only three indicated that they did not use the expense center method. There were two other stores, both in the $\$ 20-50$ range, that failed to answer the question. Of the three stores indicated that did not control expenses by expense centers, one was in the $\$ 20-50$ category, and the other two were in the over $\$ 50$ group. The percentage of stores not using expense centers was nearly the same for both of these classes of stores, 6.75 percent for the $\$ 20-50 \mathrm{class}$, and 6.67 percent for the over $\$ 50$ stores.

As has been indicated earlier, the Standard Expense Center Accounting Manual recommends different numbers of expense centers for stores in four different size groups. The manual recommends 71 expense centers for the largest class of stores. In the $\$ 10-20$ range of non-progressives, there was one store that utilized between 70 and 80 expense centers, while two others used between 50 and 60 , and the rest ranged down to less than 10 expense centers.

The $\$ 20-50$ group of non-progressives had two stores using between 70 and 80 expense centers. Only one of these stores in the $\$ 20-50$ group had fewer than $1 \theta$, while one store indicated that its expenses were assigned to 280 centers. It seems unusual that one of these stores would have four times as many expense centers as is recommended for the largest stores by the Standard Expense Center Accounting Manual. It appears that such a practice would entail considerable expense. There might be serious question as to whether or not the benefits to be derived would be worth the additional cost.

The over $\$ 50$ group of non-progressives had five stores using between 70 and 80 expense centers, no stores using less than 10 , four stores using
between 80 and 100 centers, one store using 260 centers, and another using 300 expense centers.

The progressive stores had very nearly the same distribution. There were two progressive stores in the $\$ 10-20$ range that used between 40 and 60 centers. The six progressive stores in the $\$ 20-50$ group had a range of some stores using 70 centers, and others as few as 10.

The over $\$ 50$ group had three stores with more than 70 expense centers. These three stores used 150,200 , and 260 centers respectively.

It is apparent that the use of expense centers is quite widespread. Considerable credit should be extended to the NRGDA. However, the practice of some stores using so many centers must be questioned. The author wonders if the utilization of the additional information provided by such a large number of centers is worth the highly additional cost.

## D. Results Concerning Production Unit Accounting

In the development and application of production unit accounting, it is necessary to develop some standard for the productivity measure. Physical standards for production aid in productivity determination. A11 of the smaller three groups of progressive stores established physical standards. However, many of the standards were established by persons who had no formal training in this area. While formal training may not be thought of as a requisite, it would certainly be desirable.

The over $\$ 50$ category had 57.1 percent of its progressive stores having established physical standards. Trained personnel established the standards in 80 percent of the progressive stores, and in 23 percent of the non-progressive stores in this category. In the $\$ 20-50$ group 88.8 percent of the non-progressives established physical standards, and 25
percent of these standards were established by trained personne1.
The $\$ 10-20$ group of non-progressives had 57.2 percent of its stores establishing physical standards. Only 20 percent of these standards were established by trained personne1. In this same category all of the progressive stores utilized trained personne1 to establish their standards.

Progressive stores differed considerab1y from non-progressive stores in the utilization of trained personnel to establish the standards. The smallest percentage of progressive stores using trained personnel was 50 percent. The highest percentage of non-progressives using trained personne1 was 25 percent. Both of these figures were found in the $\$ 20-50$ group.

In relationship to the acceptance of production unit accounting, one of the questions asked what changes had been made in expense control practices since 1950. Since the Standard Expense Center Accounting Manua1 was not introduced by the NRGDA until 1954, it might have been expected that several of the stores would have indicated that the adoption of production unit accounting had taken place. On1y two stores, both of which were in the over $\$ 50$ classification, specifically mentioned production unit accounting. However, many stated that they had changed their methods to comply with the Standard Expense Center Accounting Manual. Whether or not this includes production unit accounting, since it is optional under the Manual, is not possible to determine from their response.

## E. Control

Control, as it is used here, should be interpreted in a broad sense. A11 of the answers that were received did not lend themselves to rigid classifications.

The questionnaire asked if the stores were departmentalized for
accounting and control purposes. As might have been expected, all fiftyeight stores answered yes.

An attempt was made to determine who was primarily responsible for expense control. In the $\$ 10-20$ group of progressive stores, 100 percent used the top financial officer, while the non-progressives for this same group had 33.3 percent using the top financial officer, and 16.7 percent using an expense committee.

The \$20-50 group of progressive stores had 66.7 percent using the top financial officer, and 33.3 percent using what might be called an "operating officer." (This is some person in management who is not a financial officer.) The non-progressive stores of the $\$ 20-50$ group had 80 percent using the top financial officers, and 20 percent using an "operating officer."

In the over $\$ 50$ group of progressive stores 50 percent used the top financial officer, 40 percent used an operating officer, and 10 percent used an expense committee. The non-progressive stores of this size had 42.8 percent using the top financial officer, 47.6 percent using an operating officer, and 9.6 percent using an expense committee.

When total figures were calculated for the progressive stores as opposed to the non-progressive ones, very few differences were found.

The stores were asked what the smallest unit was to which they controlled expenses, and what had been used before they adopted the present practice. So many of the stores answered that the practice they are presently using has always been used, that no attempt will be made to say anything about the former practices.

A11 stores in the $\$ 10-20$ group that answered the question indicated that the smallest units to which they controlled selling expenses were

## departments.

One-third of the $\$ 20-50$ group of progressive stores indicated the department as the smallest unit to which they controlled expenses. Twothirds of the same group of stores either did not answer the question, or gave answers that did not seem to apply.

Of the over $\$ 50$ stores answering this question, 90 percent used the department, and 10 percent (one store) did not attempt to control expenses beyond the "store" leve1. The non-progressive stores for this same size had 90 percent using the department, 5 percent using the selling section, and 5 percent giving answers that did not apply.

The respondents were asked if there was a trend toward getting away from controling expenses in terms of percent to sales and percent of this year to last year. If affirmative answers were expected, an acute case of frustration would be encountered. This was rather emphatically not the case. This is an example of a practice having become encrusted with tradition. Such a practice is not inherent with the system, but is a product of management's failure to adequately understand the system.

Of the progressive stores in the $\$ 10-20$ range, not one store recognized a trend away from the traditional retail percentages as control mechanisms. Two of the progressive stores in the $\$ 20-50$ group did foresee a trend away from these percentages. Forty percent of the over $\$ 50$ progressive stores saw a trend away from this practice.

The responses received from the non-progressive stores were even more negative. Fewer of these stores foresaw any trend away from controling expenses in terms of percent to sales and percent of this year to last year.

The respondents were asked if they felt their present classification
provided "good" expense control. As might have been expected, most answers were "yes." All of the progressive stores felt that they had "good" expense control. Only three of the non-progressive stores, all in the over $\$ 50$ category, felt that they did not have good expense control.

## F. Summary and Conclusions

This author has come to the conclusion that the information provided by several of the systems and procedures, available to retailing executives for the management decision making process, are often times misused. These misuses often result from expansions and elaborations made of these systems and procedures, and often produce results which are contrary to the goals of the decision maker.

Other systems and procedures are not used to the extent they should be, and therefore fail to supply their full potential toward the attainment of established goals.

The first group of practices to be discussed will be those that result from systems and procedures not being used to the extent they should be. The second group of practices to be discussed will be those that result from over expansions or elaborations of systems and procedures. The last group to be discussed does not result entirely from either over expansion or improper utilization of the systems concerned.

Systems and Procedures Not Being Used to the Extent They Should Be
There was a conspicuous absence of budgeting at the merchandise classification leve1. This was true for sales revenue, purchases, markdowns and shortages, and expenses. Very sound reasons exist in favor of budgeting such items by classifications. Composite figures, such as those provided by departmental budgets, are frequently misleading. It appears
quite logical that trouble spots will be more likely to be located if the figures being analyzed are composed of fewer individual items. This author believes that in many instances the results of budgeting by classifications will prove well worth the additional expense.

The practice of determining variances of certain expense figures present another instance of a tool not being utilized to the extent it should be in order for full benefit to be realized. It has been emphasized in Chapter II that budgets are only as good as the utilization that is made of them. Proper utilization can result only if actual performance figures are regularly composed with budgeted figures, and if corrective measures are taken. Several stores that budgeted expenses did not determine if actual performance figures varied from budgeted figures. Such a practice denies the possibility of maximum potential benefit. If variances are not determined, it is not as likely that their causes will be corrected.

The failure to make attempts to control expenses below the departmental level presents another instance of a tool not being sufficiently used in order to attain full benefit. As indicated earlier, composite figures such as departmental operating results are likely to be misleading and produce some oversights. Since merchandise classifications figures deal with a smaller number of items, analysis at this level should produce fewer oversights.

## Over-Expansion or Elaboration of Systems and Procedures

Two-thirds of the stores in this study go through the process of computing departmental gross profit minus direct, allocated, and prorated expenses. Though no attempt was made to determine what use is made of these figures, this author fears that they would be of little value--due
to some of the methods used to assign expenses to selling departments.
In a sense this practice is an over-expansion. This is particularly true if considerable faith is placed in the final figures. While such a figure might give some indication of a department's performance, the figure should not be accepted as an absolute indication of whether or not the department operates profitably.

The results concerning expense center accounting seems to indicate another system that has been over-expanded. The Standard Expense Center Accounting Manual recommends 71 expense centers for the largest class of stores. A large number of stores indicated that they used 250 or more expense centers. The author questions, again, whether or not the additional information obtained by having such a large number of expense centers if worth the excessive costs they produce. Not only must the question be raised concerning the value of the information, but the value that is derived from the use that is made of the information.

Practices Not Resulting Entirely from Over-Expansion or Failure to Utilize to Proper Extent

There are two other practices that should be discussed which do not result entirely from either over-expansion or failure to utilize to the maximum extent the system or procedure concerned.

One of these practices is concerned with production unit accounting and the other with expense control.

The practice of so many stores having standards of productivity established by persons with no formal training might well nullify many of the benefits of production unit accounting.

The expense control practice is related to the reliance upon traditional percentages. Many stores foresee no trend away from controlling
expenses through the traditional percent to sales and percent of this year to last year.

This practice results from the failure of operating personnel to adequately understand the tool with which they are working. As so many times proved to be the case, it is not the tool that is faulty, but the thinking of its user.

It is for the above reason that this author has purported that what is most direly needed in retailing is clear thinking and an adequate understanding of the existing systems.

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## APPENDIX

## CRITERIA UPON WHICH STORES WERE JUDGED PROGRESSIVE

Ten questions in the questionnaire were used to arrive at a progressive rating for the stores in the study. An affirmative answer indicated that the store was progressive in the area of record systems and merchandising systems. Since the purpose of the study was to furnish a basis for evaluating the potential acceptance of Merchandise Management Accounting, the rating system was weighted somewhat heavily in areas related to M.M.A. Because a store did not receive a progressive rating should not be taken as an indication that its operations were poor. The reader should bear in mind throughout the study that the questionnaires were sent only to stores judged to be the leader in its geographical area. Although use of another rating scale with a different purpose might have resulted in different stores receiving the progressive rating, this system best fit our purposes.

Each of the 10 questions had a maximum possible score of one point so that a perfect rating would total ten. Since in several of the questions few if any affirmative responses were expected, a total of six out of ten was required for the progressive rating. The determination of points is discussed below for each question.

1. Question 4. Question 4 was related to budgetary control, and was judged on a sliding scale from zero to one. Usual ratings given were zero, one-half, or one. Use of little or none of the budgetary controls
listed gave a rating of zero。 A rating of one-half was given if the store budgeted departmental revenues, expenses, and markdowns, and expenses by natural accounts and work centers. In order to receive full credit, the store had to do all that those receiving one-half did; and, in addition, the store was required to budget for at least some merchandise classification or departmental direct and indirect expenses.
2. Question 7. Question 7 determined if the stores calculated a return on investment for the departments. This was simply a yes or no answer, so a rating of one was given for an affirmative answer while a negative answer received a zero. While few affirmative replies were anticipated, it was felt that this practice indicated a very progressive state of mind.
3. Question 9. Question 9 indicated thedegree of profitability data provided by departmental records. A rating of zero was given for a response of gross profit only. An answer of gross profit minus direct expenses (controllable profit) received a rating of one-half point. An answer of gross profit minus direct and indirect expenses received full credit.
4. Question 13. Question 13 indicated whether or not the stores planned markdowns for the individual items at the time of purchase. This was another question for which few affirmative answers were expected, but again it was thought that an affirmative reply represented a progressive step. The rating was zero for no and one for yes.
5. Question 14. Question 14 showed the degree for which advertising expenditures were planned for the individual items at the time of purchase. As in Question 13, few positive responses we anticipated; but the fact that the store was making a more complete merchandising
plan for the item should be rewarded. The ratings were one for positive, zero for negative.
6. Question 15. Question 15 described current practices in the assignment of indirect costs to the individual departments. It was felt that while a few of these costs should be prorated on the basis of sales, most should be allocated on some other basis. Consequently, one-third point was given for assignment primarily by proration, two-thirds points were given if the basis for assignment was essentially equally divided while full credit was given if it was felt that the store used the correct basis in all cases. Of course, no points were given if the store failed to assign indirect costs.
7. Question 18. Question 18 indicated the degree of use of expense centers in the store's accounting systems. The ratings were zero for not using expense centers, and one point for using them. Few negative replies were expected, and only one or two were received.
8. Question 19. Question 19 noted the use of standard or predetermined costs in assigning costs to the selling departments. The ratings were again either zero or one. It was interesting to note that there was more correlation between positive answers on this question and a progressive rating than on any other question.
9. Question 25. Question 25 established use of physical production standards. If any standards were established, the store received onehalf point. Only if the standards were established by someone who had had formal training in this area did the store receive full credit. This question also had a very high correlation between affirmative answers and eventual rating as a progressive store.
10. Question 26. Question 26 discussed the uses of electronic data
processing by the stores in the study. It was felt that the specific uses were more indicative of progressiveness than was simply the fact that EDP was used. The ratings varied from zero to one. No points were given if the store failed to use any EDP. One point was given if the store used EDP for dollar inventory control, perpetual unit control, expense analysis, or purchase order analysis in addition to the more conventional uses. Only one-half point was given if the use was limited to such conventional applications as payro11, accounts payable, or accounts receivable. If the store used most of the conventional applications plus one of the newer ones, it received three-fourths of a point.

TABLE III
UTILIZATION OF PROGRESSIVE FACTORS


TABLE IV
METHODS USED TO ASSIGN INDIRECT DEPARTMENTAL COSTS

| Store Size <br> S Million <br> Volume | Buying |  |  | Receiving and <br> Occupancy |  | Marking |  | Warehousing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $5-10$ | $100 \%$ | 0 | $\%$ | $66.7 \%$ | $33.3 \%$ | $33.3 \%$ | $100 \%$ | $33.3 \%$ |  |
| $10-20$ | $87.5 \%$ | $12.5 \%$ | $25.0 \%$ | $50.0 \%$ | $25.0 \%$ | $50.0 \%$ | $25.0 \%$ | $37.5 \%$ |  |
| $20-50$ | $83.3 \%$ | $8.3 \%$ | $58.4 \%$ | $33.3 \%$ | $25.0 \%$ | $66.7 \%$ | $33.3 \%$ | $50.0 \%$ |  |
| Over 50 | $56.0 \%$ | $16.0 \%$ | $48.0 \%$ | $32.0 \%$ | $48.0 \%$ | $40.0 \%$ | $48.0 \%$ | $32.0 \%$ |  |
| Tota1 | $70.9 \%$ | $12.5 \%$ | $47.9 \%$ | $35.4 \%$ | $37.5 \%$ | $52.1 \%$ | $39.6 \%$ | $39.6 \%$ |  |


| Store Size <br> \$ Million <br> Volume | Administrative |  | Delivery |  | Workroom Costs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Allocated | Prorated | Allocated | Prorated | Allocated | Prorated |
| $5-10$ | $33.3 \%$ | $100 \%$ | $0 \%$ | $100 \%$ | $100 \%$ | $0 \%$ |
| $10-20$ | $12.5 \%$ | $75.0 \%$ | $50.0 \%$ | $37.5 \%$ | $75.0 \%$ | $12.5 \%$ |
| $20-50$ | $16.7 \%$ | $75.0 \%$ | $41.6 \%$ | $50.0 \%$ | $83.3 \%$ | $8.3 \%$ |
| Over 50 | $12.0 \%$ | $68.0 \%$ | $76.0 \%$ | $8.0 \%$ | $80.0 \%$ | $4.4 \%$ |
| Total | $14.6 \%$ | $73.0 \%$ | $58.4 \%$ | $24.2 \%$ | $81.2 \%$ | $6.3 \%$ |

TABLE V

NUMBER OF WORK CENTERS USED TO CONTROL EXPENSES
BY THE PROGRESSIVE STORES

| No. of Work Centers | No。 of Stores \$10-20 Million | No. of Stores \$20-50 Million | $\begin{gathered} \text { No. of Stores } \\ \text { Over } \$ 50 \end{gathered}$ | Total No. of Stores |
| :---: | :---: | :---: | :---: | :---: |
| 0-10 | 0 | 1 | 0 | 1 |
| 10-20 | 0 | 0 | 1 | 1 |
| 20-30 | 0 | 2 | 1 | 3 |
| 30-40 | 0 | 0 | 0 | 0 |
| 40-50 | 1 | 0 | 1 | 2 |
| 50-60 | 1 | 1 | 0 | 2 |
| 60-70 | 0 | 1 | 1 | 2 |
| 70-80 | 0 | 0 | 2 | 2 |
| 80-90 | 0 | 0 | 0 | 0 |
| 90-100 | 0 | 0 | 0 | 0 |
| 150 | 0 | 0 | 1 | 1 |
| 200 | 0 | 0 | 1 | 1 |
| 260 | 0 | 0 | 1 | 1 |

## TABLE VI

LEVELS OF PROFITABILITY COMPUTED FOR DEPARTMENTS BY PROGRESSIVE STORES

| Store Size \$Million Rev. | $\begin{aligned} & \text { Gross Profit } \\ & \text { Only } \\ & \hline \end{aligned}$ | Gross Profit Minus Direct Expenses | Gross Profit Minus Direct and Allocated Expenses | Gross Profit Minus Direct and Prorated Expenses | Gross Profit <br> Minus Direct, Allocated, and Prorated Expenses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10-20 | 100\% | $100 \%$ | $100 \%$ | $100 \%$ | 100 \% |
| 20-50 | 100\% | 85.6\% | 71.5\% | 71.5\% | 71.5\% |
| Over 50 | 100\% | $100 \%$ | 80.0\% | 70.0\% | 60.0\% |
| Total | 100\% | 94.8\% | 79.0\% | 73.8\% | 68.5\% |

## TABLE VII

PROFITABILITY LEVELS REPORTED FOR DEPARTMENTS

| $\begin{gathered} \text { Store Size } \\ \text { SMillion Rev. } \end{gathered}$ | $\begin{aligned} & \text { Gross Profit } \\ & \text { Only } \\ & \hline \end{aligned}$ | Gross Profit Minus Direct Expenses | Gross Profit Minus Direct and Allocated Expenses | Gross Profit Minus Direct and Prorated Expenses | Gross Profit <br> Minus Direct <br> Allocated, and Prorated Expenses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5-10 | 66.7\% | 66.7\% | 66.7\% | 66.7\% | $100 \%$ |
| 10-20 | 66.7\% | 77.8\% | 33.3\% | 55.1\% | 44.5\% |
| 20-50 | 50.0\% | 62.5\% | 43.7\% | 37.5\% | 56.2\% |
| Over 50 | 36.7\% | 33.3\% | 13.3\% | 13.3\% | 70.0\% |
| Total | 47.6\% | 48.3\% | 27.6\% | 29.4\% | 63.8\% |

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[^0]:    14
    Herman $F$ 。Bell and Louis C. Mascarello, Retail Merchandising Accounting (New York, 1961), p. 46.

    15
    Ibid.

[^1]:    ${ }^{22}$ The criteria for determining "progressiveness" is found in the appendix.

