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DEVELOPMENT AND USE OF THE DEMONSTRATION STORE TECHNIQUE
FOR EXTENDING OPERATIONAL EFFICIENCY RESEARCH RESULTS
IN RETAIL PRODUCE DEPARTMENTS

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Jarvis Lynn Cain, B. S., M. Sc.

The Ohio State University
1961

Approved by

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INTRODUCTION

Research conducted by the Wholesaler-Retailer Section, Agricultural Marketing Service, United States Department of Agriculture, by several land grant institutions, and by others indicates that improved methods of operating retail store produce departments can increase labor productivity and reduce costs. Extension workers, representatives of the retail food trade, and research workers have indicated that an undesirable lag exists between the discovery and development of improved operating methods and the adoption and effective utilization of them. The Extension Service has developed, in several states, training methods and techniques in marketing which have proved to be in part successful in disseminating information on these methods of increasing labor productivity and reducing costs to produce departments of specific retail food firms.

These various training methods and techniques are referred to as the demonstration store technique and have been used by extension personnel over a relatively long period of time. However, present uses of the demonstration store technique by extension workers have not
been altogether successful in disseminating information developed in demonstration stores\(^1\) to retail store personnel in the rest of the firm. In order to do a better job in retailer education, with limited extension marketing funds and personnel, it was necessary to develop and test new educational methods of disseminating the results of demonstration store studies to other stores in the firm.

Extension work with the demonstration store technique in produce operational efficiency was started in some states as early as 1946. In 1949, the first formal outline of an educational program with food retailers was developed within the Federal Extension Service. Formal educational programs for food retailers in eighteen states and Puerto Rico had completed some thirty to thirty-five formal demonstration store efforts by July 1, 1959.

Thus, considering (1) the potential value of the research results in produce operational efficiency to food retailers in the country, (2) the undesirable lag which exists between development and utilization of these results, (3) the relative newness of extension programs in

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\(^1\)Demonstration store -- a store in which formal produce operational efficiency work has been done by an extension service representative, and a written report including a study of situation and recommended changes in the produce department has been completed by July 1, 1959.
this area, compared with extension programs in general, and (4) the apparent need to find more effective methods and techniques for making widespread application of these results, a contract was established between the Federal Extension Service and the Ohio State University to study methods for extending produce operational efficiency research results to other stores in the firm using the demonstration store technique.

The study was conducted in three parts designated as A, B, and C. This report follows the work on the project from origin to completion, considering each part in the order in which it was handled during the study.

The overall objective for the project was to develop and test general educational methods and specific educational techniques relating to produce operations which have been successful in increasing efficiency and reducing costs in selected retail stores.\(^2\) In order to be more specific in attacking this problem, objectives were developed for each part which will be stated in the appropriate sections of the report.

The overall purpose of this study was to find more effective ways for extension service workers to use the

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\(^2\)The statements of the overall objective for the project and the objectives for each part of the study are taken verbatim from the contract between the Federal Extension Service and the Ohio State University.
demonstration store technique in their educational programs with retail food firms. The purpose for Part A was to study existing uses of the demonstration store technique in extension educational programs and to find their common strengths and weaknesses. The purpose for Part B was to test selected methods for the extension of recommendations to other stores in the firm using the demonstration store technique. The purpose for Part C was to develop an "improved" program for the use of the demonstration store technique in extension educational work with retail food firms.
PART A

Introduction

Part A of this study was a general inventory of the efforts by the Cooperative Extension Service toward developing the demonstration store technique in the area of produce operational efficiency in retail food firms. It was designed as a pilot study to point up the major strengths and weaknesses of existing programs in this area, and as a pilot study, it does not attempt to answer all the questions that could be raised regarding the subject.

Any existing demonstration store program\(^3\) will have been influenced by a number of factors involved in bringing it into being. For this reason, all the factors involved in the establishment and implementation of the demonstration store program were studied so that their full impact could be taken into account.

The purpose of Part A was to describe methods presently used by extension workers in the training programs for retail store managers following the application of the demonstration store technique.

\(^3\)For definition of sections of the demonstration store program in produce operational efficiency work, see Appendix I.
Methodology

Selection Procedure for Pre-Test and Test Firms

Limits of time, funds and personnel on the project made a complete census of the some thirty to thirty-five demonstration store programs in produce operational efficiency established before July 1, 1959, impractical. Thus, a selection procedure was devised to provide as much information as possible concerning these demonstration store programs in as many different situations as the above restrictions would permit.

Random selection of individual demonstration store programs from the total population of these programs was not possible, since uniform cooperation of all individual extension representatives and cooperating firms was not offered. The common strengths and weaknesses that were found in this series of cases studied were brought into focus and used in later parts of the study.

Some of the general characteristics that were used as guides in selecting the individual demonstration store programs that were studied are outlined as follows:

1. Representation in the several extension districts of the country
2. Size of firm
3. Type of ownership
4. Type of organization structure
5. Individual firm characteristics
Demonstration store programs studied were selected in three of the four extension districts in the country: eastern, north central, and southern. A list of demonstration store programs provided by the Federal Extension Service did not include firms in the western extension district. Small, medium, and large retail food firms were represented, although not necessarily one of each for each area of the country. Proprietorships, affiliated groups, and corporate chains were represented. Also, there was much variation in types of organization structure present in the group of firms that was studied. Specific methods of handling produce, such as "central pre-packaging" and "tray-pack" installations, were used as considerations for including firms in the group that was studied.

The cooperating firms and extension representatives by extension district included in the group that was studied for Part A of the project are listed here:

A. Pre-Test Group - 3 Firms

<table>
<thead>
<tr>
<th>State</th>
<th>Firm</th>
<th>Extension Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>Economy Markets</td>
<td>Eric Oesterle</td>
</tr>
<tr>
<td>Ohio</td>
<td>Co-op Supermarkets</td>
<td>Vern Vandemark</td>
</tr>
<tr>
<td>New York</td>
<td>Nu-Way Markets</td>
<td>Bruce Marion</td>
</tr>
</tbody>
</table>

B. Test Group - 9 Firms

<table>
<thead>
<tr>
<th>State (Region)</th>
<th>Firm</th>
<th>Extension Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>Central Markets</td>
<td>Arnold Haseley, Donald Marion</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>First National Stores</td>
<td>Theodore Leed</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>&quot;20th&quot; Century Stores</td>
<td>Norman Whippen</td>
</tr>
</tbody>
</table>
State - (North Central Region) Firm Extension Representative
Michigan Meijer's Super Markets Mike Wood
Illinois J. M. Jones Co. George England
Kansas Fleming's IGA Sykes Trieb

State - (Southern Region) Firm Extension Representative
North Carolina Butler-Bi-Rite John Hagen
Louisiana Winn-Dixie Reid Grigsby
Oklahoma Sipe's Food Markets Inc. Roy Brandenburg

The Economy Markets firm in Indiana was selected because it presented an example of demonstration store work accomplished by an extension representative who has enjoyed a long-time working relationship with the firm.

The Co-op Supermarkets firm in Ohio was selected because it showed a case where the firm made a sharp change of direction in its produce operation immediately following the formulation of the demonstration store plan.

The Nu-Way Markets firm in New York was selected because it presented a situation where the firm took full responsibility for the follow-up work in the demonstration store program.

The Central Markets firm in New York afforded the opportunity to study a closely knit family type of organization structure.

The First National Stores firm in Massachusetts was selected to provide opportunity to study demonstration store work with a large, well-established retail food firm.
The "20th" Century Stores firm provided a good look at a central pre-packaging operation in a small firm.

The Meijer's Supermarkets firm in Michigan presented the opportunity of studying a medium-sized organization in the north central region.

The Fleming IGA firm in Kansas gave a picture of a demonstration store program with a large voluntary organization in the north central region.

The Butler-Bi-Rite firm in North Carolina was chosen because it represented demonstration store work in a small affiliated group.

Winn-Dixie in Louisiana was selected because it is a rapidly growing, large food chain in the southern region.

Sipe's Food Markets, Inc., in Oklahoma, provided a good picture of demonstration store work in a small firm in the southern region.

In the initial descriptive part of this study, the selection procedure was definitely purposive in nature. It provided the wide range of experiences, within the limitations previously mentioned, that was needed to find the strengths and weaknesses of existing demonstration store programs in produce operational efficiency for use in later parts of the project.
Interview Procedure for Pre-Test and Test Situations

The interview procedure used in Part A involved the use of three methods.

1. Questionnaires for the extension representative and personnel in the cooperating firm were filled out in each case. These questionnaires were developed from a general set of guides that were designed to allow a thorough study of the entire demonstration store program.

2. The interviewers conversed with as many persons involved in each program as possible.

3. Observations of the demonstration store situation were recorded as notes by the interviewers.

Generally, these operations were performed in a week's time in each state by one of the three extension specialists employed on the project. An attempt was made to observe the demonstration store situation from all aspects and to get as comprehensive a view of the total effort as was possible in the time allotted.

Limitations of Data Collected.

As was mentioned previously, there were three pre-test and nine test firms studied during this part of the project. The validity of generalization of these results to all retail food firms in the country or to all retail food firms in any state is questionable. However, certain principles can be learned that could apply to most retail food firms.
Only extension demonstration store programs in produce operational efficiency have been studied in this project. It is realized that there are many other methods of carrying research results within a retail food firm. However, the basic purpose of this particular project was to improve extension programs in this area.

In addition to the problems present in the selection of the firms for study, there were several limitations that pertained to controlling variables within and surrounding the demonstration store situation.

The first of these centered around the problems of defining and measuring many of the intangible influences on the extension program from within the firm, such as the failure of the management to recognize the full potential of extension educational programs with food retailers. With measures available for use today, it was not possible to measure and control many of these factors.

Another problem was in the definition and control of outside influences on the extension program, such as changes in working conditions. These factors could not be controlled in the study situation.

Other problems were that the several extension programs in this area had not been in existence the same length of time and the extension representatives did not possess the same degree of training, skill and experience.
The physical limits of time, funds and personnel resources on the contract were serious limitations to the complete coverage of all phases of the problem.

A final limitation was that the study involved only demonstration store programs for operational efficiency in the produce department. However, there are principles to be learned here that should apply to all departments of the retail food store.

Results of Studies of Selected Demonstration Store Programs in Produce Operational Efficiency

As these demonstration store programs were broken down into five sections and studied by section, this summary of results is handled in a similar manner. In addition, several points of information regarding the entire demonstration store program are summarized and presented.

Approach

Traditionally, much of the clientele of the Agricultural Extension Service has been composed of that portion of the economy which is engaged in the production and first handling of agricultural products. However, in recent years, the extension service has been expanding its services more rapidly into new areas. Educational work with retail food firms, particularly the demonstration
store efforts in produce operational efficiency, is the new area that has been emphasized in this study.

A majority of the demonstration store programs in produce operational efficiency that were studied were the first efforts in this area by the extension representatives involved. A number of problems were experienced, of course, by the extension representatives or observed by the interviewers in the demonstration store efforts studied. In spite of this fact, most extension administrators expressed the opinion that these demonstration store programs in produce operational efficiency have contributed considerably to the total extension program in their states.

The reader will note as he reads through the entire report that much of the methodology used in Part B is a result of the strengthening of some of the existing weaknesses and the addition of the strengths in the demonstration store programs in produce operational efficiency studied to build an improved program for use in the testing work.

Usually, the first thing that an extension representative did when he went into a firm to set up a demonstration store program in produce operational efficiency was to describe the existing situation. Types of information gathered by the extension representatives interviewed in the approach section are summarized in Table 1.
TABLE 1

TYPES OF INFORMATION POSSESSED BY THE EXTENSION REPRESENTATIVE DURING THE APPROACH SECTION OF THE DEMONSTRATION STORE PROGRAM IN SELECTED RETAIL FOOD FIRMS, 1959-60

<table>
<thead>
<tr>
<th>Information</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating data</td>
<td>5</td>
</tr>
<tr>
<td>Local competitive situation</td>
<td>9</td>
</tr>
<tr>
<td>Description of firm</td>
<td>10</td>
</tr>
<tr>
<td>Nature of key personnel</td>
<td>6</td>
</tr>
<tr>
<td>Little or none</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Extension representatives' questionnaire.

Each extension representative interviewed did not collect information in all the categories pertaining to the cooperating firm. Only under the categories of local competitive situation and description of firm did a majority of the extension representatives interviewed collect information. Results of the interviews indicate that even this information was incomplete.

Many of the extension representatives said that they could have been more thorough in the collection of information regarding the cooperating firm. These statements plus several problems encountered in later sections of the demonstration store program point to a need for a more thorough description of the situation before work is started on the program.
Once the situation was described, the extension representative stated objectives to be achieved in the work with a particular firm. Both the extension representative and the personnel in the cooperating firm were requested by the interviewers to state their own objectives for this section of the demonstration store program. Each was also requested to state the objectives of the other person as he understood them. These statements of objectives were then compared in order to determine how well all persons involved in the demonstration store program understood its objectives.

In general, there was a wide variation in the accuracy with which each stated the objectives of the other. The terminology used to express these objectives was quite different, and both the extension representative and the firm personnel had difficulty in making statements of objectives at all. Many of the objectives given were so broad and general that it would have been difficult to establish one specific program to accomplish them. Many of the extension representatives interviewed felt that objectives should be stated more clearly.
Three objectives of the approach section were stated by both the extension representative and the cooperating firm personnel interviewed:

1. To get the extension representative to understand the firm and to get the firm to understand and develop confidence in the extension representative.
2. To have the cooperating firm to understand the demonstration store program.
3. To arrive at an agreement on participation in the demonstration store program by the firm and to make arrangements for continuation of the other sections of the program.

Having arrived at certain objectives, the next job was to find a method or methods for accomplishing them. A summary of the methods used during the approach section by the extension representatives is listed in Table 2.

**TABLE 2**

METHODS USED IN ALL CONTACTS DURING THE APPROACH SECTION BY EXTENSION REPRESENTATIVES STUDIED, 1959-60

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting with management of firm</td>
<td>14</td>
</tr>
<tr>
<td>Personal contact with an official of the firm</td>
<td>12</td>
</tr>
<tr>
<td>Telephone conversation</td>
<td>6</td>
</tr>
<tr>
<td>Letters</td>
<td>3</td>
</tr>
<tr>
<td>Contact made by some third party</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

*Source: Extension representatives' questionnaire.*

Analysis of this table showed that the most common methods were the meeting with the management of the firm
and personal contact with an official of the firm. The other methods, although not used as often, seemed to serve a definite purpose in helping to accomplish the stated objectives.

The number of contacts made during the approach section in each demonstration store situation varied from few to many. The number of contacts seemed to be generally determined by the needs of the specific situation. Fewer contacts for smaller firms and more contacts for the larger firms seemed to be the pattern.

The more or less formal presentation of the demonstration store program was usually made in a meeting with the management of the firm or a personal contact with an official of the firm. There was a wide range in subject matter taken up at these meetings or personal contacts in the several states. The subject matter ranged from a discussion of equipment and work methods to a complete presentation of a demonstration store program in operational efficiency for the entire firm.

One of the main criticisms that the extension representative had of their own programs was that they were not thorough enough in explaining all the ramifications of the demonstration store program in produce operational efficiency to the management of the cooperating firm. Some of the extension representatives interviewed said that the
management of the cooperating firms did not realize in the beginning the consequences of full participation in the demonstration store program.

Five of the extension representatives interviewed said that they used figures to show the potential sales increases or cost reductions to be derived from the demonstration store program in their program presentation. Four said that they did not.¹

Specific persons were involved in the approach section of the several demonstration store programs studied:²

1. The decision-maker -- the person who makes the decisions in the cooperating firm
2. The driving force -- the person or persons who get the job done in the cooperating firm
3. The liaison man -- the person chosen by the decision-maker to work with the extension representative in the program
4. The extension representative -- the representative of the extension service working with the cooperating firm in the demonstration store program

Extension personnel involved in this section of the program ranged from one to over fifteen. Some of the extension representatives felt that there might have been too many extension people involved in this section of the program.

¹The pre-test personnel were not asked this question.
²These titles were used throughout all sections of the demonstration store program in produce operational efficiency.
The extension representative generally worked with the same people in the cooperating firm during the entire approach section. However, some felt that the extension representative may not have been working with the "right" people. Many comments were made by the extension representatives interviewed expressing the importance of finding out who the decision-maker, the driving force, and all the influences on the decision-maker were as quickly as possible in the program and concentrating their efforts on these people.

In every case, some one in the firm was directly or indirectly designated to work with the extension representative from the start of the demonstration store program. However, the results of the interviews show that the choice of this liaison man did not always seem conducive to the optimum development of a demonstration store program. In a few cases, the liaison man seemed to lack the interest, the authority to make appropriate decisions, or the ability to comprehend the significance of the contribution that the demonstration store program in produce operational efficiency could make to the cooperating firm. Several comments were made by extension representatives interviewed regarding the care that should be taken in the selection of the liaison man for optimum effectiveness of the work in this area.
The attitudes of both the extension representative and the people in the cooperating firm, in general, seemed to be conducive to the development of a "successful" demonstration store program. The personnel in the cooperating firm were usually receptive to the program with little reserve. The extension representatives seemed generally optimistic and looked forward to the favorable development of the demonstration store program.

Once the decision was made in favor of the establishment of a demonstration store program in the cooperating firm, the store was selected in which the demonstration was to be made. The basis of choice of the store selected by the managements varied. Some chose a "problem" store; others chose the "poorest" store; and still others chose the "best" store in the firm.

These bases of selection of a potential demonstration store did not always seem to result in a situation conducive to the development of a "successful" demonstration store program. When the demonstration store was dissimilar to the rest of the stores in the firm, there were many adaptations that had to be made in the demonstration store recommendations before they were applicable to other stores in the firm. Also, when the "best" store in the firm was selected, some resentment seemed to develop if it was criticized by the extension representative in his
report to the management of the cooperating firm. On the other hand, the firms sometimes had the attitude that it was easy to find fault with their poorer stores.

Several comments were made by extension representatives interviewed that since the object of putting the demonstration in a store was to encourage extension of results to other stores in the firm, it would be mutually advantageous to put the demonstration in a store that was somewhat typical of the entire operation.

In terms of formal evaluation, little seemed to have been done during the approach section by the extension representatives interviewed. There was some informal evaluation done; but in most cases, there was not any of either kind.

Study of Situation and Formulation of Recommendations

The majority of the information collected at the beginning of this section was limited to certain benchmark or operating data regarding the cooperating firm. Several of the extension representatives interviewed commented that these benchmark data could have been designed, however, to give a more complete picture of the operation of the produce department in the demonstration store and in the entire firm. They often expressed the opinion that a much better job could be done in the collection of these
bench mark data in order to allow for more accurate evaluation of the demonstration store program in produce operational efficiency in the cooperating firm and in helping to extend the program to other firms.

The suggestion was made by several of the extension representatives interviewed that much valuable information regarding the operation of the produce department in the cooperating firm and ways for improving it could be gained by interviewing the produce personnel at all levels and asking them for suggestions. This practice was not too common in the cases studied, but its use is increasing as the extension representatives realize the value of this analytical tool.

A majority of the extension representatives interviewed said that they used only regular extension sources of information in writing the report to management. In most cases, there was a pronounced dependence for subject matter on the Federal Extension Service.

As in the previous section, statements of objectives made by both the extension representative and the cooperating firm personnel were compared. A thorough analysis of these statements indicated that a cumulative effect can build up from the misunderstanding of objectives from section to section. The problems of statement of objectives in different terms and extreme generality mentioned earlier applied also in this section.
In several cases, unnecessary friction seemed to have been created in the cooperating firm because the people in the lower eschelons of the firm were not informed as to who the extension representative was, why he was working with the firm, and what the plans were for the demonstration store program. In cases where the lower eschelon personnel in the cooperating firm were informed relative to the extension program, the work progressed with "comparative smoothness."

Several of the extension representatives interviewed expressed the opinion that they were considered as an outside "expert" by some of the firm personnel and were not definitely endorsed by the top management of the cooperating firm. This situation tended to decrease the status of the extension representative among the store personnel in the cooperating firm in these cases.

All the extension representatives said that they made recommendations in line with the goals and objectives of the cooperating firm as they understood them. As has been pointed out already, however, they did not always have a clear understanding of the goals and objectives of the firm.

Most of the statements of objectives given for this section by both the extension representatives and the cooperating firm personnel centered around the study of
situation. Both knew that a study with ensuing report would be done. It seems that the main problem here was that the personnel in the cooperating firm did not fully realize that the study in this demonstration store was only a part of an overall educational program for the entire firm.

The methods used in making the study of situation and formulation of recommendations in the cases studied are listed in Table 3.

**TABLE 3**

**METHODS USED IN THE STUDY OF SITUATION AND FORMULATION OF RECOMMENDATIONS SECTION BY THE EXTENSION REPRESENTATIVES STUDIED, 1959-60**

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer traffic flows</td>
<td>12</td>
</tr>
<tr>
<td>Simple observation of situation</td>
<td>12</td>
</tr>
<tr>
<td>Layout of backroom and display area</td>
<td>12</td>
</tr>
<tr>
<td>Formulation of recommendations</td>
<td>12</td>
</tr>
<tr>
<td>Preparation of formal report</td>
<td>12</td>
</tr>
<tr>
<td>Study of work methods</td>
<td>11</td>
</tr>
<tr>
<td>Study of management problems</td>
<td>9</td>
</tr>
<tr>
<td>Use of USDA Checklist</td>
<td>8</td>
</tr>
<tr>
<td>Meeting with firm personnel</td>
<td>4</td>
</tr>
<tr>
<td>Meeting with extension personnel</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Extension representatives' questionnaire.
With the exception of the two categories on meetings, the extension representatives interviewed used the rest of the methods listed in Table 3 with uniformity in making the study of situation and in formulating the recommendations. However, differences were apparent in the way the methods were used and in the way the work was organized.

The first difference was in the amount of time spent studying in the demonstration store during this section. This ranged from three days to two weeks, with the most common time being one week. Because the customer traffic flow studies took so much time, several of the extension representatives remarked that they had to spend "excessive" time in the store.

Certain problems were encountered in several cases regarding the timing of the study period. In these cases, either there was some sort of holiday during the period or one or more of the key personnel in the firm were absent from their regular job. These conditions tended to distort the "normal" operation of the store under study and made it difficult for the extension representative to do a good job.

In several of the cases studied, there was a tendency exhibited toward moving in and getting the study made before an organized procedure was established for
accomplishing the job. This is partially attributable to the lack of experience of many of the extension representatives who did the work. However, in cases where careful plans were laid before the study work was started, the results seemed to more than justify the extra effort spent in planning the work systematically.

It was observed in the study of these cases that a general dependence was placed by several of the extension representatives on the Federal Extension Service staff for leadership in this section of the demonstration store program. Apparently, it was necessary to do this in some cases at this point because of the lack of experience of the extension representatives. This procedure seemed well accepted by the cooperating firm and was useful in training the extension representative in the demonstration store technique. Programs in which the extension representative assumed a strong leadership role from the start, in addition to the assistance provided by the Federal Extension office, seemed to be developing more rapidly.

The reports used in the cases studied followed similar arrangements: the statement of a problem was followed by the recommended solution. The general organization of the reports was to follow the flow of merchandise from point of receipt at the store to ultimate
sale. The majority of the reports did not include illustrations in them. There were comments from many of the extension representatives interviewed that illustrations should be used in the reports.

Five of the extension representatives said they used actual cost of changes and estimated savings figures in the report to management. Four said they did not.\(^6\) In some cases, it would seem that some of the types of benchmark data collected at the beginning of this section were confused with budgeted costs and savings.

Six of the extension representatives interviewed said that the arrangement of recommendations in a report did affect their acceptance by management. However, when asked if they made an effort to arrange the recommendations in the report to increase efficiency of installation of recommendations, four said they did and three said that they did not.

Several comments were made by extension representatives interviewed regarding the summarization of the high points of a report to be presented to the management of the cooperating firm. It was thought that this would be particularly effective in working with large retail food firms.

\(^6\)In the pre-test cases, this question was not asked.
In a number of situations, the extension representatives made oral recommendations to store personnel during the study period before the formal report to management was made. The undesirable situations of placing in jeopardy an employee's confidence in his superiors and breaking the lines of communication that could result from this practice could have been eliminated by making recommendations only in the formal report to the management. This would have allowed the firm to use its normal channels of communication to implement the recommendations.

The personnel involved in this section of the study from the extension service were the extension representative and his co-workers, subject-matter personnel and clerical help. From the cooperating firm, all the produce personnel in the demonstration store and the produce management above the store level were involved. Seldom were the firm personnel asked for their suggestions to be used in the report, and in fewer cases was the designated representative included in the formulation of the report.

The attitude of the personnel involved in this section of the demonstration store program was very good in most cases. The extension representatives showed a general confidence in the value of their contributions to the cooperating firm. The firm personnel were generally
receptive and showed only the hesitancy and reservation that could be expected in the case of such a thorough study.

There was very little formal evaluation done at the end of this section. The majority of extension representatives did not evaluate at this point in the demonstration store program. One comment made by an extension representative was "when things are going well, I don't worry too much. I evaluate when trouble comes up."

Presentation of Recommendations

Several of the extension representatives interviewed expressed a deep concern regarding the time lag that was present from the completion of the study period to the formal presentation of recommendations to the management of the cooperating firm. This period extended over eight months in one extreme case, and one or two months was not an uncommon length of time for the firm to have to wait for the formal written report.

In some of these cases, an oral report of findings and recommendations had been made to management at the close of the study period. This practice seemed to be well accepted, but it did not provide the firm with recorded recommendations to which to refer in making any decisions regarding changes in the demonstration store. The oral report seemed to raise questions in the minds of
management personnel regarding the existing setup in the demonstration store and to stimulate the thinking of management regarding ways of improving the operation. However, it was apparent that in the majority of these cases where an oral report was given first, little if anything was done in the demonstration store until a considerable time after the formal written report had been presented to management.

The extension representatives interviewed gained little if any new information in this section. The acquisition of new information did not seem to be as pressing an issue here as the reporting of the information already gathered.

The statements of objectives for this section of the demonstration store program by both the extension representatives and the cooperating firm personnel seemed, in general, to coincide. The issue appeared to be very simple: the extension representative would present the report and the management of the cooperating firm would evaluate it and make decisions regarding the relative merits of the recommendations contained therein.

At this point, the effect of the build-up of communication problems can become critical. Misunderstandings and reservations carried over from previous sections of the program can create problems in communication.
Apparently most of the firm personnel interviewed did not seem to fully realize the fact that the decision for making changes in the demonstration store would affect all the stores in the firm. They seemed to have missed the point that the whole idea of setting up this demonstration was to extend the recommendations made in the demonstration store to other stores in the firm as far as they were applicable.

The methods used in presenting the report to the management are summarized in Table 4.

**TABLE 4**

**METHODS USED IN ALL CONTACTS DURING THE PRESENTATION OF RECOMMENDATIONS SECTION BY EXTENSION REPRESENTATIVES STUDIED, 1959-60**

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting with management of firm</td>
<td>12</td>
</tr>
<tr>
<td>Personal contact with an official of firm</td>
<td>3</td>
</tr>
<tr>
<td>Sent by mail</td>
<td>2</td>
</tr>
<tr>
<td>Delivered by some third party</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Extension representatives' questionnaire.

A meeting with management was by far the most common method used in the presentation of the recommendations to the management of the cooperating firm. The subject matter discussed in these meetings was dictated by the conditions
found in the various firm situations. A variety of visuals were used and the most effective arrangement for the presentation of the results seemed to break up the discussion of the report with visuals and comments from all those present at the meeting.

Several comments were made by the extension representatives interviewed to the effect that the presentation of recommendations should be as short and precise as possible. Reasons they gave were that most of the firm personnel had to fit this meeting into a very busy schedule and that the human mind can only absorb so much material at any one time.

A number of the extension representatives interviewed recommended that the management personnel of the cooperating firm be taken from their offices to some point where privacy could be assured for the presentation of recommendations. They said this would minimize interruptions during the meeting and enhance its effectiveness.

Personnel involved in this section of the program from the extension service generally included all the extension personnel who participated in the study. The personnel from the cooperating firm who were included in this section of the program in the more successful cases were the liaison man and the decision-maker.
In many cases, problems were experienced when the decision-maker and those who influence him were not in attendance at the presentation meeting. When the results of the study were reported to men in the management of the cooperating firm who accepted the ideas but had no authority to do anything about them, the effectiveness of the presentation by the extension representative seemed to be limited.

The attitudes of both the extension representatives and the firm personnel were "wholesome." The extension representatives were generally confident that they had done a thorough job of analysis and had made significant recommendations that could be of value to the cooperating firm. The attitude of the firm personnel seemed to be a mixture of interest in what had been done, amazement at the depth and breadth of the study, amazement that certain practices could be going on without their knowledge, and a certain amount of reservation -- especially by the middle management personnel.

All the extension representatives interviewed indicated that the reception of the recommendations by the firm personnel was very good. The firm personnel interviewed indicated that their first impressions of the report were favorable.
A problem that was observed at this point in several cases was a hesitancy on the part of the cooperating firm to make a definite decision regarding the installation of the recommended changes in the demonstration stores. In these cases, considerable time elapsed between presentation of the recommendations and decisions to make recommended changes. Apparently, this was due to a lack of understanding by firm personnel as to the scope and depth of the demonstration store program. In some cases, the lack of experience of some of the extension representatives may have contributed to the interval between the presentation of recommendations and the decision to continue with the program.

Evaluation at the end of this section of the demonstration store program seemed a little more definite than in the previous sections. The extension representatives interviewed seemed at this point to have a greater realization of the importance of evaluation.

Follow-Up

The starting point for this section of the demonstration store program was the time when the decision was made to go ahead and put some or all of the recommendations into the demonstration store. Generally, there was a considerable delay in making this decision. This
contributed to a slow beginning of the follow-up work in some cases.

In addition, the decisions to make the individual changes in each demonstration store were not made all at the same time, but drawn out over a period of time. Since many of the demonstration store recommendations were designed to operate as a unit, the maximum benefit could not be gained by the firm until the entire unit was complete. If the full scope of the demonstration store program had been understood by the firm personnel during the approach section of the program, it perhaps would have helped to eliminate this condition.

A third fact adding to the problem was that, in most cases, positive direction was not given to the follow-up work by either the extension representatives or any one in the firm. Each seemed to be waiting for the other to take the leadership, and so considerable time elapsed before anything was done toward the implementation of any of the recommended changes in the demonstration store. A clear definition of responsibilities in the approach section of the program perhaps would have helped to remedy this situation.

Even when the actual work has begun on the changes, apparently much delay was experienced in getting them carried through to completion. The formulation of an
overall implementation plan jointly by the extension representative and the liaison man immediately following the decision to go ahead and put some or all of the recommendations into the demonstration store likely could have done much to increase efficiency and effectiveness of the work.

There were few different types of information collected during this section of the demonstration store program by the extension representatives interviewed. However, much of the information collected was in more detail and covered a longer period of time than similar types of data collected at the beginning of the program.

The comparison of statements of objectives during this section indicated that understanding was generally not clear. There was general understanding of the fact that recommended changes would be made in the demonstration store. However, neither the extension representative nor the management of the cooperating firm seemed to be sure how many recommendations would be installed. Nor did they seem to understand who was responsible for making the changes, in what order they would be made, where to get desired equipment, how to install and use it after they had it, or what the general picture of the changed department would look like.

The methods used in carrying out the follow-up section in the cases studied are summarized in Table 5.
TABLE 5

METHODS USED IN ALL CONTACTS DURING THE FOLLOW-UP SECTION
BY EXTENSION REPRESENTATIVES STUDIED, 1959-60

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal contact with an official of the firm</td>
<td>19</td>
</tr>
<tr>
<td>Meeting with management of firm</td>
<td>10</td>
</tr>
<tr>
<td>Telephone conversation</td>
<td>6</td>
</tr>
<tr>
<td>Letters</td>
<td>6</td>
</tr>
<tr>
<td>Contact made by some third party</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Extension representatives' questionnaire.

The methods and number of contacts that were used varied widely and generally depended on the specific situation. When a check was made on the progress or arrangements were made to implement a recommended change, it was done by telephone, letter, or personal contact. When some training was to be done or equipment to be installed, there was a meeting or a personal contact.

One of the major weaknesses in the follow-up work seemed to be in the training that was given the personnel who would have to work with these changes. Formal training meetings were held in only a few cases, and in the rest of the cases, a limited amount of on-the-job training was done. These formal training meetings were considered to be effective by the extension representatives and firm personnel involved in them.
In a majority of the cases, a large portion of the recommendations made for the demonstration store were established in it. Some of these recommendations were revised in the installation; however, the main idea of the recommendation was carried out in the demonstration store.

In most of the cases, the liaison man played a small part in the follow-up work. Most of the effort apparently was left to the extension representation to perform with whatever cooperation he could get from personnel in the firm.

The attitude during the follow-up section of the extension representatives interviewed was one of cautious optimism and playing the situation by ear. Since the entire program was new for most of them, they seemed a little hesitant to make any sudden moves for fear of upsetting it. The firm personnel were generally receptive, but some offered considerable resistance to the program until they discovered its value to them.

The evaluation in this section of the program was similar to that for the previous sections. There was little, if any, formal evaluation and only a small amount of informal evaluation.
Extension of Recommendations to Other Stores in the Firm

It will be recalled that the original premise on which this study was based was that the main stumbling block in the effective utilization of the demonstration store technique in the dissemination of produce operational efficiency research results to other stores in the firm was in the methods used in the extension of these results to other stores in the firm. While the results of this section of the demonstration store program are very important, it is readily apparent that many problems existing in the first four sections of the demonstration store program may do much to hinder its successful completion.

The results of this appraisal of the first four sections of the demonstration store programs under study serve to point up the need for consideration of all sections of the demonstration store program in the search for improvements.

Seven of the extension representatives interviewed reported that the initiative for the extension of recommendations from the demonstration store to other stores in the firm came from the firm, and two said they provided the initiative. This reversed the situation in the approach section where the majority of the initiative was supplied by the extension representative.
Two of the major types of information needed in this section of the demonstration store program were a description of other stores in the firm and an understanding of how many of the demonstration store recommendations would apply to them. In the cases where this type of information was collected in the earlier stages of the demonstration store program, the extension representative did not have to stop at this point to collect the data. Also, throughout the earlier sections of the program, he could use the information in planning the extension of the demonstration store recommendations to other stores in the firm.

The comparison of statements of objectives for this section by the extension representatives and the firm personnel indicated that they were either very close together or very far apart. In a few of the cases studied, the extension representative and the cooperating firm seemed to understand their mutual responsibilities well. In the rest of the cases, there was considerable uncertainty regarding the acceptance of responsibility by each for the completion of the demonstration store program.

Some possible reasons for this condition were --

1. The cumulation of misunderstandings from other sections of the program
2. Lack of a well-organized program for extension of recommendations to other stores in the firm
3. Poor communications within the firm and between the extension representative and the cooperating firm
Although there was considerable variation of the details of implementing the program, the methods used in this section of the program resolved themselves into two general categories:

1. Someone in the cooperating firm took leadership in the program, or
2. The extension representative took leadership in the program.

However, only a small proportion of the demonstration store recommendations was carried to other stores in the firm by either method. As has been stated previously, the major purpose of this study is to find ways to remedy this situation.

The personnel involved in this section of the program from the extension service were the extension representative, his co-workers, and some subject matter personnel. From the cooperating firm, there was the decision-maker and those who influence him operating in an administrative role and the driving force and the liaison man operating in a role of getting the job done. Of course, all those firm personnel who participated in the training program during this section were included.

The attitudes of the personnel on both sides were generally favorable. Both sides were entering into a new and untried situation and naturally exhibited some hesitancy. But, there was also a degree of confidence of
success present that seemed to extend a favorable influence in the majority of situations.

Most of the extension representatives interviewed said that the programs had not been in operation long enough to make accurate evaluation possible. The tendency not to evaluate formally, which was prevalent in previous sections of the program, seemed to be present here as well.

In this type of study, it will not be possible to answer all the questions that have been raised in this summary of results. However, later parts of this study will undertake to present guideposts to future analysis, planning and efforts toward making improvements in an effective utilization of the demonstration store technique in the dissemination of produce operational efficiency research results in retail food firms.

Results of General Questions Pertaining to the Entire Demonstration Store Program in Produce Operational Efficiency

This section will cover the results from some miscellaneous questions that do not apply directly to any particular section of the demonstration store program.

Any attempt to summarize the training and experience of the extension representatives interviewed presents a difficult task. Almost all types of academic training at the level of the Bachelor's, Master's, and
Doctor of Philosophy degrees were in evidence, as well as a wide variation in practical experiences. However, as has been stated previously, a majority of the extension representatives had not used the demonstration store technique before the cases that were studied.

Since benchmarks for training and experience of extension representatives in this area of work have not been set, evaluation is difficult. As work in this area progresses, benchmarks may become clearer.

The question of whether or not the extension representatives possessed the proper interest in the field can be resolved by assuming that they did or would not be working in the area. However, in several cases, demands were made on the extension representative's time from other subject matter areas that limited the effort expanded on the demonstration store program in produce operational efficiency.

An attempt was made to study the administrative climate in which each of the extension representatives interviewed operated. Since the programs in this area are relatively new in terms of extension programs, many adjustments had to be made to move into the area of working with marketing firms in general and specifically in retail food firms with the demonstration store technique. The speed and ease with which these adjustments were made
varied considerably in the several situations. However, the majority of the extension representatives interviewed seemed to be moving forward in an administrative climate that is conducive to the successful use of the demonstration store program in produce operational efficiency.

In a majority of the cases studied, the cooperating firm did not use any source of information and guidance in produce operational efficiency matters other than the extension service during the period of the demonstration store program. However, in several cases, other sources of information and guidance in this area were available to the cooperating firm and in a few of these cases, they were used by the firm.

A large majority of the extension representatives and the firm personnel interviewed said that the efforts during each section of the demonstration store program were successful. Also, a limited amount of bench mark data is available from the cases studied, which tends to indicate that the recommendations installed in the cooperating firms have generally produced desirable results.

The key produce personnel of the cooperating firm generally gave an accurate picture of the role that they played in the firm. However, there was generally little resemblance between their description of their roles and
the description of their roles laid out in a formal organization chart in the cases where one was available for comparison.

Some of the extension representatives interviewed expressed concern regarding extension's lack of experience in working with large, complex retail food organizations. Also, there was a general tendency for the work with larger retail food firms to take much longer and become much more involved than in the cases where the cooperating firm was a relatively small one.

One factor that could have had an influence on the demonstration store program in produce operational efficiency was the personality of the extension representative. It would have been impossible to prove this in the cases studied without an elaborate set of tests that would have been a study in themselves. However, when essentially the same methods and techniques were used in two situations with a wide variation in the degrees of success attained, a strong case could be built up that the personality of the extension representative had its effect on the difference.

Throughout the summary of results of the five sections of the program, several references have been made to the communications within the firm and between the extension representative and the cooperating firm. The
statements regarding the many misunderstandings that developed could lead to the conclusion that efforts to improve the communication in both cases would have been mutually beneficial.

In the few cases a training program existed in the cooperating firm before it started the demonstration store program in produce operation efficiency. However, generally these training programs were not utilized to their fullest extent to supplement or complement the extension program.
PART B

Introduction

Part B of this study was designed as a testing ground for many of the observations made in Part A. Based upon the results of the twelve case studies in Part A and the advice and counsel of the personnel working on the contract, two methods for extending produce operational efficiency research results to other stores in the firm using the demonstration store technique were developed, tested in one chain and one voluntary retail food firm situation each, and the results were evaluated.¹

As was pointed out in Part A, the development of the demonstration store program can have a considerable effect on the success of later sections of the program. For this reason, the entire demonstration store program was analyzed in the test situations.

The objective of Part B was to develop, test, and analyze selected methods for extending produce operational efficiency research results to other stores in the firm

¹A description of these methods is found in Appendix V.
utilizing the demonstration store technique in selected retail food firms.

Methodology

The twelve case studies in Part A have shown that the development and implementation of the first four sections of the demonstration store program can have a considerable effect on the success of the fifth section of the program. With this as a premise, a Uniform Procedure for the Application of the First Four Sections of the Demonstration Store Program in the Test Situations was developed.² This uniform procedure combined the best of the thinking from the results of Part A and was to be used as a guide for the development of the first four sections of the test programs. This would have given the test programs a more or less common background and development coming into the fifth section.

Certain conditions made it necessary to deviate somewhat from this uniform procedure in the test situations. These deviations have been recorded and their effect on the program will be assessed in the results section.

²A copy of this document is included in Appendix III.
After the uniform procedure was developed, a description of desired test situations was drawn up.3

The next problem was to develop the methods to be tested in these situations.4 There are many methods that can be used in the extension of produce operational efficiency research results to other stores in the firm using the demonstration store technique. However, limitations of time, funds, and personnel resources on the contract made it necessary to restrict the testing to the two most common methods as they were found in Part A.

The four test firms were selected under the time pressures of the contract and the need for complete cooperation by the firm which limited the field considerably. However, work was started on the test programs, and the test methods A and B were applied in the appropriate test firms.

The results of the four test demonstration store programs were evaluated in part by the author and in part by Dr. Robert Dimit, Leader of Extension Research, the Ohio State University and the findings were summarized.

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3 A copy of this document is included in Appendix IV.
4 A copy of this document is included in Appendix V.
Description of Test Firms

Firm Number 1: This firm is a five-store chain with an annual sales volume of 7 million dollars, operating in the northwestern section of Ohio. Method A was used in this firm.

Firm Number 2: This firm is a 55-store wholesale sponsored voluntary group with sales of about 60 million dollars a year operating in the northwestern section of Ohio. Method A was used in this firm.

Firm Number 3: This firm is an 86-store chain with an annual sales volume of 105 million dollars operating in the northeastern section of Ohio. Method B was used in this firm.

Firm Number 4: This firm is a 75-store wholesale sponsored voluntary with an annual sales volume of 50 million dollars operating in central Ohio. Method B was used in this firm.

Results

The results of Part B will be presented in several segments. The first will discuss the deviations from the uniform procedure and their effect on the test methods. The second will present the results in the fifth section of the demonstration store programs in the test situation. The third will present Dr. Dimit's evaluation of the test
situations. The final segment will be an overall evaluation and conclusion on the test situations by the author.

Deviations from Uniform Procedure and Their Effect on the Test Situations

The reader is referred to Appendix IV for the full content of the Uniform Procedure for the Application of the First Four Sections of the Demonstration Store Program to the Test Situations. The emphasis here will be on the deviations from the uniform procedure that occurred in the test situations. Also comments will be made regarding the possible effects of these deviations on the success of the test methods.

Deviations in Method A firms

Approach Section

1. Lack of information about the firm
2. Decision-maker not brought in early in program
3. Presentation of demonstration store program did not follow instructions
4. Arrangements with liaison man hazy
5. Statement of mutual responsibilities not used
6. Extension representative not involved in selection of demonstration store
7. Clear understanding between parties not developed
8. Mutual confidence not present
9. Little or no evaluation
Study of Situation and Formulation of Recommendations Section

1. Recommendations too wordy, meaning not clear
2. Very limited benchmark data
3. Did not make up a schedule of activities for the week
4. Did not get suggestions from employees
5. Little emphasis on management in study
6. Liaison man was not involved in the preparation of the report
7. Mutual confidence not present
8. Study week was not a "normal" week in one case
9. The program was not explained to the store people in one case
10. Traffic flows were done in the total store in one case
11. A firm date for presentation of recommendations was not set after the study in one case
12. Little or no evaluation

Presentation of Recommendations Section

1. Liaison man did not set the stage for the report
2. Arrangements for the first follow-up meeting were not made
3. Little or no evaluation
4. Had trouble scheduling presentation meeting in one case
5. Decision-maker did not attend the meeting in one case and firm liaison man did not attend the meeting in the other

Follow-Up Section

1. Implementation report not prepared
2. No formal training program, only very limited on-the-job training
3. Extension representative was not involved in the changes in the demonstration store until after they were made
4. The liaison man was not close to the program
5. Clear understanding not present
6. Mutual confidence not present
7. Changed liaison man in the middle of the program in one case
8. Only one man in the wholesale company knew about the program
Deviations in Method B Firms

Approach Section
1. Lack of information about the firm
2. Results of the demonstration store programs were not used in the initial presentation meeting
3. Little or no evaluation
4. The liaison man was not very close to the program in one case

Study of Situation and Formulation of Recommendations Section
1. Recommendations too wordy, meaning not clear
2. Very limited bench mark data
3. Did not make up a schedule of activities for the week
4. Little emphasis on management in study
5. Little or no evaluation
6. Liaison man not in on report formulation in one case
7. Did not get suggestions from employees

Presentation of Recommendations Section
1. Liaison man did not set the stage for the report
2. Liaison man not at meeting in one case
3. Firm thought presentation was too wordy in one case

Follow-Up Section
1. Implementation report not prepared
2. No formal training program, only very limited on-the-job training
3. Little or no evaluation
4. Owner took initiative on changes in one case
5. Liaison man from wholesale company had little to do with the follow-up

Such a formidable listing of deviations from the uniform procedure could lead to the impression that none of the work in these cases was worthwhile. A thorough study of the uniform procedure will show, however, that
this listing contains only a small portion of the many items that were to be performed in the several sections of the demonstration store programs. This listing has been made to note the deviations from the uniform procedure so that the effects of these deviations upon the performance of the test methods A and B could be studied. The analysis of the effect of the deviations from the uniform procedure on the performance of the test methods A and B was done in an attempt to find ways of improving this part of the demonstration store program and not to cast a negative light on the work that was done in the test firms.

It is interesting to observe that the test method A firms were started in their programs in January of 1960 and the two method B firms were started in April of 1960. A study of the number of deviations from the uniform procedure shows that there are considerably fewer in the method B firms. It is quite possible that the extension representatives who worked in the test situations were not in complete agreement with the uniform procedure as it was developed. Thus, in the method A firms, they did not follow it too closely. However, as they started to work in the method B firms, they began to realize the value of uniform procedure and followed it more closely. Not only were the personnel in the test firms learning
during the programs, but also the extension representatives were learning the value of new and improved methods of working with retail food firms.

Further analysis of the deviations from the uniform procedure shows that not only was the uniform procedure deviations from, but also the deviation was not consistent from case to case. Each of the four test situations has had a different development and hence will have a different effect on the test method.

Another facet of this situation was that during the early phases of the work with the method A firms, the thoughts on the uniform procedure were not entirely crystallized. This meant that added to the learning process the extension representatives in the test situations had to cope with "getting the bugs" out of some of the new ideas in the uniform procedure. However, both of these processes have done much to strengthen the uniform procedure.

A fourth factor that must be considered in this context was that after the initial sections of the demonstration store program in the test firms were completed, another extension representative became involved with the test firms. This extension representative was involved largely with follow-up work in the test firms and did what little training that was done in the firms. In two of the
four cases, one method A firm and one method B firm, this extension representative has exerted a strong positive influence on the program. In the other two firms, he has exerted a positive influence, but it was not nearly as pronounced.

Aside from the many mechanical omissions in the following of the uniform procedure that occurred during the first four sections of the demonstration store programs in the test situations, one subject matter omission was quite in evidence. There was only a very little on-the-job training done in any of the four firms. Historically, training programs in the produce department of retail food stores have been very limited. But, to come along with an educational program to bring research results to a retail food firm and not train the personnel in the stores in the proper use of these research results was contrary to the purpose of the program.

In summary, the uniform procedure for the application of the first four sections of the demonstration store program in the test firms was used in varying degrees in each of the four test situations. The four test firms did not have a common basis of development of the program. How much different the basis of development was in each case is impossible to say. Differences in use of the uniform procedure is one of the factors that will
affect the results of the fifth section of the demonstration store programs in the test situations. However, in the present state of development of the programs, this factor could emerge as one of the controlling factors in the relative success of the two test methods. This will be discussed further in the summary section.

Extension of Results to Other Stores in the Firm in the Test Situations

In terms of actual recommendations carried from the demonstration store to other stores in the firm in the test situations, the following evidence was collected during the evaluation period, as shown in Table 6.

**TABLE 6**

**IMPLEMENTATION OF RECOMMENDATIONS IN THE DEMONSTRATION STORE AND THE OTHER STORES IN THE FIRM, TEST SITUATIONS, OHIO, 1961**

<table>
<thead>
<tr>
<th>Test Firm</th>
<th>Some action taken on recommendation in demonstration store</th>
<th>Some action taken on recommendation in other stores in the firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm #1</td>
<td>68.8% of recommendations</td>
<td>0</td>
</tr>
<tr>
<td>Firm #2</td>
<td>37.0</td>
<td>&quot;</td>
</tr>
<tr>
<td>Firm #3</td>
<td>63.3</td>
<td>&quot;</td>
</tr>
<tr>
<td>Firm #4</td>
<td>50.0</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

Source: Observations during evaluation period.
This table shows that as of the date of evaluation in firms 1 and 2, the method A firms, there was some considerable success in getting the recommendations into the demonstration store but no success in getting the recommendations into the other stores in the firm. Firm 3 was the only firm to exhibit any extension of results but only to a small portion of the total number of the stores in the firm. The other method B firm has no extension of recommendations to other stores in the firm.

Attempts were made to collect benchmark data on store operations in the test firms, but the results were very spotty and inconclusive. Even with the very limited amount of benchmark data present, it was impossible to isolate the effect of the extension program from the other factors that affect the performance of the firms.

The length of duration of the demonstration store programs in the test situations is presented in Table 7.

Table 7 points to a variation in program duration of from eleven to fourteen months which would seem like a long time to get an individual recommendation adopted in a retail food firm. However, recommendations are made on all phases of the produce department and are designed to operate as a system.\(^5\) Often this recommended system

\(^5\) Areas covered in the recommendations include work methods, layout, quality control, personnel and management.
challenges basic concepts that have been in use for one or two generations in the firm. The acceptance of the principles behind the recommended system should take longer than to accept any one recommendation. In addition, the installation of the recommended system can involve considerable sums of money and budget restrictions that can slow progress on the program.

**TABLE 7**

**DURATION OF DEMONSTRATION STORE PROGRAMS IN TEST SITUATIONS, OHIO, 1960-61**

<table>
<thead>
<tr>
<th>Test Firm</th>
<th>Starting Date</th>
<th>Evaluation Date</th>
<th>Duration in months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm #1</td>
<td>January 12, 1960</td>
<td>March 16, 1961</td>
<td>14</td>
</tr>
<tr>
<td>Firm #2</td>
<td>January 18, 1960</td>
<td>March 20, 1961</td>
<td>14</td>
</tr>
<tr>
<td>Firm #3</td>
<td>April 21, 1960</td>
<td>March 21, 1961</td>
<td>11</td>
</tr>
<tr>
<td>Firm #4</td>
<td>April 14, 1960</td>
<td>March 23, 1961</td>
<td>11</td>
</tr>
</tbody>
</table>

Source: Extension Representatives' records.

The time involved in evaluating the recommendation and coming to a decision on installation of the recommendation in the firm is relatively short compared to all the time that is involved in developing relationships with the personnel in the firm so that they will accept the change. In addition, considerable time is spent in adapting the original research results to the particular firm situation and proving the results to each firm.
When the extension representative has worked with a given firm and developed the educational machinery for the transfer of information throughout the firm, then the adoption of the recommendation should be accomplished in a relatively short time. In all the test cases, the educational machinery had not been built and the vast majority of the time in the test cases was taken up in trying to build that machinery.

Another measure of success of the test methods would be the plans that have been made for future work as a part of the demonstration store programs in the test situations. In test firm 1 plans have been made to incorporate many of the demonstration store recommendations in two new stores that will be completed within one year from the date of evaluation. Also, the demonstration store recommendations will be used, at least in part, in the remodeling of one existing store. There is considerable pressure from the store managers in firm 1 to have the demonstration store recommendations extended to their stores. Plans are being made for training sessions for the store level personnel in firm 1.

Test firm 2 has not yet completed the demonstration store changes and has no immediate plans for extension of results to other stores in the firm.
The management of test firm 3, with the most concrete evidence of extension of recommendations to date, has plans to incorporate many of the demonstration store recommendations in all their new stores. The firm also plans to incorporate these recommendations in their remodeling plans for existing stores. Also, training sessions have been planned for the produce personnel at all levels in the firm. The management of firm 3 has by far the most receptive and cooperative attitude of any of the test firms.

Test firm 4 has had a little extension of results in that a two-page leaflet explaining the demonstration store work and success was sent to the participating members by the liaison man. The liaison man also plans to encourage the participating members to visit the demonstration store. However, at present, this appears to be the limit of the extension of the demonstration store recommendations to other stores in the firm in this case.

There is a certain amount of intangible benefit to be gained by a retail food firm from just participating in an educational program even though there may be no dissemination of the results throughout the firm. Any amount of thought on better ways of doing things or challenging of old systems, even though there may be no direct action from it, can help to keep the minds of the
management flexible and alert to the changing situation in which they are operating. Also, the management of the firm can benefit from an educational program if they learn a principle and do not apply it until long after the program is over or apply it in a different context from that of the specific program.

Dr. Dimit's Evaluation of the Test Situations

In addition to their own evaluation of the test situations, the specialists on the project asked Dr. Robert Dimit, Leader of Extension Research, the Ohio State University, to make an evaluation as a "disinterested party." Since Dr. Dimit was not trained in the food merchandising area, it was agreed that his evaluation would deal with such factors as attitudes toward the program, opinions of the firm personnel regarding the conducting of the program, and any evidence of acceptance or planned adoption of recommendations resulting from the demonstration store studies.

The procedure used in this evaluation was one of informal discussion with firm personnel at various levels in the firm. A series of guide questions was set up to cover the various sections of the program. A summary of the responses to these questions and some general
observations on the test situations by Dr. Dimit are included in the following discussion.

Four main findings from the informal discussions are listed:

1. The method of approach and the establishment of initial relationships were very effective in selling both the specialist and the demonstration store program to the cooperating firms.

2. The recommendations included in the study report were perceived as being realistic and highly desirable by all levels of personnel with the firms.

3. The program was well received by both corporate chains and wholesaler-sponsored voluntary groups.

4. Firms tend to view the program as a "service" rather than an "educational program."

Dr. Dimit's report related many evidences of program results that came from the interviews and presented data on the implementation of recommendations and the duration of demonstration store program, (Tables 6 and 7).

The remainder of Dr. Dimit's report contained general comments on the test situations which will be summarized here.

Dr. Dimit felt that there were many factors besides the number of recommendations implemented in the demonstration store and carried to other stores in the firm to be considered in the analysis of a demonstration store program.
The report cited research done by rural sociologists on communication and diffusion of ideas and practices. This research indicates that relatively simple changes in operations, require two to seven years to secure adoption after first hearing about the ideas. This research further indicates that changes requiring large outlays of capital or considerable reorganization of the operation take longer periods of time to secure adoption. In this regard, Dr. Dimit said that it is unrealistic to expect a very high rate of adoption even in the demonstration store, let alone transfer of these ideas to other stores in the firm in the eleven to fourteen months in which the test situations had to operate.

The point is also made in this report that each of the test firms may be said to have a personality of its own. This means that a composite of the personalities of the people in one firm is separate and distinct from a composite of the personalities of the people in any other firm. This composite of personalities can be said to effect the actions of the firm and can be abstracted into a separate personality for the firm. Dr. Dimit said that

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6 "Bibliography of Research on Social Factors in the Adoption of Farm Practices", North Central Rural Sociology Committee, Iowa State College, April, 1956.
in addition to the physical and economic characteristics of the firm there are many psychological and communication pattern characteristics that affect decision-making and functioning in the firm. This personality of the firm has had a definite effect on the test situations. In one case it was a positive effect and in another it was negative.

Dr. Dimit points to two items covering future programing from the discussion above. First, a knowledge of the firm, over and above the economic characteristics, is desirable in helping to determine methods of working with individual firms. Second, the selection of liaison persons for "train the trainer" situations is critical to the acceptance and success of the method.

In evaluating the methodology used in the test situations, Dr. Dimit felt that there were too many uncontrolled factors which limited or made impossible the evaluation of the design methods. He listed the non-economic characteristics of the firms involved, the differences in attitude of liaison personnel and deviation from the uniform procedure for application of the first four sections of the demonstration store program to support his conclusions. He also said that it was unrealistic to expect that complete adoption of recommendations should take place in slightly over one year.
Regarding the definition for adoption of recommendations in relation to success of the program, Dr. Dimit made the point that the acceptance of the principle underlying the recommendation was much more important than the acceptance of the recommendation in the form in which it was made in the report. He said that if the basic idea behind the recommendation was accepted by the management of the firm then it did not matter if they made some changes in the recommendations as they were implemented in the stores.

Of the two methods tested, Dr. Dimit felt that in view of the potential number of firms to be worked with, the interest demonstrated, and requests for additional help by the test firms, the "train the trainer" approach would seem to have the most feasibility.

In summary, Dr. Dimit said that the measurement aspects of the design developed to test the effectiveness of the two different approaches was precluded by other intervening variables. However, the need for and interest in such a program has been established. Many ideas for future programs and for improvement of methods in working with both corporate chains and wholesaler-sponsored voluntary groups have come out of this project.
Conclusions Regarding the Testing of Methods A and B

There were several factors which could have influenced the relative success of the test methods for extending produce operational efficiency research results to other stores in the firm using the demonstration store technique. These factors have been discussed individually here and an assessment made of their effect on the test situations in Part B.

The first of these factors was the deviation from the uniform procedure that occurred in the test situations. It has been pointed out that there were deviations from the uniform procedure in each case, but not the same deviations occurred in any one case. The weight of the evidence from Part A has suggested that these deviations could have considerable effect on the success in the fifth section of the demonstration store program.

Three different extension representatives were involved in the test situations. Although it is impossible to prove without an elaborate set of tests, the personalities of these extension representatives could have differed enough to have had a considerable effect on the test situations.

There was considerable difference in the physical characteristics of the test firms. This was more pronounced in the chain organizations, but was noticeable in
all cases. Also, the personnel in the firms differed greatly and thus affected the results of the test situations.

Such outside influences on the test firms as their competitors' action, availability of credit and others could have had considerable effect in a given test situation.

The factor of time allotted under the contract for the completion of the tests has put considerable stress on the test situations. The fourteen months maximum time allowed for testing has not been sufficient to yield a fair test of the two methods, A and B, assuming that all other factors could have been controlled.

Finally, the differences built into the test methods could have had considerable effect on the relative success in the test situations. This factor, of course, was the one for which the tests were originally designed. However, other factors that could not be controlled have complicated the measurement of the test methods considerably.

The weight of the evidence presented previously would suggest that since it was impossible to control many factors which exerted a definite influence on the test situations, any differences in the performance of the test methods A and B cannot be solely attributed to the
differences in the methods themselves. Additional testing would be necessary under carefully controlled conditions and for a much longer period of time to find whether or not there was a significant difference between methods A and B.
PART C

Introduction

Part C will serve to tie together the findings of Parts A and B into an "improved" educational program using the demonstration store technique in extending produce operational efficiency research results to other stores in the firm. This program will be prefaced by some comments by the author on the demonstration store technique itself and the role of the demonstration store technique in extension work with food retailers. Following a description of the "improved" program, Part C will be concluded by a discussion of further research needs in this area.

The objective of Part C was to determine principles and develop methods to aid extension service workers to improve their productivity in extending produce operational efficiency research results to other stores in the firm following the application of the demonstration store technique.

Methodology

Using the results of Part A and B, the advice and counsel of the advisory committee on the project, and the
knowledge and experience of the specialists on the project as the basis, an "improved" educational program using the demonstration store technique in extending produce operational efficiency research results to other stores in the firm has been developed and is presented here as part of the results of Part C. The other parts of the results section are the ideas of the author and are designed to set the stage for the use of the demonstration store technique with retail food firms and to point up needs for further study regarding the uses of the technique.

Results

The Demonstration Store Technique

The demonstration store technique as it was used in this project was an adaptation of the result demonstration concept. This concept is exemplified by the fertilizer demonstrations that extension agents have used for many years. The use of the result demonstration in this case was to establish a likeness of research results in one store of a firm or group of stores, and to carry the research results to other stores in the firm or group of stores through this demonstration store.

The demonstration store then became an educational vehicle to aid in the transfer of research information from the extension representative to all the stores in the
cooperating firm or group of stores. The intensive work that was done in the demonstration store was done to prepare this store for its task as an educational vehicle for the rest of the firm as well as to demonstrate visually the value of specific research results to the management of the firm or group of stores. When the work in the demonstration store was completed, the real work in the demonstration store program was just starting. This, of course, was the transfer of the research results to the entire firm or group of stores.

The Role of the Demonstration Store Technique in Extension Educational Work with Retail Food Firms

The successful use of the demonstration store technique in an extension educational program is based on three main assumptions:

1. The clientele for the program is well defined
2. The clientele knows and has confidence in the extension representative who will use it.
3. Research information is available to be carried to the clientele.

The first two of these assumptions have a direct bearing on the subject at hand. A great deal of careful ground work must be laid in the educational program with food retailers in any given state or area before effective use can be made of the demonstration store technique.
There are many ways of laying this groundwork. The following is a partial listing:

1. Use of brochures explaining the program
2. General meetings to create awareness and interest in the program
3. Involvement of the firm or group of stores in research work
4. All sorts of work with trade groups
5. Use of publications of all types
6. Work with other extension workers
7. Public relations work of all types

The use of the demonstration store technique would not be the first thing that an extension representative would want to take on as he is starting an educational program with food retailers. However, intimate work with firms of the type that the extension representative will get into as he uses the demonstration store technique can provide an invaluable experience for him as well as subject matter material for use in the program. A proper balance between depth and breadth of subject matter coverage must be maintained in line with the needs of the clientele, the training and experience of the extension representative, and the desires of extension administration in the particular state or area.

The third assumption involved more of a problem when extension work was started with retail food firms than it does today. More and more research information is becoming available in this area, and the extension representatives spend more time in carrying information to their clientele
and less time in actual acquisition of the information. However, much more research work is needed both in the operational and management phases of the retail food business.

The demonstration store technique can be one of the most effective educational tools that the extension representative has in working with retail food firms. However, care must be exercised in its use to avoid bogging down a program with details or giving it a shallow appearance with no subject matter depth.

"Improved" Program for the Use of the Demonstration Store Technique in Produce Operational Efficiency Work

The "improved" program for the use of the demonstration store technique presented here will be cast in the setting of educational work within the produce department of a retail food firm. This does not mean that the use of the demonstration store technique is limited to the produce department of a retail food firm or to retail food firms for that matter. Principles that are presented here should apply, with some possible modification, to most firms engaged in the marketing of agricultural products.

As was the practice in Part A, the program will be divided into five sections and each will be explored in detail. Definitions of the sections of the demonstration store program will be found in Appendix I.
Before going into the mechanics of the program, an important point needs to be discussed. It concerns the relationship to be developed between the extension representative and the management of the cooperating firm for successful completion of the program. The feeling of mutual confidence and trust that will foster the desired two-way flow of information between these two persons can only be developed through genuine efforts and the belief in a common goal. This relationship is a continuing one that can outlast a particular demonstration store effort and lead to cooperation in a total educational program.

References have been made earlier in the dissertation to the need for the development of a close working relationship between the extension representative and the management of the cooperating firm. Successful demonstration store work is not a "here today and gone tomorrow" proposition. It has tremendous long-run potential and must be handled with this in mind for maximum satisfaction from its use.

For purposes of the discussion, the basic premise here will be that the three assumptions stated in the discussion on the role of the demonstration store technique in educational work with retail food firms have been fulfilled and the extension representative is ready to move into demonstration store work.
Approach

The first step in the development of a demonstration store program will be to locate a suitable firm that is willing to cooperate in the project. It has been assumed that the extension representative knows and has the confidence of his clientele. Thus the selection of the firm should not present too much of a problem.

Some desirable characteristics in a firm that would make it a suitable subject for a demonstration store program are --

1. Relative position in the area.
2. Willingness to change.
3. Well-defined organization.
5. Willingness to share changes with other firms.
6. Lack of extremes in size, personnel and physical facilities.
7. Availability and interest.
8. Cooperation and receptiveness.
10. Location in the state.

It may be very difficult to discover a firm that possesses all these characteristics; however, efforts spent in selecting a desirable firm for demonstration store work can be well rewarded with the development of a successful educational program.

Two of the people in the firm that the extension representative will want to get to know very early in the work are the "decision-maker," the person who makes the decisions in the firm, and the "driving force," the person
who gets the job done in the firm. Since the successful completion of a demonstration store program can involve changes in operating policy and the expenditure of considerable sums of money, it will be necessary for the extension representative to start as early as possible in developing the confidence and trust of the top management of the firm. A thorough study of the organization structure of the firm will be helpful in locating those men and in making an appraisal of the lines of communication in the firm.

The next step in the program will be to hold a meeting between the extension representative, the decision-maker, the driving force, and any other persons that the situation may deem necessary. This meeting will be called for the purpose of establishing mutual understanding regarding all the aspects of the demonstration store program. The agenda for this meeting will include —

1. Developing the concept of the demonstration store.
2. Description of all sections of the demonstration store program.
3. Examination of the relationship to be developed between the extension representative and the cooperating firm.
4. Study of a sample timetable on the demonstration store program.
5. Review of other demonstration store work.
6. Establish the need for a liaison man.
7. Study the statement of mutual responsibilities.
The demonstration store concept has been discussed previously. It is very important that the top management of the firm realize the scope and depth of the proposed demonstration store program. The sooner that they are made to realize that the demonstration store is an educational vehicle for work with the entire firm, the better will be the chances for the success of the program.

The sections of the demonstration store program are defined in Appendix I. They will be explained to the management of the firm as another means of creating understanding of the program.

The desired relationship between the extension representative and the cooperating firm has been discussed previously. This relationship will be explained to the firm in terms of a two-way flow of information and cooperation between the persons involved.

The study of a sample timetable of a demonstration store program will give the firm some idea of how work on the program will be conducted and the timing and coordination that will be necessary for success of the venture.

Review of other demonstration store work done by the extension representative will give the management actual physical evidence of success of the program in other
firms. The old adage that "a satisfied user is the best advertisement for your product" might well apply here.

For maximum benefit to be derived from the program by the firm, it will be essential that a liaison man be appointed in the firm to work closely with the extension representative and take the leadership of the firm's part in the demonstration store program. Desirable characteristics for the liaison man to possess are --

1. Ability to abstract himself from his present job and devote full time to working with extension when needed and to refrain from discussion of recommendations until the formal report is presented.
2. Orientation to problem-solving and ability to give an objective appraisal of a problem situation.
3. Familiarity with and a working knowledge of training methods and their use in retail food firms.
4. A thorough knowledge of produce and its problems.
5. Ability to carry through on major decisions and to command the respect and cooperation of his co-workers.

It may be hard to find a person in the firm possessing all these characteristics. However, care in selection of the liaison man can bring big dividends in smoother working relationships and elimination of confusion and waste motion as the program develops. The liaison man will be appointed immediately after the decision has been made to go ahead with the program.
One of the most valuable tools that the extension representative has at his disposal to aid in creating understanding between himself and the management of the firm will be the statement of mutual responsibilities. This short and carefully worded statement will outline the educational services that the extension representative can provide for the firm and will state what the firm must do to gain maximum benefit from the program. The statement will serve to more or less set the boundaries for the development of the demonstration store program. A copy of the statement used in the test situations in Part B is included in Appendix II.

When the top management of the firm has been thoroughly informed regarding the program, the time has come to make the decision on participation in the program. The assumption will be made here that the decision has been made to go ahead and start work on a demonstration store program in produce operational efficiency.

After the liaison man has been selected and briefed on his responsibilities, the next step will be the selection of the demonstration store. It would be highly desirable for the extension representative and the liaison man to work together in the selection of the demonstration store. The ideal demonstration store will be one which is as nearly typical of the rest of the stores in
the firm as possible. The more typical the demonstration store, the fewer changes that will have to be made in the recommendations when they are transferred to the other stores in the firm.

Once the demonstration store has been selected, the extension representative will want to start collecting as much information as possible about this store and the rest of the stores in the firm. This will be done to aid in making recommendations for the demonstration store and to facilitate the transfer of the recommendations to the other stores in the firm. The types of information to be collected are --

1. The local and national competition situation.
2. A description of the organization structure of the firm.
3. The background and responsibilities of key personnel in the cooperating firm.
4. Such information on operating policies of the firm as how and by whom they are formulated, how they are communicated to the personnel throughout the firm, and how they are implemented.
5. The effect of labor bargaining groups in the cooperating firm.
6. The capabilities and limitations of the personnel in the firm.
7. Benchmark data on the firm and the demonstration store.
8. The number and physical characteristics of the facilities of the firm.
9. Any other information that will be helpful in making a complete analysis of the produce department in the cooperating firm.

For the gathering of this information, the extension representative will provide the firm with data collection
forms whenever possible in order to facilitate the assembly process. He will make it as easy as possible for the firm to give him information.

The last step in the approach section will be for the extension representative to take stock of the situation to see whether both he and the firm are ready to progress into the next section of the program.

Study of Situation and Formulation of Recommendations

There are several tasks that must be performed in preparation for the actual study period. The first of these will be for the top management of the cooperating firm to inform its employees of plans to embark on a demonstration store program in produce operational efficiency. It will be essential that the firm use its regular channels of communication to inform its employees of its plans so that there will be no misunderstandings when the extension representative starts to work with the lower eschelon personnel in the firm. A special effort will be made to have the demonstration store employees know who the extension representative is, what he will be doing, and how it will affect store-level personnel.

Another of these tasks will involve visiting the demonstration store before the study period to get acquainted with the people, make the necessary sketches,
and observe the general routine of work in the department. This will give the extension representative a general idea of problem areas on which to concentrate and information on which to base his schedule for the study week.

In planning the study period, the extension representative will be sure to schedule enough time in the store to get a true picture of the situation. This can usually be accomplished in a week. He also will try to schedule the study week at a time when the business is as nearly normal as possible and all the personnel are on the job. This will aid in getting an accurate picture of the operation.

The extension representative may well plan to spend some time studying the aspects of the produce operation of the firm other than at the store level. It is possible that the real cause of many of the store problems lies in some other segment of the firm. Efforts to get to the root of a problem will not stop until a satisfactory answer has been arrived at regardless of where in the organization he must look.

Before moving into the study period itself, the extension representative will take stock of his "kit of
tools" to see if they are all in good working order. The "kit" contains --

1. His own training and experience.
3. Descriptive and benchmark data on the firm.
4. Agricultural Marketing Service and land grant college research.
5. Trade and census data.
6. Materials from manufacturers of equipment and fixtures.
7. Other helpful data.

When he has marshalled all his tools together, the extension representative will have himself well prepared to approach the problems at hand.

One last item will be considered before the study itself can be started. The extension representative must not lose sight of the fact that even though his work will be concentrated within the produce department, the produce department is an integral part of the store operation. Also, the produce operation is but one part of the functioning of the entire firm. Many recommendations can be made for improvements in the produce department. However, a recommendation that helps the produce department but hurts the total operation cannot be a good one. A balance will be sought for, so that maximum improvement can be enjoyed in the produce department with a minimum of interference with other departments in the store.
In the actual performance of the study of situation, there are several methods that will be used:

1. Use of customer traffic flow studies
2. Observation of situation in the produce department
3. Use of the U.S.D.A. Checklist for produce
4. Study of the layout and equipment in the backroom and display area of the produce department
5. Observation of work methods in the produce department
6. Study management problems in the produce department

An informal method the extension representative will use during the study week will be to ask the employees of the firm for suggestions on how to improve the department. This will be done discreetly but can yield helpful suggestions and can aid in making the employees feel that they are a part of the program. Also, these informal discussions will give the extension representative a chance to assess the capabilities and limitations of the store personnel.

The extension representative will compare the job descriptions as given him by the employees with their assigned role in the firm to get a complete picture of the functioning of the department. The informal relationships that have grown up in a department or firm can be a definite factor in finding the solution to a given problem.

As he goes about his various tasks during the study week, the extension representative will want to keep the
liaison man informed of current happenings. This will help to keep lines of communication open and to keep interest in the program at a high level.

As the study period comes to a close, the extension representative will want to make a date with the decision-maker, the driving force and the liaison man in the firm for presentation of results of the study. This meeting will be scheduled soon after the study so that the information to be presented will be fresh in the minds of the persons involved.

When he has all the necessary data collected, the extension representative will start to work formulating the report. The first thing that he will do will be to review the objectives of both parties involved in the program and see whether his thinking is still in line with those objectives.

Next, the extension representative will make up a rough copy of the report and take it to the liaison man for his comments and suggestions. The liaison man will point up places in the report where company policy is involved and help to anticipate problems which may arise during the presentation of the report. This will be also another way of making the firm feel a part of the program.

The liaison man will be encouraged not to discuss the recommendations in the report with anyone in the firm.
until the report has been presented to the top management of the firm. This will avoid the confusion and misunderstandings that could be built up if various stories were allowed to leak out regarding the results of the study.

The physical layout of the report will involve the use of four columns on a legal size page. The four columns will be labeled situation, recommendation, planned action, and action taken. For purposes of presentation of the study results and recommendations, the first two columns will be used. The last two columns will be left blank for use in later sections of the program.

The subject matter in the report will follow the flow of merchandise from the back door of the store to the point of ultimate sale. It may be necessary to go outside the demonstration store to point up certain problems which affect the performance at store level. If so, this part of the report will blend logically into the rest of the report.

The presentation of customer traffic flow data in conjunction with the rest of the report will be handled by the inclusion of a master traffic flow sheet with supplementary tables on the personal characteristics and performance of the sample customers. Implications for action at the store level will also be listed.
In evaluation of this section of the demonstration store program, the extension representative will search to make sure that he has discovered and reported the real problems in the produce department in the firm and has not confused the evidence of the problem with the cause of the problem in his analysis. Also, he will want to be sure that the firm will be ready to receive the report and that he will be ready to present it.

Presentation of Recommendations

The actual presentation of the formal report to the firm will take place in a meeting between the extension representative, the decision-maker, the driving force, and any other people that the situation might dictate. This session will be limited to the top management personnel of the firm. A meeting place will be arranged that will be comfortable and free from interruptions.

Before the report is read and discussed, the liaison man will introduce the extension representative and authenticate the observations that have been made during the study.

The extension representative will preface his remarks with a short review of progress on the demonstration store program and a reminder of the steps necessary for the successful completion of the program.
The rest of the program will revolve around the discussion of the report. The extension representative will lead the discussion, using appropriate visual materials to emphasize and clarify various points in the presentation. Ample time for discussion will be allowed, and the extension representative will make every effort to clear up any misunderstandings which may arise immediately.

At the close of the presentation meeting, the extension representative will set a date for the first follow-up visit with the liaison man. The purpose of this visit will be for the liaison man to relay to the extension representative the decision of the management of the firm regarding the changes that will be made in the demonstration store, and eventually in the other stores in the firm. Also, these two men will start to work making plans to carry out this decision.

In evaluating this meeting, the extension representative will get the reaction of the management of the firm to the report and look for any changes of attitude or relationship. He will also make a list of the items in the report which caused the most controversy, and will make plans to put extra emphasis on these points during later sections of the program.
Follow-Up

When the top management of the cooperating firm has studied and evaluated the report and made a decision on the recommendations, the extension representative and the liaison man will meet and go over that decision. Complete understanding will be reached between these two men regarding what changes will be made in the demonstration store. This is the point when all misunderstandings on recommended changes will be worked out. When this understanding has been reached, the two men will start to make plans to implement the desired changes in the demonstration store.

As they draw up the plans for implementation of the changes in the demonstration store, the types of information that the two men will need are:

1. Desired changes to be made.
2. Sources of equipment and fixtures.
3. Approximate cost of changes.
4. Timetable of events, the setting of priorities.
5. The responsibility for changes fixed.
6. Provisions for training in the use of the changes.

In this planning process, the third column in the report, planned action, will be completed. This column lists the specific action planned, tentative date of completion and personal responsibility for carrying out each action. This part of the report will be used with care so that it can perform its intended function of being a guide for carrying out the desires of top management.
rather than becoming a "straight jacket" for the persons involved.

When all the plans have been made to get the recommended changes in the demonstration store, the extension representative will start work in the store. He will spend as much time as necessary with the plumbers, electricians, carpenters, and equipment manufacturers to be sure that the physical changes are made as recommended or desired by the firm. He will also be sure that the liaison man is involved in this work and is familiar with the various techniques and information required to do this job. This will be done so that the liaison man can take leadership in this work with the rest of the stores in the firm.

As the physical changes are being made in the demonstration store, the extension representative and the liaison man will be working on the training program that will be needed to acquaint the store personnel with the changes and to help them become more productive workers. There are many lessons that could be included in this training program. Several are:

1. Basic training in the produce operation
2. Principles of work simplification
3. Quality maintenance
4. Work scheduling
5. Ordering and inventory control
6. Familiarity with new fixtures and equipment
7. Packaging techniques
8. Display techniques
9. Personnel training
10. Cleanliness
The methods used to present his material will be on-the-job training, seminar type discussions, movies and hand out materials. The emphasis will be on individual instruction with special emphasis on the development of skills and proficiencies for demonstration to the other stores in the firm.

The fourth column in the report, action taken, will be filled in upon completion of the various changes at the end of this section of the program.

Evaluation of the work in the demonstration store will be done by looking for acceptance and use of the changes by the store personnel. Benchmark data on store performance will be another good yardstick. The extension representative will make every effort to see that the demonstration store will be ready to perform its function as an educational vehicle for the rest of the stores in the firm. He will also see that the rest of the stores in the firm will be ready to receive the recommendations.

Extension of Recommendations to Other Stores in the Firm

When the recommendations are established in the demonstration store, appropriate training programs have been developed, and the operation running smoothly, the extension representative will turn his full attention to the extension of recommendations from the demonstration
store to other stores in the firm. In reality, the extension representative has not had the transfer of information to the other stores in the firm out of his mind for a single moment. He has used every opportunity during this entire program to remind the management of the firm of the real purpose of the demonstration store, and has been studying the firm and its personnel to find the best ways of disseminating the information.

During the entire demonstration store program, the extension representative has been collecting information regarding the firm of the types listed on page 81. He will use this information in trying to see how the recommendations for the demonstration store will fit into the other stores in the firm.

In order to make plans for implementing the changes in the other stores in the firm, it will be necessary for the extension representative and the liaison man to get together and form an overall plan of action. This plan will be similar to the one discussed on page 90, except it will be for the entire firm. The two men will need the types of information listed on page 90 to complete it. Care will be taken that the specific actions to be taken are spelled out, tentative completion dates set up, and responsibility for completion of the work defined.
In order to make sure that the recommended physical changes will be installed properly in the other stores in the firm, a regular system of follow-up work will be devised. Assuming the liaison man has been properly trained, there will be little difference in the results whether this work is to be handled by the extension representative or the liaison man. However, an understanding on responsibilities will be reached by both persons. If he is to be involved in this phase of the work, the extension representative will encourage the liaison man to follow-up on the physical changes and take charge of the training program himself.

The training program for the produce personnel in the other stores in the firm will contain largely the same types of subject matter as those listed on page 91, with adaptations for specific situations. The methods used will emphasize group techniques, such as classroom and seminar sessions, tours, movies, and hand out materials in order to increase the efficiency of teaching.

As in the case of the physical changes, assuming the liaison man has been properly trained, it will make little difference which one of the two men heads up the work. However, if the extension representative is to be involved he will stay close to the training work and let the liaison man take responsibility for straightening out problems in individual stores.
Evaluation of the work with the other stores in the firm will be found in the acceptance and use of the changes by the store personnel and in the attitude of the management of the firm. Benchmark data collected on the entire firm will be a good concrete measure of success that will find a variety of uses in other program work.

It must be remembered that the use of the demonstration store technique is a never-ending proposition. The end of one particular phase of the work does not mean that the demonstration store has outlived its usefulness. As research brings out further improvements in the produce area, the machinery that has been established for the transfer of information throughout the firm can be used over and over again. Also, information on other departments of the store may be spread throughout the firm with certain modifications in the educational machinery.

Further Research Needs in the Use of The Demonstration Store Technique

There are several places at the retail level where more research could be done to find better ways of using the demonstration store technique. Since most of the demonstration store work to date has been done in the produce department, research is needed to find the best use of the technique in the other departments of the retail food store.
There are many types of firms with which the demonstration store technique has not been used. Ways must be found to work effectively with these firms.

Only two methods of extending research results from the demonstration store to other stores in the firm were tested here. There are many more that need to be tested. Also, more testing is needed on the two methods that were studied here.

Much more work is needed in the development of training programs for use in the demonstration store program at the retail level.

Finally, more work should be done to improve the program that has been suggested in the results of Part C.

Work on the use of the demonstration store technique at the wholesale level has barely scratched the surface. There is a federal contract at present in Oklahoma under which this problem is being studied.

The demonstration store technique can have application in almost all types of agricultural marketing firms. Work here has yet to get started.

A final thought to be interjected here. It is possible that the demonstration store technique may not be the most effective educational tool for disseminating information within agricultural marketing firms of all types. Work is needed to see whether there is not a better way of doing this job.
APPENDIX I

DEFINITION OF SECTIONS OF THE DEMONSTRATION STORE PROGRAM IN PRODUCE OPERATIONAL EFFICIENCY OF THE AGRICULTURAL EXTENSION SERVICE
Definition of Sections of the Demonstration Store Program in Produce Operational Efficiency of the Agricultural Extension Service

1. Approach: Time and effort spent from the time that the firm was first considered as one in which to do formal produce operational efficiency work to the time when the formal study of the situation started.

2. Study of Situation and Formulation of Recommendations: This involves such things as description of the existing set-up in the firm, a detailed analysis of present layout and procedures, preparation of recommended improvements in line with U. S. D. A. and other institutional recommendations and sound economic and marketing principles.

3. Presentation of Recommendations: This involves the time and effort spent in the presentation of the findings of the study to the firm.

4. Follow-up: This represents all the time and effort spent with the firm from the time of the presentation of recommendations until the recommendations established in the demonstration store were ready to be extended to other stores in the firm.

5. Extension of Recommendations to Other Stores in the Firm: This represents all the time and effort spent
from the initial extension of recommendations from the demonstration store until all the recommendations that the management of the cooperating firm wished had been carried to the other stores in the firm.
APPENDIX II

WRITTEN STATEMENT OF MUTUAL RESPONSIBILITIES USED IN PRESENTATION OF DEMONSTRATION STORE PROGRAM DURING TESTS IN PART B
Demonstration Store Program of
The Agricultural Extension Service
Ohio State University

I. Purpose of Program

A. General

To increase the effectiveness of the educational program of the Ohio State University Agricultural Extension Service, designed to help Ohio food retailers reduce costs and make greater profits in the operation of retail food stores.

B. Specific

1. To establish in one retail store of a group (chain, voluntary, etc.) methods and procedures designed to help in making work easier and more efficient, bring about sales increases, reducing costs in the produce department.

2. To assist the management of the group in getting the methods and procedures considered to be of value by the management adapted to the other stores in the group where applicable.

II. Procedure

A. Food Merchandising Specialists of the Agricultural Extension Service of the Ohio State University will make a thorough analysis of the operation of the store in which the demonstration will be established, involving the following:

1. Analysis of operation records for at least the last accounting period, preferably for the last year. This can be based on operation ratios developed from complete records, or on the complete records.
2. Analysis of methods used in ordering, receiving and inventory control.

3. Close observation and analysis of work methods employed in all phases of the operation of the produce department in the store.

4. Analysis of the use of equipment, personnel, and space resources.

5. Customer-flow analysis involving the recording of the path followed and the shopping activities in the produce department of each of a carefully selected sample of customers.

6. Based on the analyses as outlined in 1 through 5 above, write a demonstration store "plan", including a clear statement of procedures and methods in use at the time of the analysis, the problems involved, and recommended solutions to these problems.

7. Explain to management of the store and the group precisely the meaning of the written "plan", how it can be put into effect, and how the Agricultural Extension Service of the Ohio State University can aid in putting it into effect.

8. Cooperate with the management of the store and the group in guiding changes and improvements undertaken as a result of the recommendations in the "plan" and in getting the improvements smoothly integrated into the operation.

9. Aid the management of the group in teaching management and operations personnel who have responsibilities in produce in the demonstration store and in other stores of the group the importance of the improvements made in the demonstration store, the principles involved in making the operation more profitable through these improvements, and how the improvements can be adapted to other stores in the group.

B. The management of the store and group will:

1. Designate some member of the management of the group to work with the Food Merchandising specialists throughout the demonstration store program and perform the following functions:
a. Act as liaison between the management of the group and the Food Merchandising specialists.

b. Help in planning and carrying out all sections of the demonstration store program.

c. Explain to all other personnel in the group the nature of the demonstration store program in the produce department and the work to be done by the Food Merchandising specialists.

2. Provide operation records for the last accounting period (or for the last year, if possible). This may be in the form of complete records or in the form of operation ratios, such as:

a. Sales per man hour in the produce department,

b. Sales per dollar of payroll cost in the produce department,

c. Sales per dollar merchandise cost in the produce department,

d. Sales in the produce department as a percentage of total sales,

e. Inventory in relation to weekly sales.

These ratios will be provided for the demonstration store insofar as they are available from records, and also as averages for all the stores in the group.

3. Make full explanation to all personnel in the demonstration store prior to the time of the work by the extension specialists as to the nature of the work that the extension specialists will do while in the store.

4. Study carefully all recommendations in the demonstration store "plan" and undertake to put into effect as many of the recommended changes as the management believes will improve the operation of the produce department. The Ohio State University Agricultural Extension Service will be available to help in implementing these recommendations as outlined in A, 8 and 9 above.
5. Develop a program, in cooperation with the Ohio State University Agricultural Extension Service, for teaching management and operations personnel who have responsibilities in the produce department of the various stores of the group the principles involved in the improvements made in the demonstration store and how these improvements can be adapted to other stores in the group. This will involve personnel in the demonstration store, in other stores of the group, and at levels above store management.

6. Provide records for a period comparable to the period involved in B, 2 after the improvements have been made in the demonstration store, to permit evaluation of the changes made.
APPENDIX III

UNIFORM PROCEDURE FOR THE APPLICATION OF THE FIRST FOUR SECTIONS OF THE DEMONSTRATION STORE PROGRAM IN THE TEST SITUATIONS IN PART B
Uniform Procedure for the Application of the First Four Sections of the Demonstration Store Program in the Test Situations in Part B

The purpose for developing this uniform procedure is to give each of the test methods as nearly as possible the same background in order to increase the accuracy in measuring their relative differences. It is assumed that this uniform procedure will be followed closely unless conditions make it impossible to do so. In the event that deviations from the uniform procedure should occur, they will be recorded and an attempt will be made to analyze their effect on the performance of the test method.

A problem arises here in that this uniform procedure is an aggregation of the best thinking regarding the first four sections of the demonstration store program in produce operational efficiency; but the uniform procedure, as such, has not been tested under controlled conditions. All information available points to the success of this method and it will be assumed that this procedure will do the best possible job of preparing the demonstration store and the cooperating firm for the dissemination of produce operational efficiency research results to other stores in the firm. This may or may not be true, but this is not
the main issue here. If this uniform procedure is not the best in performing the job assigned to it, at least all the test situations will have similar starting points and backgrounds.

In this discussion, the same definitions for the first four sections of the demonstration store program that have been used throughout the study will be applied and are listed as follows:

1. Approach: Time and effort spent from the time that the firm was first considered as one in which to do formal produce operational efficiency work to the time when the formal study of the situation started.

2. Study of Situation and Formulation of Recommendations: This involves such things as description of the existing setup in the firm, a detailed analysis of present layout and procedures, preparation of recommended improvements in line with U. S. D. A. and other institutional recommendations and sound economic and marketing principles.

3. Presentation of recommendations: This involves the time and effort spent in the presentation of the findings of the study to the firm.

4. Follow-up: This represents all the time and effort spent with the firm from the time of presentation of recommendations until the recommendations established in the demonstration store were ready to be extended to other stores in the firm.

The Approach Section

The origin of the idea for a demonstration store program in produce operational efficiency and the initiative for the initial contact with the cooperating firm will most likely be the responsibility of the extension representative handling the test method. However, the
fact that the cooperating firm has indicated an interest in the program and taken the initiative in finding out more about it could be very helpful in getting the program underway.

The important things to be taken care of in the initial visit or visits, as the case may be, are for the extension representative to get to know as much about the firm as possible and to let the firm become thoroughly familiar with the extension representative and the functions of extension programs for food wholesalers and retailers. In some cases, more than one visit will be needed to get acquainted and make arrangements for the initial presentation of the demonstration store program. In other cases, it may be given on the first visit to the cooperating firm. The several test situations will have to dictate the course of action for the extension representative to follow.

Desirable types of information regarding the cooperating firm such as the following will be gathered by the extension representative:

1. Local and national competitive situation.

2. Description of the organization structure of the cooperating firm.

3. Background and responsibilities of key personnel in the cooperating firm.
   a. How and by whom they are formulated.
   b. How these rules of action are communicated to the store personnel.
   c. How these rules are implemented.

5. The effect of labor bargaining groups in the cooperating firm.

6. Any other information that will be helpful in making a complete analysis of the produce department in the cooperating firm.

It is very important to find the decision-maker, the person who makes the decisions, and the driving force, the person who gets the job done in the cooperating firm, as soon as possible. The possibility of influence on the decision-maker from forces outside the firm, such as financial institutions and family should be determined as nearly as possible. It is necessary that the persons acting in these capacities be reached at the beginning of the program in order to firmly establish the concept of proper use of the demonstration store in the firm.

In the test situations, a complete analysis of a department as a unit and also as a functioning part of the total store operation will be made. In accordance with the original definitions used in this project, the specific departments analyzed in the test situations will be limited to the produce department in the cooperating firms.
Preparatory to the development of plans for each of the test situations, a meeting will be arranged between the top management of the cooperating firm and the extension representative to discuss the demonstration store program. Those in attendance at this meeting from the extension service will be all the extension personnel who will be involved in the study. Those in attendance from the cooperating firm will be the top management only. This will include the decision-maker, the driving force, and other top management personnel who the decision-maker thinks should be included. At this point, it is very important that as many of those who influence the decision-making process in the cooperating firm as possible attend the meeting.

Starting with the initial presentation and throughout the development of the demonstration store program, the extension representative points out the value of the extension of the demonstration store results to other stores in the firm. He will take advantage of all opportunities to encourage personnel in the firm to think of work that is done in the demonstration store as a part of the educational work with the entire firm.
The items to be discussed in this initial presentation of the demonstration store program are as follows:

1. Complete description of all sections of the demonstration store program.

2. Results of other demonstration store work. Use of slides, movies and discussion to dramatize the extension story.

3. Discussion of what extension can and will do with the cooperating firm.

4. Discussion of the need for liaison man in the firm and desirable characteristics such as:
   a. Ability to abstract himself from his present job and devote full time working with extension when needed and to refrain from discussion of recommendations until the formal report is presented.
   b. Orientation to problem solving and ability to give an objective appraisal of a problem situation.
   c. Familiarity with and a working knowledge of training methods and their use in retail food firms.
   d. A thorough knowledge of produce and its problems.

5. Discussion of written statement of mutual responsibilities of the extension service and the cooperating firm in establishing the demonstration store program.

Assuming that the decision is made to go ahead with the demonstration store program, the decision-maker of the cooperating firm will designate someone in the firm to act as a liaison man between the extension representative and the decision-maker and to be responsible for seeing that

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1A copy of this statement is included in Appendix II.
the things that the cooperating firm agreed to do are done. This liaison man will be included in the planning and implementation of the first four sections of the demonstration store program. In order to insure continuity of programming, the functions performed by the liaison man should be administered by the same person throughout the demonstration store program.

Every effort will be made by the extension representative to have the store selected in which he can set up the best demonstration of the equipment and procedures that will be recommended in later sections of the program. The objective of this whole program is to demonstrate certain recommended procedures and equipment. It will be to the advantage of all concerned that the store selected will provide the best demonstration of these recommendations.

Top management of the cooperating firm will be encouraged to request their employees to cooperate in the study. Management will be requested to explain to the employees that this work is being done to help make their jobs easier to perform and in turn, to help the organization.

A careful evaluation of the effort during the approach section will be made by the extension representative so that he will be better prepared to develop later
sections of the program. In this evaluation, he will keep the following questions in mind:

1. What have I agreed to do? Does the firm understand this? Do I have the resources at my command to fulfill my commitments?

2. What has the top management in the firm agreed to do? Does the decision-maker understand this? Are all needed resources available?

3. Is anything else needed to further necessary relationships with the cooperating firm?

It is possible that other contacts will be necessary before the start of the study of the situation and formulation of recommendations section. The situation will dictate the number and content of any such contacts.

The Study of Situation and Formulation of Recommendations Section

A complete operating week will be used as the observation and study period. This will provide enough time for the extension representative to get a complete picture of the operation of the produce department and its relative position in the total store operation.

The week selected will be one in which all the personnel in the firm who normally are associated with the operation of the produce department of the cooperating firm are present and performing their normal functions. Also, this week will be as "normal" as possible, and any unusual behavior observed will be carefully analyzed for possible effects upon any phases of the test situation.
Arrangements will be made with the firm to supply certain benchmark data to be used in the analysis of the operation. The details of the data are specified in the written statement discussed in the approach section.

Prior to the study week, the extension representative will have a discussion with the produce manager in the demonstration store to find out certain details such as when he receives his merchandise, how he schedules his labor, and his ordering and inventory procedures. This information will aid the extension representative in setting up a schedule of operations for himself during the study week. Also, the extension representative will make and use a scale drawing of the backroom preparation area and of the display area for the study of the production and transportation functions and the customer traffic flow in the produce department.

Arrangements will be made for a personal interview by the extension representative with each of the produce personnel in the store and the key produce personnel in all levels of management in order to find out the following information:

1. What they consider to be the strengths and weaknesses of the produce department,
2. If there are problems, how they would solve them.
4. Help in assessing the capabilities and limitations of all the personnel connected with the operation of the produce department in the cooperating firm.
The extension representative will make an effort to assess the capabilities and limitations of all the personnel connected with the operation of the produce department in the cooperating firm. This will be done by the following methods:

1. Personal interviews
2. Observation of on-the-job performance
3. Results of their work

Immediately prior to the study week, a meeting will be held with produce personnel in the demonstration store to make sure that they understand the following:

1. Who the extension representative is
2. What he will do during the study week
3. Why he will do it

The extension representative will be introduced to the group and endorsed by the liaison man as the person who will assist the firm in doing this work in the demonstration store program.

The store personnel will be instructed to perform their jobs as they normally do and to answer as completely as they can any questions the extension representative should ask them. It will be emphasized again at this meeting that this study will encompass the entire produce department and the results of the study will serve as a demonstration to the rest of the stores in the firm.
Methods to be used during the study week will include --

1. Traffic flows in the produce department.
2. Personal interviews with all the produce personnel, and the store manager of the demonstration store.
3. Observation of situation in the produce department.
5. Study of layout and equipment in backroom and display area for produce.
6. Careful observation of work methods in produce.
7. Study of management problems related to the produce department.

Traffic flows done in the demonstration store will be set up and supervised by the extension representative, but part of the actual work may be performed by another person or persons. This may leave the extension representative free for closer observation of the operation of the produce department.

The extension representative and all others involved will proceed with all observations in such a manner as to attract as little attention as possible to their presence and activities.

When all the information has been collected, the extension representative will start to work immediately on the preparation of the report to management. A date, on a tentative basis at least, will be set for the presentation of the formal report before the study starts. If possible, it will be held not later than two weeks after the study week.
The report will follow the general form which is used by most specialists who have made demonstration store studies. This form involves the statement of the situation and recommendations counterposed on the same page. The general organization of the report will follow the flow of merchandise from the point of receipt to the point of ultimate sale. The report will have an appendix with specific pictures and instructions on the changes and a statement on estimated costs of changes and potential savings.

The report will be summarized and the high points discussed in the formal presentation of recommendations when the cooperating firm is a large organization and the personnel to whom the report is presented are rather far removed from the details of the operation. In the case when the cooperating firm is a small organization and the personnel to whom the report is presented are closely connected with the details of daily operation, the entire report with all its ramifications will be presented.

Every source of material that can be helpful in writing the recommendations will be used by the extension representative. The liaison man will be involved in the formulation of the report. His role will be to offer suggestions on improvements in the produce department of the demonstration store and to help in anticipating
problems that might arise in the extension of demonstration store results to other stores in the firm. Alternative recommendations will be included when information is available upon which to base them. Both favorable and unfavorable features of the present operation of the department will be pointed out in the report with special emphasis on improving the unfavorable features.

No information as to changes needed in the demonstration store will be discussed by the extension representative with any personnel in the firm other than the liaison man until the formal report and recommendations are presented according to plans agreed upon. The liaison man will be encouraged not to discuss any recommendations with other firm personnel. This will prevent a misunderstanding in the minds of management personnel and confusion in the minds of the store personnel.

The extension representative will carefully evaluate his efforts at this point to see that he has done the best possible job in the formulation of the recommendations and that the cooperating firm is in the proper frame of mind to receive the formal report of the study. If either of the above-stated conditions is not fulfilled, the extension representative will take appropriate action to see that they are.
Presentation of Recommendations

The formal presentation of recommendations will be kept as short and precise as possible. Persons in attendance at the presentation meeting will be the extension representative, the decision-maker, the driving force, the liaison man, and any other top management personnel of the firm who the decision-maker thinks should attend. It is extremely important that the meeting be held in a room that is comfortable and conducive to good discussion that is isolated from anything but emergency interruptions.

The extension representative will spend a few minutes at the first of the meeting on clarification of objectives. He will briefly explain that this meeting is for presentation of the report and discussion of the recommendations made by the extension representative and the liaison man. The liaison man will follow and verify the validity of the observations made during the study period. The extension representative will use this opportunity to emphasize that these changes can be carried to other stores in the firm, where applicable. At the presentation meeting, the extension representative will use slides of the existing situation and other visuals that will aid in making the presentation effective.

A definite date will be set at this presentation meeting for further contacts by the extension
representative with the firm for deciding upon recommendations to be adopted and setting priorities on steps toward their implementation.

The extension representative will carefully evaluate the results of this meeting to determine if anything must be done so that the following contacts with the cooperating firm may be more effective.

When the decision is made to go ahead with the follow-up work, the extension representative will make arrangements to work with the liaison man in developing details of the follow-up procedure.

Follow-Up Section

Working with the liaison man, the extension representative will develop an implementation plan including sources and costs of equipment, specific details of equipment, improved work methods, and the suggested timetable for establishing recommended practices. Plans also will be developed for instituting a training program for the implementation of the recommended changes in the demonstration store.

All the follow-up work will be done by the extension representative and the liaison man. This will be done so that as accurate a measurement of results of the work as possible can be made.
The extension representative will be available to work as closely as possible with the cooperating firm in the implementation of the recommendations for the following reasons:

1. Speed -- time limits of the contract
2. Exactness -- get things done properly
3. Training -- proper training of people essential
4. Expediency -- last minute adjustments.

The firm personnel toward which the efforts of this section of the program will be directed are the top management personnel designated previously in this paper, the store manager, and produce personnel in the demonstration store.

The exact number of contacts to be made during this section will be determined by the several test situations. Each contact will have a definite purpose and can be evaluated only in terms of the degree to which this purpose was accomplished.

All follow-up work will be carefully evaluated and bench marks set for measurement of the test method used in the fifth and final section of the demonstration store program. All needed adjustments will be made and everything will be put in readiness for application of the test methods.
APPENDIX IV

THE TEST SITUATION FOR PART B
The Test Situation for Part B

It is assumed that the uniform procedure for the application of the first four sections of the demonstration store program has been applied in each case and followed as closely as conditions permit. Deviations from the uniform procedure will be carefully recorded and an attempt will be made to analyze their effect on the results of the test method. Thus, within the limitations of the contract, every effort will be made to have the same starting point for each of the test methods.

It appears at present that the best arrangement for location of the several test situations is in the State of Ohio. This would allow the personnel on the contract to keep a closer watch over the progress of the tests and there would be few problems in fitting the tests into the on-going program. Every effort will be made to make an objective appraisal of the work in all sections of the test situation. The major problem that will arise here is to complete the desired number of tests within the time stipulations of the contract.

There is a tremendous range of possibilities for selection of firms to work with in the test situation.
Due to the apparent length of time required to work with larger retail food organizations and due to the lack of opportunity for extension of results within the smaller organizations, the field would appear to be limited to medium-sized retail food organizations. This still leaves a large range in types of firms so the following arrangement is suggested:

1. The use of four retail food organizations to be classified as —

   a. Two medium-sized corporate chains of up to forty stores in size with an average store sales of from $25,000 to $40,000 per week.

   b. Two voluntary groups of up to 150 stores in size with an average store sales of from $15,000 to $30,000 per week.

2. The application of the two test methods\(^1\), A and B. Method A will be tested in one chain and one voluntary situation, and Method B will be given the same treatment.

   It is realized that the firm situations listed above may not exactly describe those used in the test situations. However, every effort will be made to make the two chain situations as similar as possible and the two voluntary situations will be handled in the same manner in order to aid in comparability of test results.

\(^1\)See test methods for Part B in Appendix V.
APPENDIX V

TEST METHODS FOR PART B
Test Methods for Part B

In the development of these test methods, the following assumptions were made:

1. A definite difference has been built into the test methods.

2. The cooperating firm must not know that it is involved in a special test situation. The firm personnel should think that the methods and procedures used by the extension representative are the ones that he uses in the normal course of his work with food firms.

3. The extension representative will know, of course, that he is operating in a test situation. However, he should know as little about the other tests as possible.

4. The extension representatives who will run the tests will be trained in the use of the uniform procedure for the application of the first four sections of the demonstration store program at one time; so that they have the same information regarding the job to be done.

5. The extension representatives who will run the tests will be trained for the test methods separately.

Two test methods are briefly described in the discussion that follows. This is an arbitrary number of tests, but limitations of the contract make the use of a large number of tests impossible.
A. FORMAL PROGRAM SET UP IN THE COOPERATING FIRM WITH COMPLETE FOLLOW-THROUGH BY EXTENSION REPRESENTATIVE.

This method will include the following items:

1. A definite understanding between the extension representative and the decision-maker in the cooperating firm regarding individual responsibilities in the program will be arrived at before starting work on extension of demonstration store results.

2. A person shall be designated by the decision-maker of the cooperating firm to have responsibility and authority for the implementation of the program.

3. The person designated in (2) will be included in the formulation of the program.

4. A definite program for presenting the recommended changes to the cooperating firm's personnel will be formulated by the extension representative and the liaison man.
   a. Definite training sessions will be held by the extension representative for:
      (1.) Initial training of top management, intermediate management, and store people who will work with the changes.
      (2.) New personnel who will work with the changes.
   b. New equipment and procedures will be introduced into the cooperating firm on a definite predetermined schedule.

5. A definite master plan will be set up for implementation of the changes in the other stores in the firm.

6. Definite guideposts as established by Ohio State University extension service representatives and approved by the contracting officer's representative will be available to both parties to measure the progress in the extension of the demonstration store results.
7. All materials and procedures needed in implementing the extension of recommendations to other stores will be agreed upon by both parties and arrangements will be made for their use before the beginning of the test method.

8. The extension representative will be involved in all parts of the method and will help wherever and whenever his services are requested.

B. FORMAL PROGRAM SET UP IN THE COOPERATING FIRM WITH NO FOLLOW-THROUGH BY EXTENSION REPRESENTATIVE.

This method will include the following items:

1. A definite understanding between the extension representative and the decision-maker in the cooperating firm regarding individual responsibilities in the program will be arrived at before starting work on extension of demonstration store results.

2. A person shall be designated by the decision-maker of the cooperating firm to have responsibility and authority for the implementation of the program.

3. The person designated in (2) will be included in the formulation of the program.

4. A definite program for presenting the recommended changes to the cooperating firm's personnel will be formulated by the extension representative and the liaison man.

   a. Definite training sessions will be held by the liaison man for:

      (1.) Initial training of top management, intermediate management, and store people who will work with the changes.

      (2.) New personnel who will work with the changes.

   b. New equipment and procedures will be introduced into the cooperating firm on a definite predetermined schedule.
5. A definite master plan will be set up for implementation of the changes in the other stores in the firm.

6. Definite guideposts as established by the Ohio State University extension service representatives and approved by the contracting officer's representative will be available to both parties to measure the progress in the extension of the demonstration store results.

7. All materials and procedures needed in implementing the extension of recommendations to other stores will be agreed upon by both parties and arrangements for their use will be made before the beginning of the test method.

8. The extension representative will have an understanding with the decision-maker that he will help in setting up the program and then the firm is on its own. The extension representative will check on things periodically, but will make no formal follow-through efforts.

Note that the major difference in test Method A and B lies in point 8. It has been stated by some that one of the major problems in the extension of demonstration store results lies in the degree of follow-through by the extension representative. These tests are designed to yield some information on this subject.
BIBLIOGRAPHY


Beal, George M., Bohlen, Joe M., and Rogers, Everett M. "Validity of the Concept of Stages in the Adoption Process." Reprint from Rural Sociology, Vol. 22, Number 2, June, 1957.


AUTOBIOGRAPHY:

I, Jarvis Lynn Cain, was born in Fort Wayne, Indiana, October 1, 1933. I received my high-school education from Oakwood High School in Dayton, Ohio, and my undergraduate training at Purdue University, which granted me a Bachelor of Science degree in Agriculture in 1955. From The Ohio State University, I received the Master of Science degree in Agricultural Economics in 1956. While in residence there, I was graduate assistant in food merchandising. I began work immediately on the Doctor of Philosophy degree in Agricultural Economics at The Ohio State University, and in 1959 was appointed to work on a federal contract study on the uses of the demonstration store technique in extending operational efficiency research results to retail produce departments. I held this position for two and one-fourth years while completing the requirements for the Doctor of Philosophy degree.