IDENTIFYING PERSONNEL MANAGEMENT PRACTICES
THAT EFFECTIVELY ENHANCE PRODUCTIVITY IN
FOOD RETAILING
by:
Lynn W. Robbins
Associate Professor
and
Jane Rea Brothers
Graduate Research Assistant
University of Kentucky
Lexington, Kentucky

Statement of the Problem

Productivity increases have been overshadowed by wage increases since 1960. In 1979, wages paid to supermarket employees increased by ten percent while productivity barely maintained its 1978 level (Progressive Grocer, p. 132-5). In that same year, nearly one half (45.4 percent) of the retailer's gross margin went for wages (Progressive Grocer, p. 89). Labor is, by far, the largest single component of grocers' costs after costs of goods sold. Rent and real estate, the next largest cost component makes up only 6.6 percent of the retailer's gross margin. This data reveals the large potential that exists for increasing labor productivity in food retailing.

Where should service-oriented industries as food retailing look for solutions? To Bloom, "Management emphasis...on employee motivation and personnel relations generally is...an essential ingredient in...productivity improvement" (page 27). The problem is that there are numerous and divergent views as to what set of personnel management practices will best elicit optimal productivity improvement. There are now even a number of views, called contingency theories, that state that management practices must differ according to the situation. Although it may be difficult to acquire agreement overall there are some management practices generally accepted to be both essential and basic to labor productivity. Differences arise, however, in the degree to which management practices are employed (intentionally or not). The most unclear part of this, or the place of most disagreement is the part played by money versus psychic motivators toward increasing productivity.

Objectives

This paper will examine some basic management practices, the implementation of these practices and the place of money and psychic motivators to achieve increased labor productivity in food retailing. This exercise has three objectives:

1. to determine the degree to which basic management practices are being used to motivate increased labor and management productivity,
2. to relate implementation procedures to the impact that these management practices have on store success,
3. to identify the impact of monetary and psychic motivators on increasing labor productivity.
Methodology

Management audits and literature searches provided access to the "real world" of supermarket operations while a literature review provided background information on motivational theories and the treatment of monetary and psychic motivators in these theories. Managerial approaches to motivation were also examined to determine the use of presently accepted management practices and the success of these practices in their attempts to increase labor productivity.

One hundred fifty customers, 130 employees and numerous owners and managers from three different supermarkets were interviewed. Management audits were used to examine each department and the total store, along with financial data and the general management and organization of the store. These audits point out how well store operations are doing and indicate problem areas within a store where productivity and efficiency measures could be improved. Interviews with the management and employees of each store were utilized along with on-the-spot observations to determine problem areas of the store. Questions were also asked of employees concerning their work, salaries and opinions of the store. In addition, surveys of employees and customers were used as a data source.

The employee survey asked employees about their expected duties and tasks while the second survey was designed to quiz customers as to the supermarket services that were important to them and to develop a customer service rating. These questionnaires were designed to test the degree to which a predetermined set of "accepted management practices" were being utilized by the stores.

The foundation of this study was found in two general hypotheses.

1. Money will be the most effective motivator, according to management criterion for large work groups. Where other motivators supposedly work, they are either money motivators in disguise or truly other motivators not acting on the group, but rather on individual workers within the group.

2. At higher management levels, motivators other than money will become relatively more efficient. This implied that a large portion of higher salaries are interval payment for minimum service and high fringe benefits are more likely to be in-kind transfers as ratio payments.

These hypotheses were tested by examining the variable relationships of the "accepted management practices." A positive relationship between each variable pair was expected.

The approach used to evaluate these variables and the results included three levels of analysis: statistical analysis, quantitative descriptors and descriptive analyzes. Statistical analysis, and quantitative descriptors were used to analyze the results that dealt with quantitative variable relationships. Descriptive analyses were used on variable relationships where only simply observation comparisons of relationships were possible.

Results and Conclusions

Ten variable relationships were analyzed to meet the first and second objectives, determining the degree to which accepted management practices were being used and relating implementation procedures of these practices to store success (Table 1). For the first variable relationship, management expectations for workers and worker's knowledge of these expectations, and prediction was that the relationship would be positive in better managed stores. As anticipated, these variables had a strong positive relationship in the better stores and were not as strongly related in
<table>
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<tr>
<th>Relationship</th>
<th>Prediction</th>
<th>Result</th>
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</thead>
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<tr>
<td>Management Expectations/Worker Knowledge</td>
<td>Positive(^a)</td>
<td>Positive</td>
</tr>
<tr>
<td>Worker Knowledge/Manager Rating</td>
<td>Positive(^a)</td>
<td>Positive</td>
</tr>
<tr>
<td>Labor Productivity/Manager Rating</td>
<td>Positive</td>
<td>Unrelated</td>
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<tr>
<td>Store Success/Manager Rating</td>
<td>Positive</td>
<td>Unrelated</td>
</tr>
<tr>
<td>Labor Productivity/Store Success</td>
<td>Positive</td>
<td>Not supported nor disproved</td>
</tr>
<tr>
<td>Customer Service Rating/Manager Rating</td>
<td>Positive</td>
<td>Unrelated</td>
</tr>
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<tr>
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<tr>
<td>Labor Compliance/Worker Reward</td>
<td>Positive(^a)</td>
<td>Positive</td>
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\(^a\) These variable relationships were predicted to be positively related in only the better managed stores.
poorer stores. The prediction was similar for the relationship between worker knowledge of management expectations and the manager's ratings of worker performance. Similarly, these variables were positively related for better stores.

Labor productivity and the manager's ratings of performance were predicted to be positive. The results showed that little if any relationship was found between the variables. The variable relationships of store success and the manager's ratings, and of labor productivity and store success were predicted to be positive. The prediction was incorrect, however, for the relationship between store success and the manager's ratings was found to be unrelated. The analysis neither supported nor disapproved a positive relationship between labor productivity and store success. Although it was assumed that a store with a high level of productivity would have a high level of store success, the data did not support the assumption. Here, it is possible that the labor productivity measurement was at fault.

The variable of customer's service rating and the manager's rating of worker performance were determined to be unrelated. The prediction, however, was that a positive relationship would be found.

The variable relationship between labor productivity and the customer's service rating was neither supported nor disproved due to an error which may have existed in the labor productivity measurements. The prediction was, however, that these variables would be positively associated. The variable relationships of worker knowledge and labor's compliance, labor's compliance and the manager's ratings, and labor's compliance and worker rewards were predicted to be positively related in other stores. This research found these predictions to be correct.

From the analysis of the variable relationships, the conclusion was reached that accepted management practices were being used to motivate increased labor productivity, and that implementation of these practices led to store success. Further breakdown of the variable relationships of management practices indicated that those that were positively related were more frequently used to help motivate labor productivity. These were:

1. management expectations for workers and workers knowledge of these expectations,
2. workers knowledge and the manager's ratings of worker performance,
3. worker knowledge and labor compliance to management expectations,
4. labor compliance and manager's ratings,
5. labor compliance and worker rewards for meeting management expectations.

It was assumed that positive associations of these variable relationships in management practices would benefit productivity since workers could not produce satisfactorily if they did not know what to do or if they were not rewarded when they did it. Finally, the research revealed that positive relationships did not exist between store success and manager rating, or labor productivity and manager rating.

Some stores exhibit more accepted management practices than others in motivating labor productivity. The management practices utilized are apparently a function of whether managers are Theory X or Theory Y oriented. A Theory X management style is based upon the belief that most people dislike work, and, therefore must be closely directed to get them to work. Theory Y, on the other hand, assumes that people enjoy work and will exercise self-direction and self-control when pursuing their tasks and management would be supportive of workers rather than directive.
To examine the third objective of this study, the impact of monetary and psychic motivators, two additional variable relationships were examined. The first variable relationship relating to objective three was labor productivity and group size. This relationship was expected to be negative so that stores with high levels of productivity would have a smaller effective group size and low level productivity stores would have larger effective group sizes. The expectation was supported.

Before the results of the analysis are presented, however, it is important to distinguish between effective group size and actual group size. Actual group size describes how employees are divided into work groups within various departments, such as meat, produce, deli/bakery and grocery. Effective group size, on the other hand, describes the "attention" groups that employees are placed in according to management's monetary and non-monetary (psychic) reward policies. For example, within the meat department, there may be five employees, the department head and four subordinates. If the store manager treats each employee in an identical manner, both monetarily and non-monetarily, then the group's actual and effective group size is the same, five. The store manager, however, may give special attention, either personally or monetarily, to two of the employees, the department head and one subordinate. Although the actual group size remains at five, there are now two effective group sizes, one of size two and the other of size three.

Examination of labor productivity ratios showed that Store A possessed the best productivity levels while Store B had much lower levels of productivity. Observations of group size in each store revealed that Store A had the smallest effective group size and Store B the largest effective group size. The impact of group size and psychic motivators was analyzed by re-examining the labor compliance and worker reward relationships for each store in conjunction with labor productivity. In Store A, workers were determined to be rewarded either with promotions and merit raises, or parallel moves into preferred work areas while Store B employees were compensated, but not necessarily for labor compliance. Store A employees, however, received additional rewards, although non-monetary that employees in Store B did not. The management in Store A tended to treat each employee as an individual with encouragement and support given a personal basis. In Store A, an employee was involved with a serious personal problem that was affecting his attendance as well as job performance. Individual consideration was given to this employee by the manager at a meeting where the problem was discussed and an effective solution arrived at. A second example concerned the scheduling of employee work hours. Consideration was given to employees for the days and the number of hours to be worked so that family matters and schooling could be pursued. Store B's management, on the other hand, seemed to treat all workers without consideration to their personal needs whether they were at the management or employee level of the organization. Non-monetary (psychic) rewards reduced the effective group size so that Store A had the smallest effective group size and Store B the largest in terms of rewards.

The foundation of this research was the primary hypothesis that money would be the most effective motivator, according to management criterion, for large work groups. Managerial non-monetary rewards (individual attention) given to employees tend to reduce group size. The conclusion, then, that money is the most effective motivator for large groups is both correct and incorrect. It is self-fulfilling in that non-monetary or psychic motivators reduce effective group size leaving money as the only possible motivator for large groups. It is incorrect because psychic motivators generate more
productivity in large groups...by effectively making them smaller.

The secondary hypothesis was that at lower management levels, money would be the most effective motivator whereas at higher management levels, motivators other than money (psychic motivators) would become relatively more efficient. As with the first hypothesis this hypothesis was not supported. Money was the most effective motivator for large groups as non-monetary rewards tend to reduce group size. Since most large groups are found at lower management levels, money should be the most effective motivator because when large work groups exist and individual attention is not applicable, almost all rewards are in dollars. Apparently, however, where large work groups exist, labor productivity levels are lowered. Psychic motivators can be used to divide large work groups into effective smaller groups and as a consequence increase productivity levels. Therefore, non-monetary rewards could be more effectively used at lower management levels. At higher management levels where groups are smaller and more individual situations exist, psychic motivators are also appropriate.

Implications

This study has attempted to provide a descriptive foundation of some basic management practices, the implementation of these practices and the place of money and psychic motivators to achieve increased labor productivity. Many parameters and variable relationships have been identified that could be used in an efficient evaluation of productivity-motivating practices.

Money was identified to be a more effective motivator in large work groups because of its ability to reward without discrimination. In smaller effective work groups, psychic motivators can be used more effectively. Labor productivity in large groups, however, has been determined to be at lower levels than in smaller effective work groups. Psychic motivators can be used as an effective means of increasing labor productivity in large work groups. Monetary rewards would compensate individuals on a universal basis within the group and psychic motivators would decrease the effective group size while increasing productivity.

Analysis of the variable relationships has shown that store managements differ in their successful use of these accepted management practices. This study has revealed that Theory Y management approach may be most helpful in the efficient use of accepted management practices for boosting supermarket employee productivity levels.

FOOTNOTES

1 References to labor productivity can be interpreted to mean management as well as employee productivity.

2 The variable relationships of "accepted management practices" were summarized in an earlier study by Lynn W. Robbins, Associate Professor in Agricultural Economics at the University of Kentucky. These management practices are those that were expected to be found in the stores as indicated by the hypothesized positive relationships.

3 A positive relationship between two variables indicates that the variables are consistent with one another in that if one variable has a high (low) value, then the other variable would also be high (low).

4 A distinction was made between those stores that were better managed and those stores that were not, as it was felt that many of the variable relationships would be found to exist in the better managed stores, but not in the poorer stores. This distinction was based upon on-the-spot observations by the audit team and through interviews.
with the management and employees in each store. In addition, each store's store success ratio was examined to reinforce the difference. Store A was determined to be the better managed store with a store success ratio of 1.02 followed by Store C and then Store B with store success ratios of .80 and .52 respectively. Store success ratio is defined as weekly average departmental or total store sales divided by the industry standard.

Labor productivity was measured by labor expense as a percent of total store sales and industry standard data for this ratio.

REFERENCES


LOSSES IN THE U.S. FOOD DISTRIBUTION SYSTEM:
OVERVIEW AND SUMMARY

by:

John M. Halloran
Thomas R. Pierson
and
John W. Allen
Michigan State University
East Lansing, Michigan

Introduction

This paper is one of several reports resulting from research contracted by the National Science Foundation - Research Applied to National Needs (NSF-RANN) to establish estimates of the general magnitudes and locations of "food losses" occurring in the food distribution system.¹ It presents a brief overview of the objectives and the procedures used, as well as summarized findings from the study. Due to the large size of the study and the broad spectrum of food marketing information collected and analyzed, only highlights of the results and their implications are provided in this report. The findings, in turn, illustrate several economic principles that must be considered in any discussion of "food loss" prevention or reduction. Finally, a number of requisite needs are identified which must be met before significant reductions in food losses can be attained on a systems-wide basis.

The Study

"Food losses" is a term that is subject to many interpretations. The purposes and nature of this study dictated the use of a number of different "food