MARKET PLANNING FOR
AGRICULTURAL FIRMS

Thomas F. Funk

Extension Bulletin AE/74/5
April 1974
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>STRATEGY PLANNING</td>
<td>4</td>
</tr>
<tr>
<td>Identification of Market Segments</td>
<td>4</td>
</tr>
<tr>
<td>Selection of Target Markets</td>
<td>8</td>
</tr>
<tr>
<td>Development of a Marketing Mix</td>
<td>10</td>
</tr>
<tr>
<td>CASE EXAMPLE</td>
<td>13</td>
</tr>
<tr>
<td>ADVANTAGES</td>
<td>17</td>
</tr>
</tbody>
</table>
INTRODUCTION

In recent years a rather dramatic shift of orientation has been occurring in business. In the past, major emphasis has been on production. Problems relating to production technology, efficiency, internal organization, and the allocation of resources were of paramount importance to most firms. Some emphasis was placed on sales, but largely from the perspective of pushing products. Sales was viewed simply as another step in the production process. Marketing, in the true sense of the word, was not an established concept.

All of this is changing. Modern management is evolving from a production orientation to a marketing orientation. This, of course, does not mean that production problems are no longer important, nor that management does not concern itself with these problems. It does mean, however, that the major organizational thrust in business is now being provided by marketing rather than production. Production is now being viewed as an important step in the marketing process.

This new marketing orientation is called the "marketing concept." The central theme of this concept is that the major motivation of a firm should be to seek to meet the needs of customers, at a profit. According to the marketing concept, a firm "keys on the customer", but requires that all marketing activities focus on specific company objectives--profit, sales, volume, and market share targets. Thus the basic idea of

\footnote{Many of the ideas in this paper are originally attributed to Jerome McCarthy and Phillip Kotler. For a discussion of this topic in the context of consumer goods marketing see their excellent books: E.J. McCarthy, Basic Marketing. (Homewood, Ill.: Richard D. Irwin, 1971) and P. Kotler, Marketing Management. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972)}
this philosophy is that all of the activities of the firm should be oriented toward meeting the needs of present and potential customers, so long as these activities contribute to the attainment of the firm's goals.

At first glance this seems to be a simple and rather obvious concept. Anybody knows that firms exist to serve the needs of customers, and that by doing this, they seek to meet certain performance goals. However, this has not always been, and in many cases still is not, the organizing theme in business. While a lot of lip service has been paid to the marketing concept in the past, until recently it has not emerged to its present position of prominence in business. To see that this is true, one merely needs to observe the manner in which production oriented firms operate.

In a production-oriented firm, what planning is done is organized around the production function. Sales estimates are made based upon the projection of historical sales trends, or in some cases, upon the combined judgment of the management team--most of which is composed of production men. Little or no attention is given to the relationship between the marketing program--pricing policy, advertising strategy, distribution channel--and the sales forecast. In terms of research and development, the group responsible for this function is given a budget which they must not exceed, but little or no guidance as to what to research or develop. Management simply hopes they will come up with something the market will like and accept. This type of firm is also characterized by little or no marketing research. This function is not viewed as a priority area since there are still too many other problems to solve.
Perhaps the most telling characteristic of a production-oriented firm is its concept of the market. It views the market as one, large, homogeneous group of customers that have similar needs. In addition, it either assumes, or believes, that all customers will respond to various marketing programs in the same way. Using this approach, the firm is viewing the market in terms of some "average buyer", which may or may not exist.

A marketing oriented firm, on the other hand, plans around the marketing function. The basic motivating force in such a firm is to serve the needs of customers at a satisfactory profit. This organizing theme provides the basis for planning in this type of firm. For instance, in a marketing oriented firm, the sales forecasting problem is not viewed simply as an extrapolation of trends, but rather careful attention is given to the relationships between marketing programs and anticipated level of sales. Thus instead of taking sales as given, management is aware of the fact that its actions will influence the level of sales achieved. With this orientation, the firm is in a superior position to plan its program to meet its sales and profit objectives.

A marketing oriented firm, with its emphasis on customer needs, recognizes that the market it currently serves, or potentially could serve, is very heterogeneous. For this type of firm there is no such thing as an "average buyer." Instead, it views the market as a collection of groups of buyers, each group having different product and service needs, and different responses to marketing activities. With this basic point of view in mind, the firm can evaluate each market segment in terms of estimated profitability, and on this basis, determine where to place its major marketing emphasis. Furthermore, once segments have been identified and selected, it can tailor its marketing strategy to the specific needs of these groups. This pinpoint
approach is more likely to meet the specific product and service needs of individual customers than an approach which ignores the inherent differences among buyers.

STRATEGY PLANNING

One of the principal tasks of management is strategy planning. This process involves establishing a general marketing plan for the firm, usually for the next two to five years. As the term strategy implies, this plan is general, not specific; it gives overall direction to the marketing program, but requires much greater detail before it can be successfully implemented. By keeping the planning on a broad, general basis at this stage, it allows the manager to view the market with the proper perspective to satisfactorily perform this task.

The development of a marketing strategy involves three distinct, yet interrelated steps:

(1) Identification of market segments,
(2) Selection of target markets, and,
(3) Development of a marketing mix

Identification of Market Segments

The first step in the development of a marketing strategy involves the identification of market segments. Recall that in our earlier discussion of the differences between production and marketing oriented firms, it was pointed out that perhaps the major difference was in terms of how these types of firms viewed the market. In production oriented firms the market was viewed in terms of some "average buyer." Few, if any, distinctions were made among groups of buyers in terms of their product needs or susceptibilities
to various marketing programs. In marketing oriented firms, on the other hand, the market is viewed as a collection of groups of buyers. Each group is different from the others in terms of product and service needs, and in terms of their response to marketing programs. Thus each group forms a separate market segment.

In this step, management is interested in breaking a large, heterogeneous market down into smaller, more homogeneous groups. For instance, in the fertilizer industry, all farmers in the Province of Ontario might be considered the total market. Within this total market, smaller, more homogeneous groups might be defined in terms of size or type of farm for different geographical areas. If such a division produces significant differences among groups in terms of product and service needs, but only small differences within groups, then meaningful target markets have been defined. On the other hand, if such a division produces groups with as much variation within as among groups, then relevant target markets have not been defined and other bases for segmentation should be used.

The idea of market segments is shown in Figure 1. Figure 1 (a) shows a market consisting of twelve buyers before it has been segmented. In Figure 1 (b), the market has been completely segmented—here each buyer forms a separate market segment. While this approach would be feasible in situations where there are only a few buyers, and each purchases large quantities, it is not relevant to the usual situation faced by marketers of farm supplies. Figure 1 (c) shows the same market after it has been segmented by type of farm. This produced three segments: G, grain farmers; L, livestock farmers; and D, dairy farmers. Finally, Figure 1 (d) shows
Figure 1. Alternative Approaches to Market Segmentation

(a) No Segmentation

(b) Complete Segmentation

(c) Segmentation by Type of Farm

(d) Segmentation by Type of Farm and Size of Farm
the market segmented by type of farm and size of farm. Using two size categories, large and small, this produced six segments: LG, large grain; SG, small grain; LL, large livestock; SL, small livestock; LD, large dairy; and SD, small dairy. If the groups created by this division are homogeneous in terms of product and service needs and responses to marketing programs, then the characteristics type and size of farm are useful segmentation variables and specific marketing strategies can be defined for each target market.

The type of variables which will produce useful market segments are many times difficult to define and certainly vary from one product class to another. For example, in the case of feeds, the type of livestock produced may be a relevant segmentation variable, whereas in the case of fertilizer a better variable may be the type of crop produced. In many cases, variables which at first seem to produce useful market segments may not seem so useful upon closer examination.

Although virtually any characteristics of the farmer or his farm could be used to define target markets, there are certain conditions which make some variables better than others for this purpose. In general, the usefulness of a particular variable for segmentation purposes increases as the following conditions are approached:

1. Measurability - the extent to which information is available on the characteristic,
2. Accessibility - the extent to which the firm can focus its marketing efforts on the market segments, and
3. Substantiality - the extent to which segments are large enough to be worth considering for separate marketing programs.
The logic of the above conditions is immediately clear. For a characteristic to be most useful, it should be measureable, accessible, and substantial. The closer any characteristic comes to meeting these criteria, the better it will be for segmentation purposes. For instance, a variable such as size of farm probably rates high on all of these conditions. Information is readily available on this variable from Agricultural Census data; different size groups of farmers can be selectively reached; and, depending upon the exact definition of size used, each group would form a large enough segment for separate marketing treatment.

Table 1 presents a short list of characteristics which might be used by marketers of farm supplies for defining market segments. While some of these variables fall short of meeting the above conditions, in many cases they may be superior in their ability to isolate homogeneous market segments, hence useful segmentation variables.

**Selection of Target Markets**

Once a large number of potential target markets have been defined, management's attention focuses on the problem of selecting those groups to which the company wishes to appeal.

In order to make this decision, management must carefully analyze each potential target market. Although many criteria could be established to aid in the selection of segments for separate marketing action, the most relevant is long term profitability. Those segments which offer the greatest long term contribution to profit would be selected over those with lower profit potential.

To analyze the long term profitability of a segment is no easy task. Many factors need to be considered in an adequate appraisal. Some
Table 1. Useful Characteristics in Segmenting the Farm Supplies Market

<table>
<thead>
<tr>
<th>SOCIODEMOMIC CHARACTERISTICS</th>
<th>FARM CHARACTERISTICS</th>
<th>PERSONAL CHARACTERISTICS</th>
<th>BUYER BEHAVIOUR CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Rental Status</td>
<td>Risk Aversion</td>
<td>Usage Rates</td>
</tr>
<tr>
<td>Sex</td>
<td>Size of Farm Operation</td>
<td>Innovativeness</td>
<td>Buyer Motive</td>
</tr>
<tr>
<td>Family Size</td>
<td>Gross Farm Income</td>
<td>Source of Information</td>
<td>End Use</td>
</tr>
<tr>
<td>Income</td>
<td>Farm Efficiency</td>
<td>Rationality</td>
<td>Brand Loyalty</td>
</tr>
<tr>
<td>Education</td>
<td>Specialization</td>
<td>Technological Competence</td>
<td>Dealer Loyalty</td>
</tr>
<tr>
<td>Family Life Cycle</td>
<td>Years Farming</td>
<td>Group Participation</td>
<td>Price Sensitivity</td>
</tr>
<tr>
<td>Religion</td>
<td>Non-farm Work</td>
<td>Personality</td>
<td>Service Sensitivity</td>
</tr>
<tr>
<td>Race</td>
<td>Type of Farm</td>
<td>Attitudes</td>
<td>Advertising Sensitivity</td>
</tr>
<tr>
<td>Nationality</td>
<td>Country of Residence</td>
<td>Knowledge</td>
<td>Opinion Leadership</td>
</tr>
<tr>
<td>Social Class</td>
<td>Tillable Acres</td>
<td>Reading Level</td>
<td>Product Knowledge</td>
</tr>
</tbody>
</table>
of the more important are:

1. **Size.** Is the segment of sufficient size now that it would pay to design a separate marketing program for it? How large will the segment be next year? In five years?

2. **Competition.** Where are competitive firms heading? What segments do they seem to be trying to key on? What are the particular product strengths and weaknesses of competitive firms? How do our products compare with theirs?

3. **Resources.** What restrictions are imposed by our own resources? Where do our current products seem to fit the best? For what segments can we develop new products or services? How many dollars are available for advertising? Promotion? Salesmen?

4. **Costs.** Are there differences among the segments in terms of marketing and distribution costs? How do these costs affect the profitability of each segment?

**Development of a Marketing Mix**

The third step in the development of a marketing strategy is the selection of a marketing mix. This step involves defining separate marketing programs for each target market.

In developing a marketing program, attention is given to all of the detailed aspects of such programs. For example, product characteristics, package, brand name, associated service, advertising media, sales personnel, price, discounts, and credit policies are all elements of a marketing strategy. In the final marketing plan, decisions must be made on each of
these detailed elements. However, at the initial planning stage, it is often unnecessary and undesirable, to consider the program in such detail. Such a course would have the tendency of focusing attention on detail rather than on the overall objectives of the plan. As a result, it is often wise to abstract from details and view the effort in a more aggregate manner.

To simplify the task of developing marketing strategies, it is common to view a strategy in terms of four basic variables. These variables are called the "four P's" or the "marketing mix," and consist of product, price, place, and promotion.

The product variable is concerned with providing the right product for each target market. Since target markets may vary in terms of specific product needs, it is necessary to evaluate the specific needs of each segment and relate these needs to existing or potential products. In addition to product characteristics, this element also includes branding, packaging, and associated services.

The second basic variable in a marketing mix is price. While this area is primarily concerned with the determination of product price, it also includes various types of discounts and terms of sale. The importance of this area in marketing management is often underestimated. While it is true that in some competitive situations managers may not have a great deal of discretion in setting prices, in other situations this ability is substantial. In addition, even in highly competitive environments, management frequently has considerable flexibility in establishing discounts and adjusting the terms of sale. Furthermore, a close examination of target markets may show some variation among segments in terms of price
sensitivity. Depending upon how the segments are defined, it may be possible to take advantage of this situation by establishing different prices or discounts for each target market. Since there are many legal restrictions involved in pricing, these should be thoroughly investigated before discriminatory pricing practices are employed.

The place variable in the marketing mix refers to the type of distribution channel used to move the product to each target market. For some firms, such as small retailers, this decision area is not relevant since they represent the last stage in an existing distribution chain. For other firms, where the number of alternative distribution channels is greater, this becomes a more important marketing decision. Essentially, the problem in this area is to determine which channel will best serve the needs of existing and potential customers while at the same time keeping distribution costs at a reasonable level.

Finally, promotion refers to all marketing activities which directly attempt to persuade a customer to purchase a particular brand. Included in this set of activities are advertising, special promotions, personal selling, and point of sale displays. All of these activities involve communication between the buyer and the seller, and all attempt to increase the buyer's awareness and knowledge concerning the brand. Because it is very easy to develop different promotional programs for different target markets, these activities are frequently used in pinpoint marketing.

The development of a marketing mix thus involves determining the product, price, place, and promotion for each target market. In the above
discussion, each element in the marketing mix was treated separately. In the development of a strategy, all of these elements have to be considered simultaneously since they are obviously highly interrelated. For instance, promotional decisions often depend upon channel decisions. In a direct channel from the manufacturer to the buyer, a promotional program emphasizing direct mail might be quite appropriate. On the other hand, if a channel composed of small retailers is selected, point of sale displays may be more appropriate. Similar interrelationships exist among all the marketing mix variables.

CASE EXAMPLE

In order to more fully appreciate the method of market planning discussed in this paper, a case example will be presented. For the sake of this example a hypothetical firm in the seed corn industry will be used.

As a first step in the market planning process, the case firm performed a detailed market potential study of its sales area. Based upon the results of this study the firm concluded that two variables--type of farm and size of farm--produced segments which were relatively homogeneous, measurable, accessible, and substantial. As a result, this initial planning produced four market segments--large grain farmers, large livestock farmers, small grain farmers, and small livestock farmers.

Given these four market segments, the firm then analyzed each segment in terms of its long range profitability. A simplified example of this process for the small livestock segment is shown in Figure 2. Although many factors must be considered in such an assessment, the procedure illustrated in Figure 2 provides a useful summary of this process. Once
<table>
<thead>
<tr>
<th>Type of Farm</th>
<th>Size of Farm</th>
<th>Small</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock</td>
<td>Analysis Cell</td>
<td>$200,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>Grain</td>
<td></td>
<td>$400,000</td>
<td>$800,000</td>
</tr>
</tbody>
</table>

Figure 2. Example of Segment Analysis

this analysis has been completed for all segments, the firm is in a position to select those to receive separate marketing treatment. We will assume in this example that all of the segments showed long range profit potential, and, as a result, the firm decided to develop separate marketing programs for each.

Having selected its target markets, the attention of this firm then turned to developing separate strategies for each of the segments. The basic elements of these strategies are shown in Figure 3. In each case, the strategies are defined to attempt to meet the precise product and service needs of each group. In addition, the price, place, and promotion variables have been defined to take advantage of the varying response of each group to different marketing activities. Each of the four strategies is designed to be the best combination of marketing activities for the particular target market under consideration.

Obviously, the strategies as they are presented in Figure 3 are too broadly defined to be implemented directly. Many questions remain to be answered before these strategies become realities. For instance, how many salesmen will be needed, what should be the advertising appeals, what media should be used, how many varieties in each category should be produced, etc? Despite these unanswered questions, the basics of the marketing plan have been established. Meaningful target markets have been defined and separate strategies developed for each of these target markets. Given this basic plan, it is a relatively easy matter to add the necessary detail to complete the plan.
Figure 3. Example of Development of Marketing Mix
ADVANTAGES

The method of market planning described in this paper offers several important advantages over some of the more traditional planning methods. First, the selection of target markets, and strategies consistent with these target markets, often will lead to the development of better marketing strategies. Through a sincere attempt at matching the precise product and service needs of buyers with the seller's existing and potential products and services, both parties in the transaction should gain. The buyer will gain in the sense that he will have an opportunity to purchase a product which is closer to his real needs, while the seller will gain by creating more satisfied buyers, hence a higher percentage of new and repeat purchases. In addition, by formulating separate strategies for each target market, the seller can expect to achieve a higher degree of effectiveness for each dollar committed to his marketing program.

A second advantage of this method of market planning is that it provides a definite plan which can be evaluated. At the conclusion of a selling season, management can compare planned performance with actual performance in each of its target markets. Such comparisons can provide valuable guidelines for formulating future strategies. For instance, this review may show that the firm actually lost market share in one segment while achieving substantial gains in the others. Upon closer examination it may become apparent that to compete effectively in this submarket, the firm must spend a considerable sum to develop an improved product which has particular appeal to the individuals in this target market. Depending upon the amount involved and the future potential of the segment, this investment
in product development may or may not be worthwhile. If it isn't considered to be a good investment, the firm might be better off to terminate its marketing efforts in this segment and instead, expand its efforts in its more profitable target markets. It is only when the marketing program of the firm is planned on a target market basis, with individual strategies identified for each target market, that this type of analysis is possible.

A third advantage deals with improving communications among managers in the firm. In the process of market planning, each person involved brings to this exercise his own particular set of experiences and assumptions. Frequently, these experiences and assumptions are different from one person to another and are not verbalized in the planning process. The process of market planning described in this paper has the tendency to bring these experiences and assumptions "out on the table" so they can be examined by all the participants in the planning process. If these experiences and assumptions are significantly different from one person to the next, attention can be focused on achieving some unanimity of thought in this respect before moving on to the determination of strategies.

A final advantage of systematic market planning deals with innovation. Many successful marketing strategies are the result of some real innovation either in terms of the product, some associated service, the method of distribution, or the promotion which builds the demand for the product or service. It is clear that the most important factor involved in marketing innovations is the imagination of the market planner. Without a great deal of imaginative thinking, new marketing innovations are not likely.

While it is no substitute for imagination, systematic market planning
can provide a framework in which the imaginative mind can flourish. For instance, the process of defining target markets can easily lead the planner to a new concept of his business and product. In the fertilizer industry, for example, the planner might see that a traditional definition of the market excludes a large segment of plant food users—home gardeners. Further analysis may indicate that this is a growing, profitable segment for the firm.

Once target markets have been defined, there is further room for marketing innovations. Detailed analysis of a segment may show that the product and service needs of that segment are not being adequately met. For example, in the seed example presented earlier, a close examination of the large farmer segment may reveal a real need for a calendarization service for these farmers. Or in the case of the large livestock farmers, it might very well be that existing varieties do not have the feeding characteristics which would be desirable. In either case, product innovations could provide the initiating firm with a significant competitive advantage.

While systematic market planning is no guarantee that these opportunities will be recognized, in many cases it will aid management identify areas for further analysis and imaginative thinking. The result of this process could very well be some important marketing innovation.

Although systematic market planning offers progressive firms several important advantages, there is one important drawback which should be recognized. In most applications it is almost certain that this approach to marketing will be more costly than simple, undifferentiated marketing. For one thing, it will require a greater degree of coordination and supervision
if it is to be successfully implemented. In addition, selectively reaching certain target markets with individualized programs and appeals most likely will cost more per person reached than a broad, blanket coverage. Production costs too may be higher using differentiated marketing because of the smaller production runs of special products for each market segment. Yet despite the increased costs involved, the improved effectiveness of the overall marketing program may easily outweigh the disadvantage of higher marketing costs. However, it is important that firms are aware of the potential for higher costs before they embark on a program of differentiated marketing. The increased marketing costs must be carefully weighed against the potential returns from a more effective, pinpoint marketing program.