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AGRIBUSINESS MANAGEMENT

MARKET SEGMENTATION AS AN AID TO AGRIBUSINESS MARKETING

As part of a recent survey of retail fertilizer outlet managers, I had occasion to ask each person interviewed to describe their "market." In most instances, their response was less than surprising. Some managers would respond with a vague description of the geographical boundaries within which they currently serve customers. Others would describe their market within the context of the occupational pursuits of their customers, e.g., farmers. Still others would argue that their market is best described by a listing of their current product line and the competitive entities active in each.

Many agribusiness managers simply do not have a clear understanding of the true depth and breadth of their market. Instead, they view their market from within a limited or restrictive scope. What is a market? Is it possible that a market has many different dimensions? Is it possible that an agribusiness firm might capitalize on the multi-dimensioned nature of their market? Does a segmentation of these numerous market dimensions provide the basis for an enlightened marketing program for agribusiness firms? The objective of this discussion is to provide answers to these questions. As a result, it is my hope that agribusiness managers will have a more thorough and appreciative understanding of what their market is and how best to serve it.

What Is A Market?

Few agribusiness managers have neither the time nor the inclination to conduct an

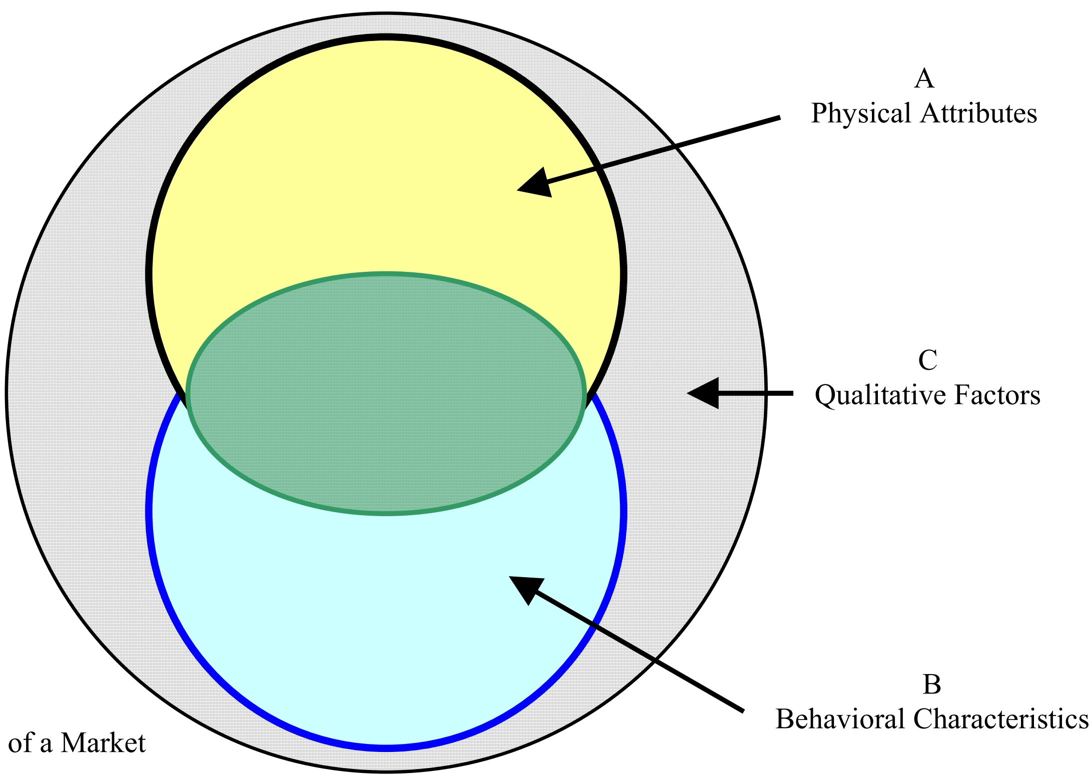

Figure 1. The Confines of a Market

extensive review of the professional literature describing the dimensions of a market. Surprisingly, the responses from my survey suggest that those persons interviewed were not really so deficient in that regard. Each retailer viewed their market from within a single dominant dimension. If I had simply combined these single, but different, responses, I would have before me a reproduction of the true market as described by professional writers. To acknowledge all these writers and their individual contributions would require endless pages. Instead, I shall try to graphically describe the multiple dimensions of a market without extensively documenting their origins.

A "market" can be viewed as a composite of three basic components: physical attributes, behavioral characteristics, and qualitative factors. Within each of these three highly interdependent components can be found a series of dimensions. Figure 1 and the following discussion attempt to describe graphically the nature of the relationships between components and dimensions.

Addressing first the physical attributes of a market (A), these would likely be the most familiar to the agribusiness manager. As shown below, the physical attributes component of a market contains three basic dimensions.

Examples of each of the three dimensional factors suggest a high degree of quantification. In fact, subjective judgments fulfill almost no role in describing these dimensions. Perhaps this is why many agribusiness managers feel most comfortable

Physical Attributes Component (A)

Dimensions:	(1) Size	(2) Geographic Location	(3) Demographic Features	
	No. Units Sold	Physical Boundaries	Sex	Income
	$ Sales Volume	$ Sales by Region, City, Area	Age	Race
(Examples)	% Market Share	Locational Attributes	Occupation	Religion
	Variety of Product Offerings	Types of Competing Outlets	Marital Status	Education

Behavioral Characteristics Component (B)

	(1)	(2)	(3)	(4)	(5)
Dimensions:	When Purchases Are Made	How Purchases Are Made	Purchasing Influences	Socio-Economic-Psychological Profile of Purchases	Reasons for Purchasing
	Month	Impulse	Who Uses Product	Social Class	Utility Value
	Week	Brand Loyalty	Who Buys Product	Value Structure	Psychological Pressures
(Examples)	Season	Direct Request	Who Influences	Introvert-Extrovert	Major Uses
	Day of Week	Frequency of Purchase	Buying Decision	Blue Collar – White Collar	Minor Uses
	Time of Day	No. Units Bought			

in viewing their market exclusively from within this context.

As we address the second of our market components (B), we are forced to enter that area where both subjective and objective measures are required. For example, you will note that such behavioral characteristics as those describing when purchases are made remain highly quantifiable, while those describing the reasons underlying customer purchases are almost purely subjective.

Returning to Figure 1, you will note that Physical Attributes and Behavioral Characteristics are partially super-imposed, one upon the other. This is intended to graphically describe the high degree of interdependency between these two components. Examples of this interdependency are not difficult to find in agribusiness markets. Most managers are aware of selected geographical locations where such factors as brand loyalty or the social-political views of their occupants uniquely impact those marketing strategies employed. I recall this from my own days as a youth in a rural area of southern Illinois. A region near my home was populated with a high concentration of persons of French descent. Many of these people continued to speak the French language and attend a local church characterized by strict hierarchical levels. The agricultural practices and purchases undertaken by the church leadership, by and large, dictated the actions of all the community occupants. By capturing the interests of the church elders, an agricultural marketer was nearly assured of capturing the major share of area sales.

Encompassing both market components mentioned above, one finds that qualitative factors (C) impact both. As illustrated in Figure 1 and shown below, these factors are largely based on subjective measures and expressed in relative terms. The dimensions are suggestive of the attitudinal characteristics of your customers.

Qualitative Factors (C)

Dimensions:
1. Heavy vs. light users.
2. Frequent vs. infrequent purchasers.
3. Firm vs. indefinite intention to purchase soon.
4. Favorable vs. unfavorable attitude towards brand.
5. Risk taker vs. risk averter.

Market Segmentation

We have now established that a "market" is not a singular measure. In fact, most markets are comprised of three basic components and numerous dimensions. If an agribusiness manager views his market in a simplistic fashion, he is likely overlooking some highly important features. Indeed, one could argue that a manager's true understanding of his market is dependent upon his ability to segment that market into its multitude of integral parts (dimensions). Once this segmentation process has been completed, the manager can use the information thereby generated to more effectively design his marketing and sales programs.

Market segmentation has been steadily gaining in management popularity. By the mid-1970's, hardly a management training conference could be scheduled without this topic finding its way onto the program or into the proceedings. Within a strictly professional context, Professor Wendell Smith defined market segmentation as, "That process of market analysis based upon developments on the demand side and representing a rational and more precise adjustment of product and marketing effort to consumer or user requirements." Or, stated in layman's terms, once you discover that your customers are Eskimos, you may wish to redesign that marketing effort directed toward stimulating the sales of refrigerators.

The idea that all markets can be profitably segmented is now generally accepted within the agribusiness industry. The processed fruit industry, for example, has exploited this idea in its attempt to convince the younger U.S. consumer that juice consumption need not be restricted to the breakfast meal and is consistent with health and vitality. Even herbicide and pesticide manufacturers have now taken to the TV airwaves in an attempt to convince the more progressive farmers that weed control and good management are complementary attributes. However, one major problem remains. In many cases, the agribusiness marketer can segment his market in as many ways as he can describe his prospective customers. In the extreme, the machinery manufacturer and equipment retailer could segment their prospective customers into left- and right-handed tractor drivers, blue- and brown-eyed harvester operators, or Swahili- and non-Swahili speaking purchasers of hay balers. The relevant question, therefore, becomes a matter of determining which of these seemingly limitless alternatives is likely to prove most beneficial to the agribusiness manager. While the eye color and foreign language abilities of his prospective customers may be of little marketing value, the percentage of left-handed farmers in the U.S. may be relevant in redesigning the tractor's hydraulic controls. Such a product redesign could then capitalize on this information through a marketing and sales program which stresses the ease with which their equipment is operator-controlled.

Varieties of Market Segmentation

Several varieties of market segmentation have become popular over the past two decades. The first variety to emerge was that process linked to geographic segmentation. For those smaller agribusiness managers who were dealing with limited investment capital, and were not capable of supporting nationwide channels of distribution, they simply elected to segment their market by selling their product only in those geographic areas which appeared most promising. Later to emerge was the process of demographic segmentation. Under this variety, total markets were segmented into age and family status classifications; each then receiving a marketing message tailored to their age-linked philosophy. With the passage of time, our nation of consumers has become a more homogeneous lot. The producer of corn and soybeans in Illinois is no longer so uniquely different from his wheat-producing counterpart in Washington. Similarly, the 22-year-old college graduate of today may be just as conservative-minded as his 74-year-old grandfather. Age and location, occupation and race, income and religion have become less valid as predictors of consumer behavior in the 1980’s. They are no longer optimum bases for market segmentation strategies.

More recently, a third variety of segmentation has arisen and become known as volume segmentation. A more popularized version of this process has become known as the "heavy-half theory.” As practiced by the Oscar Meyer Company, it acknowledges that in most agribusiness product categories one-half of the customers account for around 80 percent of the consumption. A brief review of productive concentration in the U.S. agriculture economy quickly validates this premise. Anyway, if this is true, the argument goes, then agribusiness managers should concentrate their marketing efforts on that segment of the total market comprised of high-volume consumers.

The only problem with this segmentation strategy is that not all heavy-half consumers show a preference towards the same brand or product. Fertilizer retailers discovered long ago that large-volume purchasers may be comprised of two major types: those who prefer granular materials for fall applications and those who prefer liquid solution materials for springtime applications. Obviously, these two groups of farmers, although they are both members of the heavy-half segment, are not equally good prospects for the same brand or product type even though their goal of soil fertility is similar.

It should also be noted that lower-volume purchasing segments of markets often represent some of the greatest potential for growth of individual firms. The formulation of marketing and promotion programs aimed at the low-volume segments of the market have to be dealt with very carefully as well. It is possible at times to alienate these individuals towards your product and/or service if these programs imply that the product is specifically designed for large-volume users.

Each of the three varieties of market segmentation is subject to an underlying disadvantage inherent in its very nature. Each rests on an ex post facto analysis of the kinds of prospective customers comprising various segments of a market. Each relies on descriptive factors rather than causal factors. For this reason, they are no longer accurate predictors of future buying behavior; and this future behavior is of crucial interest to agribusiness managers. As early as 1968, Russell I. Haley, a prominent New York advertiser, acknowledged that none of the three varieties of market segmentation referenced the basic reason a person spends money to buy a product, i.e., the benefits a person expects to receive from the purchase. Furthermore, Haley argued that future attempts to segment a market should focus specifically on this heretofore-ignored factor.

Benefit Segmentation

The views underlying this benefit segmentation strategy are that the benefits people are seeking in purchasing a given product are the basic reasons for the existence of true market segments. Indeed, experience within the agribusiness industry has shown that benefits sought by farmers more fully determine their behavior as consumers than do their physical attributes, their demographic characteristics, or their volume of consumption. While these features are still of value to agribusiness marketers, they can no longer be heavily weighted as predictive measures.

Quite obviously, this benefit segmentation approach is based upon some ability to measure farmers' value systems. Here's where computers and multivariate attitude measuring techniques play an important role in contemporary market research. Several statistical approaches are currently available to the more serious-minded marketer. Regardless of which approach is selected, the objective is to quantitatively establish a few (3 to 6) agricultural market segments, each representing a potentially productive focal point for management's future marketing decisions. Each of the segments is singularly identified by the benefits sought by its occupant-customers, e.g., in the farm supply industry, farmers may be in search of value, standardization, ease of application, potency, reliability, or convenience. Note that it is the total configuration of the benefits sought which differentiates the segments, one from another, rather than the fact that one segment seeks but one specific benefit while another segment seeks a quite different one. In fact, the relative importance farmers attach to benefits sought may become the most effective lever in segmenting the agricultural market.

Is Segmentation Practical?

Once the dimensions are known and the market has been segmented accordingly, your marketing program can be tailored to that product benefit sought by the market occupants. For example, if price or product value is found to be a predominant benefit, your sales or promotional efforts should stress that particular economic attribute. If your selected and segmented market is found to place product potency high on the list of desired benefits, then the advertising program may be rewritten so as to emphasize the chemical test results, guaranteed germination rates, engineered drawbar horsepower, or some other measure of the product's potency. In a market where reliability is determined to be a priority benefit, an entire sales campaign might focus on maintenance-free service records, longstanding and stable yield performance, or the universality of product adaptation.

It should become readily apparent that the kinds of information obtained in the course of market benefit segmentation could have a wide range of marketing implications. Sometimes this information is useful in suggesting physical changes in a product. For example, the knowledge that many retail food shoppers selected their fresh fruit purely on the premise that product appearance was commensurate with the desired benefit of taste prompted most apple packers in the Northwest to install waxers in their packing lines. Since waxing improved most the appearance of the Red Delicious apple, Northwest producers capitalized on this rather inexpensive marketing adjustment. In other areas the agribusiness manager may use the segments identified with his market to uncover new product opportunities. As wheat growers located in the Palouse hills of eastern Washington expressed their desired benefit of reduced surface soil erosion, the need for developing minimum-till seeding equipment became more readily apparent. In addition, as ease of application was identified as a desired benefit of our farmers producing under irrigation, it was not long before a water-soluble means of fertilizer application via sprinklers found a rapid market acceptance.

Rules of Thumb for Marketers

Benefit segmentation, as an approach to improved agribusiness marketing is of particular interest because at the very least it provides management with a fresh insight into its own markets. In effect, when the segmentation process is begun, a number of smaller markets emerge where one large one was earlier believed to exist. When benefit segmentation is applied, a number of homogeneous market dimensions are uncovered and can, therefore, be used as effective marketing guides. As general rules of thumb, the following statements apply:

1. It is easier to take advantage of market segments that already exist than to attempt to create new ones.
2. No brand, label, or logo will appeal to all potential customers ... to truly cover a market you must, therefore, understand the divergent benefits sought by all its occupants.
3. New and old products should, if possible, be designed and promoted to fit the particular benefits hierarchy of some market segment.
4. Marketers who adopt a benefit segmentation strategy have a measurable competitive edge over their counterparts.
5. An understanding of the benefit segments which exist in a market can be used effectively in the design of a new product or the preparation of a sales program for an existing product.

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