MARKET SEGMENTATION PRACTICES
OF RETAIL CROP INPUT FIRMS

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Abstract

While market segmentation and the associated idea of target marketing are not new, there are questions about how the strategy of market segmentation and target marketing is being used in retail agribusiness firms. Previous research has demonstrated that distinct groups of farmers/customers exist (Alexander). However, retail crop input firms tend to be of modest size and are geographically bound. Both lack of resources and confinement to a specific geographic market present challenges for successful implementation of a market segmentation/target marketing strategy (Stolp).

In this study, market segmentation/target marketing practices were explored in two types of crop input retailers: independently owned and operated firms (9 firms) and agricultural cooperatives (11 firms). A number of questions related to market segmentation/target marketing strategy were assessed via a web-based survey and telephone interviews. Referencing Best’s seven-step framework, market segmentation is compared and contrasted by firm type; gaps in market segmentation strategy execution are identified; and challenges to implementing a market segmentation strategy are considered.

Results show that market segmentation/target marketing was employed by 85% of the crop input retailers in the sample. Key gaps identified in market segmentation strategy execution include measuring market segment attractiveness; evaluating market segment profitability; developing a product-price positioning strategy for a tailored offering; expanding the positioning strategy to include promotional and sales elements of the marketing-mix; and evaluating the progress/success with each target market segment. Addressing these key gaps will aid industry professionals as they work to serve the needs of a continuously evolving farmer/customer base.

Keywords: market segmentation, target marketing, crop inputs, distribution channel, retailer
Market Segmentation Practices of Retail Crop Input Firms

Introduction

The crop input retailer is the business entity which traditionally has served as the final link between the farmer and the manufacturer of crop inputs. Traditional crop input retailers provide fertilizer, crop protection chemicals, and seed to farmers. In addition, most crop input retailers provide a host of complementary information services and application services for these products. The crop input retailer’s customers (farmers) continue to consolidate, creating fewer and larger farms. Retailers increasingly work with a larger, more sophisticated, and more demanding customer (Akridge, et al.). At the same time, crop input manufacturers continue to merge, creating ever larger, typically multi-national, organizations. Fewer, larger suppliers reduce the retailer’s bargaining power in the purchasing relationship (Thompson and Strickland). In addition, competition in agricultural retail from new intermediaries such as consultants, brokers, wholesalers and large growers has also emerged as a formidable threat to the traditional crop input retailer (Joshua). These challenges create significant concern for the viability of the traditional crop input retailer longer term and questions about the future role of these businesses.

Marketplace changes force any firm to re-examine its business model, and reconsider how they go about creating and communicating value. For a retailer of crop inputs, this means value as defined by their grower/customer and their manufacturer/supplier. How do these firms (continue to) create value for their customers and do so as efficiently as possible?

Marketing segmentation is a marketing strategy aimed at aligning an organization’s resources with the varied needs of its targeted customers. Market segmentation, frequently employed in larger organizations, is the practice of dividing a total market into separate groups of prospects and customers which have homogenous preferences within the groups, but heterogeneous preferences between groups. (Stern, El-Ansary, Coughlan). While market segmentation and the associated idea of target marketing (approaching each segment with a unique marketing mix – product/service/information bundle, price, promotion, place, people) is not new, there are questions about how the strategy of market segmentation and target marketing is being used in retail crop input firms. Previous research has demonstrated that distinct groups of farmers/customers exist (Mwangi; Gloy and Akridge; Alexander, Wilson, Foley). However, retail crop input firms tend to be of modest size (annual agronomy sales under $100 million) and are geographically bound (the economics of the logistics of their products and services force these firms to serve a specific geographic market). Both lack of resources and being limited to a specific geographic market present challenges for successful implementation of a market segmentation/target marketing strategy (Stolp).

The purpose of this study is to assess if market segmentation strategies are employed by crop input retailers and if so, to determine what the best practices are for successful implementation of market segmentation. In addition, this study will identify the barriers to successful implementation of market segmentation strategies. More specifically, this study will:

1) identify market segmentation strategies currently employed by crop input retailers and compare and contrast keys to market segmentation strategies as suggested by the small business and marketing literature with those currently practiced by the crop input retailer; and
2) determine where market segmentation/target marketing is not widely employed by crop input retailers and identify the reasons for not pursuing this practice and the barriers to its successful implementation.

A Framework for Market Segmentation

Roger Best proposes a framework for implementing a market segmentation strategy. He suggests a set of sequential steps to be taken in a needs-based segmentation process (Figure 1). The primary benefit of needs-based segmentation is that segments are created around specific customer needs. The goal is to determine what observable demographics and behaviors differentiate one segment from another in order to make a needs-based market segmentation actionable (Best).

<table>
<thead>
<tr>
<th>Steps in Segmentation Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Needs-Based Segmentation</td>
<td>Group customers into segments based on similar needs and benefits sought by customer in solving a particular consumption problem.</td>
</tr>
<tr>
<td>2 Segment Identification</td>
<td>For each needs-based segment, determine which demographics, lifestyles, and usage behaviors make the segment distinct and identifiable (actionable).</td>
</tr>
<tr>
<td>3 Assess Segment Attractiveness</td>
<td>Using predetermined segment attractiveness criteria, determine the overall attractiveness of each segment.</td>
</tr>
<tr>
<td>4 Evaluate Segment Profitability</td>
<td>Determine segment profitability (net marketing contribution).</td>
</tr>
<tr>
<td>5 Segment Positioning</td>
<td>For each segment, create a &quot;value proposition&quot; and product-price positioning strategy based on that segment’s unique customer needs and characteristics.</td>
</tr>
<tr>
<td>6 Segment &quot;Acid Test&quot;</td>
<td>Test the attractiveness of each segment’s positioning strategy.</td>
</tr>
<tr>
<td>7 Marketing-Mix Strategy</td>
<td>Expand segment positioning strategy to include all aspects of the marketing mix: product, price, promotion, place, and people.</td>
</tr>
</tbody>
</table>

Figure 1 Key Steps in a Needs-Based Market Segmentation Process

The process begins with identifying customers’ needs in the marketplace. After grouping customers based on these needs, the second step is segment identification (Best). Each needs-based segment must be examined for demographics, lifestyles and/or usage behaviors that make it unique from all other needs-based segments. The third step is to evaluate segment attractiveness. Although the specific criterion by which to evaluate attractiveness will vary from business to business, the factors that make any market attractive are somewhat similar and include at a minimum market growth, competitive intensity, and ability to access the segment (Best).
Although meeting criterion for market attractiveness maybe sufficient, an assessment of segment profitability is necessary to truly understand the profit potential of each segment. Best measures profit potential as the net marketing contribution expected for a given level of market segment penetration:

Net Marketing Contribution = [Segment Demand * Segment Share * (Revenue per Customer – Variable Cost per Customer)] – Marketing Expense

The fifth step is to create a tailored offering for each target segment that will deliver value to respective customers. This tailored offering should include the benefits that the particular customer segment looks to gain from the purchase. Conversely, it should exclude anything which the respective target segment finds of no value (Best). The sixth step in Best’s process is to conduct a market segment acid test through “segment storyboards.” The goal is to gauge whether the new, tailored offering satisfies the needs sought by potential customers. The general idea is analogous to a ‘test market’ evaluation of a new product. The strategy is considered successful if a majority of the potential customers from a given target segment select the “segment storyboard” created for them (Best).

The seventh and final step is focused on executing the market segmentation/target market strategy. The segment positioning strategy may include both product and price, but the market segmentation strategy must also incorporate promotion (communication) and people and placement (sales and distribution) strategies (Best). This framework provides a useful guide for exploring segmentation practices in the retail crop input industry.

In practice, few detailed accounts of market segmentation strategies are found in the trade press for the crop input industry, and there is virtually no published academic work. Since January 2005, some material dealing with market segmentation has appeared in the trade press focused on the crop input retailer (Ruen; Schrimpf, 2005; Schrimpf, 2006). In September 2005 an article in Agrimarketing emphasized the importance of local crop input retailers’ influence over growers’ input buying decisions. Because of this strong local retailer influence, manufacturers of crop inputs have focused their energy on marketing to segments. Rob Neill of Syngenta, a major manufacturer of crop inputs, commented, “We realize more and more that segmenting the market is key to success. The more segmenting we do, however, the more complex the marketing and sales job becomes” (Grooms). A market segmentation strategy could serve to direct the retailer’s role as a conduit for products, technologies and support; all important elements of the retailer’s role (Joshua). At question is if such strategies are employed, and if so, how are they executed.

Data Collection and Methods

This research compares and contrasts market segmentation practices between two groups: independently owned crop input retail businesses, and diversified agricultural cooperatives. Individuals from these firms with primary responsibility for marketing crop inputs and agronomic services were chosen to participate in this study. Participants’ experiences with market segmentation strategy were examined through a two-part process: first with a survey administered through Zoomerang Survey (http://info.zoomerang.com) online; and second with a succeeding telephone interview. The sample design was structured around CropLife’s Top 100 ranking of crop input retailers (Sfiligoj, 2003; Sfiligoj, 2006). The 20 participants were selected
first based upon a previous working relationship with Purdue’s Center for Food and Agricultural Business (CAB), and secondly on their status as a current Top 100 rank holder.

The web-based survey was designed to gather demographics, general market information and address preliminary issues in the market segmentation process to set the tone for the follow-up telephone interview. The web-based survey instrument is presented in Appendix A.

The telephone interview was designed to examine in a detailed manner the specific elements, methods, effects and outcomes (both challenging and beneficial) of adopting a market segmentation strategy. The phone interview survey instrument is presented in Appendix B. Questions were structured upon an adapted version of Best’s steps for a needs-based market segmentation process. By structuring the questionnaire so that at least one question addressed each of the steps, gaps or breakdowns in the market segmentation process could be assessed, and then related back to a difference in organizational type, size, market environment descriptor, implementation challenge, or participant’s survey responses.

Statistical analysis included simple descriptive characteristics including the mean, minimum, maximum, frequency and cross tabulations. Cross tabulations and associated chi-squared statistics were completed to evaluate differences in firm type. Statistical significance of mean responses between the categories of firm type for each variable were calculated using an F-test. Digitally recorded telephone interviews were transcribed in Microsoft Word, highlighting key points and statements from individuals’ responses. Once all interviews had been transcribed, responses were sorted by question and a synopsis of each set of qualitative responses was compiled. This procedure was previously used successfully by Stolp to collect data on market planning practices of retail crop input firms. These data were collected in March and early April 2007.

Results

An overview of the sample demographics is first presented. Second, a descriptive statistical analysis is reported for the survey questions concerning key accounts and market segmentation strategy. Last, results from the interviews with individuals of the respondent firms with primary responsibility for marketing crop inputs and agronomic services are presented.

Sample Demographics

The responding sample was 55% (11) agricultural cooperatives, 40% (8) privately held, independent retailers, and 5% (1) publicly held retailers for a total sample of 20. For the purpose of comparative analysis between firm types, the public firm’s responses were aggregated with those of independents. While publicly traded, the firm’s retail operations were of modest size and the firm’s overarching goals were deemed to be closest to those of independently-owned operations.

Independent Retailers: Common to all of the independent retailers were retail agronomy sales under $1 billion. Non-diversified firms (4) ranged from under $15 million to $1 billion in retail agronomy sales with 75% (3) of non-diversified firms doing between $15 million and $50 million in annual retail agronomy sales. Those firms with lines of business in addition to agronomy (5) had retail agronomy sales from under $15 million to $100 million. Diversification within these four firms included grain merchandising (3), feed/animal nutrition products (3), micronutrients (1), propane/LP sales (1), ethanol production (1), turf and/or lawn care (1), rail
car leasing and services (1), warehousing and distribution (1), and retail sales (hardware, plumbing, electrical, building supplies, unique specialty food, housewares, automotive supplies, pet supplies) (1). Market territories for these independent retailers were confined by a single state’s bounds (5), a region (1) and multiple regions (2). Regions operated in included the Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT), Appalachian (KY, NC, TN, VA, WV), Lake States (MI, MN, WI), Corn Belt (IL, IN, IA, MO, OH) and Pacific (WA, OR, CA). Crop input retail locations varied from 2 to 40 outlets. Titles of individuals interviewed included: owner/general manager (6), departmental (agronomy, marketing, etc.) manager (1), sales management (1) and regional business manager of retail operations (1).

Cooperative Retailers: Cooperatives shared the uniqueness of being owned by the people that they serve, their grower customers. Unlike the independents, every cooperative was diversified into at least one line of business in addition to agronomy. These lines of additional business included petroleum (fuel, lubricants, etc.) (8), grain merchandising (11), feed/animal nutrition products (9), propane/LP sales (1), turf and/or lawn care (1), precision-ag technology equipment (1), and crop insurance (1). Agronomy sales among these cooperatives ranged from under $15 million to $1 billion. Market territories for these cooperative retailers were confined by a single state’s bounds (6), a region (4) and multiple regions (1). Regions operated in included the Lake States (MI, MN, WI), Corn Belt (IL, IN, IA, MO, OH) and Northern Plains (KS, NE, SD, ND). Crop input retail locations varied from 2 to 46 outlets. Titles of individuals interviewed included: owner/general manager (3), departmental (agronomy, marketing, etc.) manager (7), and account manager (1).

**Primary Results of Web-Based Survey**

**Key Accounts**

Key accounts are customers of strategic importance due to their size or influence. Respondents identified their key accounts according to the 80/20 rule (presumably 20% of accounts comprise 80% of the firm’s total sales revenue) and then approximated the average acreage farmed by those key accounts. On average, retailers’ key accounts were 2,400 acres, but ranged from a low of 800 acres up to 5,000 acres. Because the 80/20 rule is a generality, it was necessary to ascertain the actual percentage of accounts that comprised 80% of the retailers’ total sales revenue (product and service revenue). On average, 80% of the retailers’ business was done by 24% of their customer accounts, nearly 4% more customers than suggested by the 80/20 rule. However, the most frequent response (5 respondents) was that 20% of accounts did represent 80% of the total sales revenue for the firm. Those retailers responding with proportions 30% or higher tended to be smaller in size. These firms (3 retailers) were all under $25 million in annual crop input sales.

**Market Segmentation**

Participants were asked to respond to the following definition and question:

A market segment is a specific group of customers who share unique needs, desires and identifying characteristics. Target marketing involves identifying these groups of customers and then selecting segments to target with a marketing program tailored to each segment’s unique needs. Do you segment customers in your firm’s marketing strategy?
Seventeen of the twenty (85%) crop input retailers responded ‘yes’ to this definition/question. The three retailers (15%) who responded ‘no’ included one independent and two farmer-owned cooperatives. The succeeding discussion of survey questions hinges on the assumption that a market segmentation strategy was employed. Therefore, responses for the retailers who answered ‘yes’ to segmenting their customers were analyzed separately from those who answered ‘no.’

**Database Support**

Market segmentation is an activity that requires extensive data on customers and/or prospects. Participants were asked to rate the effectiveness of their electronic database on its ability to support their market segmentation strategy on a scale of 1 (ineffective) to 5 (highly effective), or 6 (not applicable). For those retailers who segmented customers (17), the mean effectiveness of their electronic databases as a support tool was 2.38 on average. The most frequent response was an effectiveness rating of 2 on the five-point scale.

The relatively low mean effectiveness rating of these retailers’ electronic databases could have several explanations in this scenario. It may imply that the retailers’ electronic databases are less effective (mean < 3.00) at supporting a market segmentation strategy because:

- They do not contain pertinent information useful for supporting a market segmentation strategy.
- The information tracked in the electronic databases would be useful in supporting a market segmentation strategy, but the firm lacks the expertise/experience to put this information to work, and therefore the database is found less effective as a support tool.
- They track the data in some non-electronic form.

Retailers’ responses regarding information tracked on key accounts support the first explanation. Customer information such as profitability per account, customer specific business goals and information on use of competitors’ products/services were electronically tracked for low proportions of key accounts relative to traditional categories such as name, address, and phone number, custom application acres and customer specific sales/purchase history.

**Challenges to Market Segmentation**

Retailers were asked to rate a series of 11 challenges that could contribute to a breakdown in the implementation of a market segmentation strategy. The challenges were rated on a scale of 1 (was an easily surmounted challenge; insignificant challenge) to 5 (challenge served as a significant barrier to implementation; very significant challenge), or 6 (not applicable). These challenges were grouped into four sub-categories: knowledge/information/data challenges (K/I/Dc); staff/human capital challenges (Sc); market challenges (Mc); and general challenges (Gc). Displayed in Table 1 are the overall mean ratings for these challenges, their mean ratings by firm type, the associated F-statistic for each challenge and the Chi-squared statistic resulting from the cross-tabulation by firm type.

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Sub-category</th>
<th>Overall Mean</th>
<th>Independent</th>
<th>Co-op</th>
<th>F-test</th>
<th>Chi-squared</th>
<th>Number</th>
</tr>
</thead>
</table>

Table 1 Challenges to Implementation of Market Segmentation Strategy
<table>
<thead>
<tr>
<th>Challenge</th>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of practical guidance on what elements are necessary for a successful market segmentation strategy</td>
<td>K/I/Dc</td>
<td>3.56</td>
<td>4.14</td>
<td>3.11</td>
<td>3.11</td>
<td>5.16</td>
<td>16</td>
</tr>
<tr>
<td>Lack of evaluation criterion for market segmentation strategy (no way to determine effectiveness, measure benefits, or success)</td>
<td>K/I/Dc</td>
<td>3.13</td>
<td>3.50</td>
<td>2.89</td>
<td>0.72</td>
<td>2.50</td>
<td>15</td>
</tr>
<tr>
<td>Obtaining data, or data quality (customers resistant to share information)</td>
<td>K/I/Dc</td>
<td>2.94</td>
<td>2.57</td>
<td>3.22</td>
<td>1.10</td>
<td>2.32</td>
<td>16</td>
</tr>
<tr>
<td>Expensive and/or time consuming</td>
<td>Gc</td>
<td>3.25</td>
<td>3.29</td>
<td>3.22</td>
<td>0.01</td>
<td>0.97</td>
<td>16</td>
</tr>
<tr>
<td>Benefits to a market segmentation strategy are unclear/not proven</td>
<td>Gc</td>
<td>2.71</td>
<td>2.63</td>
<td>2.78</td>
<td>0.05</td>
<td>0.94</td>
<td>17</td>
</tr>
<tr>
<td>Inability to tailor bundles to fit individual market segments</td>
<td>Sc</td>
<td>3.19</td>
<td>4.14</td>
<td>2.44</td>
<td>8.33**</td>
<td>7.53</td>
<td>16</td>
</tr>
<tr>
<td>Limited access to marketing expertise to develop and/or execute a market segmentation strategy</td>
<td>Sc</td>
<td>3.13</td>
<td>3.86</td>
<td>2.56</td>
<td>5.47**</td>
<td>6.33</td>
<td>16</td>
</tr>
<tr>
<td>Inexperienced managers (lack expertise incorporating market segmentation strategy into the firm's marketing/strategic plan)</td>
<td>Sc</td>
<td>3.06</td>
<td>2.43</td>
<td>3.56</td>
<td>5.02**</td>
<td>7.33</td>
<td>16</td>
</tr>
<tr>
<td>Resistance to change (sales staff and sales managers)</td>
<td>Sc</td>
<td>2.94</td>
<td>3.00</td>
<td>2.89</td>
<td>0.05</td>
<td>2.82</td>
<td>17</td>
</tr>
<tr>
<td>Too much variation across market for any market segmentation strategy to work</td>
<td>Sc</td>
<td>2.81</td>
<td>3.29</td>
<td>2.44</td>
<td>1.41</td>
<td>2.59</td>
<td>16</td>
</tr>
<tr>
<td>Rapidly changing market environment (market segments become obsolete quickly)</td>
<td>Mc</td>
<td>2.67</td>
<td>2.50</td>
<td>2.78</td>
<td>0.17</td>
<td>1.67</td>
<td>15</td>
</tr>
</tbody>
</table>

* Differences statistically significant at 90% confidence level
** Differences statistically significant at 95% confidence level

When ranked by overall mean the three highest rated challenges were: lack of practical guidance on what elements are necessary for a successful market segmentation strategy (K/I/Dc); expensive and/or time consuming (Gc); and, inability to tailor bundles to fit individual market segments (Sc). Interestingly, these three challenges were all of different sub-categories and had mean ratings above the median level (3.00), but below a mean level of increased importance (4.00). The five least-rated challenges (resistance to change; obtaining data, or data quality; too
much variation across market for any market segmentation strategy to work; benefits to a market segmentation strategy are unclear/not proven; rapidly changing market environment) by overall mean were all below the median rating (3.00) indicating that these challenges posed relatively little threat to retailers’ successful implementation of a market segmentation strategy.

With the exception of a few challenges, independents mean ratings were higher than those of cooperatives. Independents rated lack of practical guidance on what elements are necessary for a successful market segmentation strategy (K/I/Dc), and inability to tailor bundles to fit individual market segments (Sc) as their most important challenges relative to the others. Additionally, these challenges had identical mean ratings of 4.14, making them the only challenges considered important on average (mean ≥ 4.00). The challenges lack of practical guidance on what elements are necessary for a successful market segmentation strategy (K/I/Dc), inability to tailor bundles to fit individual market segments (Sc) and limited access to marketing expertise to develop and/or execute a market segmentation strategy (Sc) were statistically different from the cooperatives. The lowest rated challenge on average was inexperienced managers (lack expertise incorporating market segmentation strategy into the firm’s marketing/strategic plan) (Lc). It was also statistically different from the cooperative response.

Cooperatives rated the implementation challenges much differently than did the independents. Their highest mean rated challenge was inexperienced managers (lack expertise incorporating market segmentation strategy into the firm’s marketing/strategic plan) (Sc); the independents’ lowest mean rated challenge. Expensive and/or time consuming (Ge) and obtaining data, or quality data (customers resistant to share information) (K/I/Dc) represented the second and third highest mean rated challenges for cooperatives. Interestingly the cooperatives highest mean rated challenge was 3.56, with seven of the challenges rated at 3.00 or less on average. Because cooperatives’ rated seven of the challenges lower on average than those of independents, the results suggest that cooperatives in this sample have/had a less challenging experience implementing a market segmentation strategy relative to independents. Interestingly, none of the highest (top 3) mean rated challenges were shared by cooperatives and independents alike.

**Benefits to Market Segmentation**
The final question of the web-based survey addressed the benefits of a market segmentation strategy. In the same fashion as with the challenges, retailers were asked to rate a list of nine benefits on a scale of 1 (realized little or insignificant gain) to 5 (realized significant gain), or 6 (not applicable), or 7 (don’t know). Displayed in Table 2 are the overall mean ratings for the benefits, their mean ratings by firm type, the associated F-statistic for each factor and Chi-square statistic of the cross-tabulation by firm type.
Table 2 Mean Ratings for Benefits of Market Segmentation

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Overall Mean</th>
<th>Independent</th>
<th>Co-op</th>
<th>F-test</th>
<th>Chi-squared</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of highest value market segments</td>
<td>4.25</td>
<td>4.57</td>
<td>4.00</td>
<td>3.15*</td>
<td>2.96</td>
<td>16</td>
</tr>
<tr>
<td>Increased sales/market share</td>
<td>4.00</td>
<td>4.13</td>
<td>3.89</td>
<td>0.16</td>
<td>2.76</td>
<td>17</td>
</tr>
<tr>
<td>Improved efficiency when serving customers (resource allocation, cost savings)</td>
<td>3.94</td>
<td>3.86</td>
<td>4.00</td>
<td>0.08</td>
<td>0.09</td>
<td>16</td>
</tr>
<tr>
<td>Improved competitive position</td>
<td>3.88</td>
<td>3.86</td>
<td>3.89</td>
<td>0.00</td>
<td>4.26</td>
<td>16</td>
</tr>
<tr>
<td>Increased cross-selling opportunities</td>
<td>3.82</td>
<td>4.00</td>
<td>3.67</td>
<td>0.21</td>
<td>2.45</td>
<td>17</td>
</tr>
<tr>
<td>Improved firm profitability</td>
<td>3.81</td>
<td>4.43</td>
<td>3.33</td>
<td>5.64**</td>
<td>6.81*</td>
<td>16</td>
</tr>
<tr>
<td>Insights into new product/service offerings</td>
<td>3.71</td>
<td>3.63</td>
<td>3.78</td>
<td>0.05</td>
<td>5.30</td>
<td>17</td>
</tr>
<tr>
<td>Elimination of products/services which do not create customer value</td>
<td>3.29</td>
<td>3.50</td>
<td>3.11</td>
<td>0.39</td>
<td>2.68</td>
<td>17</td>
</tr>
<tr>
<td>More accurate forecasts (future market trends)</td>
<td>3.27</td>
<td>3.00</td>
<td>3.44</td>
<td>0.76</td>
<td>5.63</td>
<td>15</td>
</tr>
</tbody>
</table>

* Differences statistically significant at 90% confidence level
** Differences statistically significant at 95% confidence level

The highest rated benefit on average was identification of highest value market segments. Increased sales/market share and improved efficiency (resource allocation, cost savings) were rated second and third highest on average. None of the mean rated benefits were rated below the median level (3.00) on the five-point scale.

Independents rated identification of highest value market segments highest on average. Improved firm profitability and improved sales/market share were the second and third highest rated benefits on average for independents. Of these highest mean rated benefits, identification of highest value market segments and improved firm profitability were statistically different from cooperatives. Independents considered identification of highest value market segments, improved firm profitability, increased sales/market share and increased cross-selling opportunities to be important (mean ≥ 4.00) benefits. Among these same four benefits, cooperatives found only identification of highest value market segments to be important (mean ≥ 4.00).

Like independents, cooperatives rated identification of highest value segments to be their most important benefit on average and increased sales/market share to be their third most important benefit, on average. Improved efficiency when serving customers (resource allocation, cost savings) completed the three most important benefits and ranked second. Elimination of products/services that do not create value customer value was rated as the least important benefit on average by cooperatives. Independents shared a similar opinion, rating this benefit second to least important.
Primary Themes of Telephone Interviews

Step 1: Market Segmentation Identification

Overall, 17 (85%) retailers identified market segments within their respective market areas. Retailers recognized a variety of characteristics that uniquely defined their market segments. Many of these characteristics were also acknowledged by Kotler and Keller as “major [market] segmentation variables.” Major market segmentation variables reflected throughout retailer interviews included geographics (e.g. by location/outlet); demographics such as age, occupation (e.g. off-farm job), and generation (e.g. father and son within same operation); psychographics, or personality traits (e.g. innovative/progressive, traditional, loyal, professional); and behaviors such as user status (e.g. custom application versus farmer applied crop inputs), usage rate (e.g. proportion of business done by crop input category: fertilizer, crop protection chemicals, seed), and loyalty (e.g. high level of loyalty evaluated by consecutive years of retailer/farmer relationship). No single unifying set of characteristics (demographics, psychographics, behaviors) was used across the sample of retailers to segment their markets. Rather, various combinations of geographics, demographics, psychographics and behaviors were used by these retailers to define unique market segments.

Among retailers who segmented their markets, the core basis (variable) for segmentation beyond geographics (outlet/location) included some combination of personality traits and buying behavior that dictated services valued (6); acreage operated (3); service required (no-service vs. other)/service level (number of services, sophistication of services) (2); personality traits that dictated services valued (2); some combination of personality traits and demographics (generation, occupation) that dictated services valued (1); some combination of acreage operated and crop grown (1); types of product (fertilizer, chemical, seed) purchased (1); and personality traits (pre-season planning) that created operational efficiencies for the retailer (1).

A second tier of market segments (sub-segments) were identified by 7 retailers who segmented their markets. The broader, more encompassing segments discussed above were further segmented on bases including: service level (number of services, sophistication of services)/service required (no-service vs. other); off-farm employment (full vs. part-time); product required (no product purchased, or purchased elsewhere); product usage (bulk quantities, direct shipment); and buying behavior. This distinction does not imply increased effectiveness of the market segmentation process; it simply indicates another level of complexity and illustrates the types of sub-segments formally acknowledged during the interview process by retailers in this sample.

The most unifying market segment recognized, regardless of whether business was transacted with that segment, was a price/economic buyer segment. Every interviewee recognized the existence of this type of customer in their market area. The recognition of the price buyer segment transcended market segmentation schemes, where the scheme was clearly centered on market segments characterized by psychographics, or some behavior other than buying behavior. This was clearly apparent with three retailers and is illustrated by the following transcribed description of one retailer’s market segments:

“Loyal: … value service over price, long time business partners, tend to be multi-generational, depend upon us for agronomic information"
Business: … value service we provide, but tend to analyze the value it brings to their operation (evaluate ROI), little more price sensitive than the loyal segment, very analytical

Price buyer: want bottom-line input prices, base buying decisions upon this factor alone”

Clearly this retailer’s method of identifying market segments is centered on psychographics (personality traits) as illustrated by the descriptions for the loyal and business segments. The price buyer segment stands out as it is described by customers’ buying behavior alone. The remainder of the interviewees (14) expressed the price/economic buying behavior as a characteristic of a market segment (e.g. no-service, mega grower, cash & carry).

Market segments based on the demographic acreage operated had no consistent size across the retailers’ different market areas. Of the retailers that segmented their markets on acreage operated (3), and some combination of acreage operated and crop grown (1); a pair of retailers used two different sized acreage segments, while another pair of retailers used three different sized acreage segments.

Other commonly identified market segments included a “relationship segment” (7), a “business segment” (4), and a “technology segment” (4). An aggregate description from the retailers who identified these segments is transcribed:

“Relationship: long-time customers, loyalty transcends salesman, less price sensitive than other segments, desires more traditional product/service offering

Business: analytical, must show added value that service provides, prefer sales appointments, more price sensitive than a relationship customer, conversations revolve around specific business topics only

Technology: desires efficiency, desires precision services like … VRT fertilizer application, data management of yield data, desires latest seed technologies/traits, lack labor (time and expertise) to support these services, more opportunities relative to other segments to provide services”

The relationship and business segments were identified through two different segmentation schemes. Based on personality factors (psychographics), the relationship segment was commonly cited as having high retailer loyalty and being least price sensitive while the business segment was identified by their analytical nature and their overwhelming desire for retailers to “prove the value” of a service offering.

The second way in which the relationship and business segments were identified was by buying behavior. Two retailers claimed that their relationship and business segments matched well with that identified in studies conducted by Purdue University (Alexander et. al.). In this context, the relationship segment “values personal communication and traditional service and information,” while the business segment desires a “high quality product and information at a reasonable price, and relevant, timely information” (Alexander et. al.).
The technology segment was always identified through personality traits (psychographics). These were customers who were driven by technologies and saw value in operational efficiency, but lacked the labor and/or technical expertise to maintain these technologies.

Two of the three firms which did not segment their markets were cooperatives. Additionally, the most formal set of market segments belonged to an independent. This independent retailer’s segments were first identified by acreage, and then each acreage segment was divided into sub-segments based on buying behavior. The buying behaviors formed three distinct segments including a price buyer, business buyer and relationship buyer. Within the mid-sized relationship buyer sub-segment, a technology segment was also identified.

**Step 2: Market Segment Attractiveness**

Market growth, competitive intensity and market access are measurable and/or observable across most markets (Best). Best suggests these commonly observed market characteristics be used to evaluate a particular market segment’s attractiveness. Best articulates the details of these measures:

“Large, growing segments with potential for future growth are more attractive than combinations of small segments without potential for growth.

The number of competitors, the number of substitutes, and the competitive rivalry among competitors affect the attractiveness of a segment. An attractive segment is one with relatively few competitors, little price competition, very few substitutes and high barriers to competitor entry.

Market access requires a good fit between a business’s core capabilities and target segment needs. The better the match between customer needs and a business’s sources of advantage, the easier it is to access markets. Without sufficient marketing resources, market access is greatly impeded. Segment attractiveness is greatly enhanced when a business has good customer access, sufficient marketing resources to access customers and a good fit between business capabilities and customer needs” (Best).

Best argues that a market segment assessment using these measures combined with an evaluation of segment profitability will determine which segments a firm should pursue with a tailored offering and positioning strategy. Clearly, this framework encourages the firm to place a priority on market segments meeting and/or excelling with respect to these measures.

In contrast, market growth, competitive intensity and market access were rarely cited as ways in which retailers prioritized their market segments. Three of 17 retailers said that they did not prioritize their market segments, while an additional pair of retailers admitted that prioritizing market segments based on attractiveness was an area of weakness for them. Of the two retailers that reported a weakness in this area, one said:

“We don’t do a good job at that, and I don’t think that happens like it should. Even though we talk about it in weekly sales meetings, I think my sales people don’t do too much prioritizing and they go wherever they have to go to get sales.”
This retailer also noted that only one market segment may exist at a particular location/outlet within his market territory. Accordingly this would dictate the market segment prioritization that could take place at the location/outlet level across a retailer’s territory. The example highlights a sales force organizational issue that may need to be addressed in order to implement an effective market segmentation strategy. Interestingly, only five retailers’ responses reflect attractiveness measures suggested by Best. Profitability was the focal measure of market segment attractiveness with these retailers.

Analysis of the retailers’ ways of measuring segment attractiveness and prioritization revealed an important gap in the market segmentation process. While attractiveness measures including market growth (future customer growth through acquisition) (3) and market access (organizational fit) (2) were cited, competitive intensity was never cited as a measure used to prioritize market segments. Interestingly, retailers in this sample are aware of competitive intensity in their respective market areas, responding most frequently that retail capacity to provide agronomy products and services was somewhere between 1% to 50% greater than farmers’ needs in their respective market areas.

Retailers also gave some indication about the type of customer that aligns well with their core capabilities (market access). On average, retailers in this sample rated their performance relative to similar retail competitors in their market areas highest on service elements, rather than product or service prices. This could indicate that in terms of organizational fit, a market segment such as a technology segment (values a retailer’s provision and support/expertise of site-specific services such as field mapping, grid-soil sampling, or custom application), or a relationship buyer segment (values personal contact and more traditional agronomic services/information) may be a better fit than a segment that is characterized by owning application equipment and employing an agronomist. Naturally, this type of market segment may not require any of the items that a high-service retailer performs exceptionally well.

Although market growth rate was not cited by retailers as a segment attractiveness measure, it was considered in the context of which customers will continue becoming larger through acquisition, and therefore operating a greater number of acres. One retailer stated:

“I can say all kinds of things like, [market segmentation is] going to lead to a deeper long term partnership, I think its going to create this -- going to create that, but the reality is [prioritization] still comes back generally to business growth.”

An important gap between theory and practice appears to be evaluating segment attractiveness with a multi-faceted (market size, market growth rate, and market growth potential concurrently) approach and then determining which segments to target based on these measures.

**Step 3: Market Segment Profitability**

Best states that “although market attractiveness of a segment may be acceptable, a business may elect not to pursue that segment if it does not offer a desired level of profit potential.” Therefore, retailers were asked if they determined the potential profitability of each of their market segments, and if so how they measured that profit. The most common response was that firms do not determine each market segment’s profitability (14). Of retailers who responded this way, 2 acknowledged the desire to become more sophisticated in this area as illustrated by the following quotations:
“That’s an area where we’d like to become more sophisticated.”

“In the past we’ve measured profitability by branch (location). We are not to the point where our operating system allows us to go back to profitability per territory. We are trying to move that direction or even profitability by customer. I think that refinement probably needs to happen to really get a better assessment on our efforts and see how effective we are with certain [marketing] programs.”

Another retailer confirmed the challenge of developing a system to manage the information needed to track profitability at a more refined level similar to the previous quotation:

“I’d like to tell you we’ve got a great information system that dices these customers up for us and tells us exactly how much we are making on each one and what segment they bucket into. Unfortunately, I feel we’ve got a weakness in being able to specifically track some of the activities of these customers. I think the reality of it is that it’s more of a generality that we do see the revenues being driven, or the margins we are able to capture by being able to tie up that customer with the services of a salesperson as compared to what margins are out there when you talk about purely a price conscious buyer.”

One retailer supplemented his response indicating that instead of measuring potential market segment profitability his firm focused on determining customer profitability of their key accounts (20% of customer base that comprises 80% of business) as demonstrated through the following quotation:

“We’re more focused on determining any given customer’s profitability on a one-on-one basis. When you get up into this business segment and especially when you get up into the price segment, each individual is a case of its own. There are no averages there. We’ve got some out there we have to do that on because you want to make sure you’re not giving it all away. It’s not a high percentage. Anymore, of our customer base, if you look at it from an acre standpoint sometimes it gets a little higher because most of the guys that fall in that category (price segment) are farming quite a few acres, but we’re still talking roughly 20% of the customers.”

The remaining retailers (3) responded yes to the question of measuring segment profitability. As mentioned previously two retailers expressed that their attempts to measure potential segment profitability were a work in progress. Only one retailer provided a precise explanation of how, and what measurements/tools were used to determine potential segment profitability within his firm. A description of the measurements/tools used by this respondent follow:

- The Profit Calculator: Microsoft Excel spreadsheet developed in conjunction with an outside consultant that determines profitability per customer

- Lifetime value number: takes into account the customer’s remaining active years in farming and then relates a profitability figure over that time period
A proprietary customer information database management system supported through a supplier that tracks sales by individual customers per input category including

- Services (e.g. custom application)
- Micronutrients
- Crop nutrients (N-P-K)
- Crop protection chemicals
- Seed

As evidenced through interview responses, it appears that the information and accounting systems to track market segment profitability have not reached an adequate sophistication level in at least two of these firms. This might be attributed to the size of the firm and subsequent available resources. Again, this sample of crop input retailers struggled to successfully complete this step in the market segmentation process. Eighty-two percent of the retailers who segmented their markets did not evaluate the potential profitability per market segment. This illustrates an important area for improvement within this group of retailers.

**Step 4: Segment Positioning**

The next step in the market segmentation process is positioning, which involves creating a value proposition and positioning strategy for each target segment. A value proposition ideally, “should be built around the needs/desires by a target customer” (Best). The second element is creating a product-price positioning strategy based on the segment’s unique needs and characteristics (geographics, demographics, psychographics, behaviors)” (Best). This step was addressed with the question: How do you create a tailored offering for each market segment?

Seven retailers described creating tailored offerings based on the needs of their customers in all identified market segments. An additional 8 retailers cited ways in which their offerings could vary (product price breaks on volume purchased, product price terms based on mode of shipment, service level, financing, etc.), but did not relate a specific tailored offering to any particular market segment. The remaining retailers (2) did not create a tailored offering for their market segments as evidenced by these quotations:

“I can’t say as there is any segment that is tailored [too]. Our number one concern would be treating everybody equal. Every customer no matter how much they farm is important to our business.”

“We will come up with a tailored offering, but on a per customer basis rather than per segment basis. Occasionally we will spread fertilizer or spray some acres at a reduced rate (service price), however not a reduced product price! We do nothing else beyond that on a regular basis.”

While the quotations show that these retailers did not create tailored offerings by segment, common to both retailers’ responses was an emphasis on treating customers ‘equally’ through pricing of products. This might indicate that the level of comprehension regarding the creation of tailored offerings at the crop input retail level is not widely understood. The focus of the previous two quotations was tailoring an offering on product price alone. This highlights the importance of understanding every step in the market segmentation process at all levels (sales staff, sales management, department management) of the organization in order to achieve an effective market segmentation strategy.
Only seven retailers created a tailored offering and then developed a product-price positioning strategy directed at each of their market segments. This finding points to another gap in the market segmentation process. Fifty-nine percent of the retailers who segmented their markets in this sample could improve upon execution of their tailored offering product-price positioning strategy. This finding is consistent with the way in which retailers rated the challenges to implementation of a market segmentation strategy in their survey responses. Inability to tailor bundles to fit individual market segments was rated as being an important overall (mean = 3.19) challenge to implementation of a market segmentation strategy.

**Step 5: Segment “Acid Test”**

The segment “acid test” proposed by Best hinges on the idea of presenting a set of tailored offerings in association with their respective product-price positioning strategies to a small sample of potential customers in the market. If the strategy (i.e. tailored offering in conjunction with positioning strategy) is successful, the majority of the test customers will select the tailored offering/positioning strategy created for them (Best). Because this method represents only one of many ways to gauge acceptance of a tailored offering/positioning strategy from the market, an open question was asked of retailers: Do you have a formal way of gauging the receptiveness of a tailored offering before its introduction into the market?

Seven retailers had no formal way to gauge the receptiveness of a tailored offering before its introduction to the market. These retailers cited soliciting feedback from sales staff/growers after the introduction (4), trial and error method (2), and simply a process of recognizing needs and then reacting to them with a tailored offer to meet those needs (1). The remaining retailers (10) had a way to gauge receptiveness of an offering before the introduction of a tailored offering in their respective markets. Methods included a test market by location/outlet, or by a small group of target customers (4), presenting the offering to a small group of target customers individually (4), and talking with a small group of target customers in a round table format collectively (2).

This lack of fulfillment could be directly related to the performance of the previous step which involved creating a price-product positioning strategy for each market segment. Ten retailers did not execute the previous step versus 7 retailers who did not have a way to gauge receptiveness of a tailored offering before its introduction to the market. Again, the inability to tailor bundles to fit individual market segments (mean = 3.19) could partly explain this breakdown in the market segmentation process.

**Step 6: Marketing-Mix Strategy**

“A major cause of failure is ineffectively executing the market segmentation strategy. To be successful, the market segmentation strategy needs to be expanded to include all elements of the marketing mix, including place (sales strategies) and promotion (communications)” (Best).

Retailers were asked to explain steps taken to communicate a new tailored offering to sales staff, and then articulate how its intended implementation was ensured through sales staff. Retailers responded to this question in a variety of ways, but common themes were noted among responses. These common themes included: general sales staff meetings occurring on a regular basis (weekly, monthly) (5); involving the sales staff from ground zero in development of a new tailored offering through sales/administrative staff meetings (4); a third party and/or internal
sales training effort (3); and general sales staff meetings occurring on an as-needed basis (2). Three retailers reported doing little in the way of communicating new tailored offerings to sales staff.

Of the 17 retailers who segmented their markets, 6 cited specific ways in which they ensured implementation of marketing strategies by sales staff. Common responses included: established a special resource team comprised of senior level agronomists/sales management/general management and made sales calls as a team with junior salesman to monitor progress (2); sales management specifically follows-up with individual salesman (2); aligned sales staff with the segment/customer their capabilities allowed them to best serve (1); and management delivered a consistent message to sales staff so that marketing strategies were presented in the same fashion from location to location (1). Two retailers admittedly said that they were not sure how to ensure implementation, noting that implementation of marketing strategies was flexible per location. One of these retailers stated:

“That’s the million dollar question! We have always allowed quite a bit of autonomy to our lead field people in terms of adapting their style to their marketplace, to their customers’ personalities, etc. The face of our business is a lot the face of our key lead person at each of our locations. One of the things we’ve always in a way wished we could have is the ability to be like a [major crop protection chemical company]. When the [crop protection chemical company] representative gets his packet in the fall and it’s the new program for the next year, he reads it, he gets his script down, he goes to market, and he sells it like it’s his livelihood complete. When you roll out tailored offerings to others and you say ‘this is how it is,’ and you want your customers to be able to choose and select the levels of service they want…it’s hard! We don’t have a way to sit down on top of people and say you will follow this exactly. That’s just not been our style and culture inside the business. So, we’ve tended to let people take this to market. What happens then is that the personality of the individual presenting the program takes over, and in many cases the offering takes on the shape and form of how that individual views it.”

While 14 retailers who segmented their markets explained steps which they took to train sales staff and emphasize sales strategies, 11 did not report a specific way to ensure implementation of a new tailored offering (sales/marketing strategy) by sales staff. The previous quotation illustrates some challenges including limited access to marketing expertise to develop and/or execute a market segmentation strategy, and inexperienced managers that lack the expertise incorporating a market segmentation strategy into the firm’s marketing/strategic plan. Both these challenges were rated as somewhat important challenges by this group of retailers with overall mean ratings of 3.13, and 3.06, respectively.

In order to evaluate if retailers’ market segmentation strategies encompassed the complete marketing-mix, a final question was asked regarding communication strategy. Retailers were asked if and how the communication strategy varied between market segments.

Eleven retailers responded that their communication strategy did vary between their respective market segments, while 6 did not. Common ways in which communication strategies varied was by: length of time spent personally communicating with a customer of a particular market segment (5); type of communication (direct mail, email, web-site) used with market
segments (2); type of personal conversation conducted between salesman and customer of a particular market segment (e.g. more professional, or required prior preparation to prove value to customer) (3); a combination of time spent, products/services offered and type of communication (direct mail, email, web-site) used with market segments (1).

In total, 1 independent and 5 cooperatives that segmented their markets successfully expanded the market segmentation strategy to include the sales and communication elements of the marketing-mix, and also were able to ensure sales strategy implementation through sales staff by some methods previously described. Clearly, independents struggle relative to cooperatives with employing methods to ensure implementation of a marketing strategy for a particular market segment. Otherwise, there were no important differences noted between independents and cooperatives.

**Step 7: Progress with Segments**

The final step of the market segmentation process is to measure progress within the segments through customer satisfaction and/or broader measures of success. Retailers were asked if their market segmentation strategy had a way to measure customer satisfaction within segments. None of the retailers reported having a way to measure customer satisfaction by market segment. Common alternative measures of generic customer satisfaction included: repeat business (6); personal communication with customer about satisfaction (5); a combination of repeat business and customer surveys (2); customer surveys (2); a combination of key account grower meetings and customer surveys (1); and sales growth/sales margin level (1).

Ideally, each particular market segment has a unique tailored offering developed for customers within that segment. Therefore, it is necessary to measure satisfaction within the segment to evaluate the effectiveness of the market segmentation strategy. Accordingly, retailers in the sample rated lack of evaluation criterion (no way to determine effectiveness, measure benefits, or success) for a market segmentation strategy as an important (mean = 3.13) challenge to implementation. This could explain the overwhelming lack of fulfillment of this step by retailers.

**Challenges to Implementation of a Market Segmentation Strategy**

Retailers that segmented their markets were asked to comment on significant, overarching challenges to implementing a market segmentation strategy within their respective businesses. Commonly cited challenges are compared and contrasted with mean importance ratings (refer to Table 1) from the web-based survey instrument for the respective challenges. Direct quotations from interview responses are reported to illustrate each challenge. The challenges which follow are taken directly from the web-based survey instrument in order to compare and contrast the interview responses with the associated web-based survey responses. To protect confidentiality, no form of ownership affiliation is reported here.

Lack of practical guidance on what elements are necessary for a successful market segmentation strategy: One independent and 2 cooperatives expressed this challenge as an important barrier their firm had encountered through the process of incorporating a market segmentation strategy into their strategic plan. Accordingly, it was cited as an important (mean = 3.56) challenge by this group of retailers overall.
“You start with numbers (sales, volume, acreage) and you try to slice and dice your customer base and fit them into segments. That works somewhat, but the numbers don’t tell the whole story. If you really try to get down to the nitty-gritty you would have a segment for every customer. I’m struggling right now with how many segments and what they look like. Marketing and segmenting is a little bit nebulous…it’s not black and white.”

“I am sure we are missing some opportunities based on customer needs because we don’t have a real precise way about doing [market segmentation].”

“What to do with [customer] information; how to use it. Everybody’s got big theories and big ideas, but it’s all based at 50,000 feet and nobody’s really touched down on the ground with any of it that I’ve ever seen, that really looks worth while.”

Expensive and/or time consuming: Two independents and 2 cooperatives expressed this challenge as an important barrier their firm had encountered through the process of incorporating a market segmentation strategy into their strategic plan. Accordingly, it was cited as an relatively important (mean = 3.25) challenge by this group of retailers overall.

“First and foremost, time, and time with your sales people as a group, the time to implement something. Time is so limiting in this business.”

“Making sure we have the time to understand the customer’s ever changing needs and not get so involved in the day-to-day operations that we forget about it.”

“The amount of time it takes to make sure everybody is on the same page with a particular customer. So it’s internal communications, and making sure the right people have the right information. This includes the people that work the counters, work the phones, and work at our locations.”

“It’s just taking the time and effort to do it without creating a whole layer of additional people and expense and discipline…because it seems like it can slow things down. It’s kind of like going from normal fertilizer application to site-specific application. All of a sudden this feels like a lot of work. So is customer segmentation, where as if you kind of fly by the seat of your pants you can get to more people, and there again, it’s probably less organized, but it seems easier.”

Inability to tailor bundles to fit individual market segments: Two independents and 1 cooperative expressed this challenge as an important barrier their firm had encountered through the process of incorporating a market segmentation strategy into their strategic plan. Accordingly, this was rated as a relatively important (mean = 3.19) challenge by this group of retailers overall.

“Finding a program that will fit a broad range of customers without affecting your other customers that choose not to participate.”

“There continues to be so much price discovery out here in the market place. This creates a challenge when developing defensible, tailored offerings for each segment.”
“Being able to create the offers that are distinguishably different and change the offers as needed. It gets really difficult to react in the marketplace very quickly when you have a broad [geography to cover].”

**Limited access to marketing expertise to develop and/or execute a market segmentation strategy:** Two cooperatives expressed this challenge as an important barrier their firm had encountered through the process of incorporating a market segmentation strategy into their strategic plan. This was rated an important (mean = 3.25) challenge by this group of retailers overall. Interestingly, this was rated as an important (mean = 3.86) challenge by independents, yet none of the independents’ interview responses reflected this particular challenge. Conversely, cooperatives rated this challenge as unimportant (mean = 2.56), yet two cooperative retailers clearly reflected this challenge through the quotations below.

“It goes back to identifying what are the key segments. We need to take [market segmentation] away from just pure inputs (fertilizer, chemical, seed) and incorporate that into an offering that provides a guy solutions. A challenge we have is how many people in our organization are forward enough thinking to come up with these marketing ideas?”

“The first challenge is discipline. Our structure has been one that we can charge a higher price and provide very high levels of service but we haven’t been as good at charging a lower price and then providing the appropriate lower level of service. The guys want to fall back into that ‘we’ll give you a pump and meter because we love you’ kind of thing.”

**Resistance to change from sales staff and sales managers:** Two independents and 4 cooperatives expressed this challenge as an important barrier their firm encountered through the process of incorporating a market segmentation strategy into their strategic plan. Overall, this was rated as a relatively unimportant (mean = 2.94) challenge by this group of retailers. Unexpectedly, the challenge was reflected in retailers’ responses most frequently (6) out of all other challenges.

“More important [than any other challenge] is the culture of your company and how you’ve approached servicing customers and managing relationships for years and years. People that have always done it, and fundamentally believe there is a right way to do it, and have done it that way for a long time are difficult to move to a different mindset.”

“It would be too easy for a lot of our people to slip back into a mode of ‘we work with a product that really never changes,’ because that’s what you work with when you are working with [crop] inputs. Therefore it is very important, and frankly quite difficult to get people to buy into the thought of ‘so that means we always need to be looking for ways to improve the value of this service.’ It’s human nature. At some point in time those people would like to say enough. We’ve taken this far enough. Let’s rest on our laurels a little bit.”

“Training and education of sales people to think a little differently in the marketplace, particularly some of the older ones that were set in their ways.”
“Maintaining the vision and reasoning behind why we are doing what we are doing [with a market segmentation strategy].”

“It’s just that of 30 years in the industry, helping the sales people understand it is ok to make money, the farmers don’t mind you making a profit if we can help them be profitable.”

“We’re still probably in the infancy of getting the buy-in from our group about how important these [market segmentation ideas] really are. To me this is probably our biggest challenge; it is keeping the sales force focused and in tune and enthusiastic about market segmentation and putting together [marketing] programs. For them, sometimes it’s just another thing they have to do. I think some of it may be they don’t have a broadened background/understanding. They’ve been in this [traditional agronomy retail] world for a long time.”

Rapidly changing market environments (market segments become obsolete quickly): Three independents and 2 cooperatives expressed this challenge as an important barrier their firm had encountered through the process of incorporating a market segmentation strategy into their strategic plan. Overall, this was rated as an unimportant (mean = 2.67) challenge by this sample of retailers. This challenge was also rated least important, yet was illustrated by the second highest frequency (5) of retailers’ quotations from interview responses.

“Continue to identify changes taking place out there [in the market]. And sometimes the changes, even though they may appear to some as being pretty obvious, sometimes it’s more subtle from our sales approach, out here from our sales people and the feedback we (management) get. So it’s identifying those changes and continuing to bring the added value to the marketplace, to the customer [in order] to maintain the customer’s business.”

“I feel that it is reacting to the fact that those segments are more fluid than we’ve ever experienced them in the past. It’s that what the segments find value in is a very rapidly moving changing target.”

“The ongoing evolution of the customer base, his changing needs continue to be a challenge for us. Our customers are changing right now at warp speed!”

“Another challenge is as you think you’ve got a customer figured out, and got him segmented into the right bucket, the reality of it is that there are sub-segments in that bucket and it becomes more complex.”

“The dynamics of our marketplace are changing so quickly that it gets really hard and cumbersome to spend the amount of time it takes to get [market segmentation] done with the multiple roles that most of us play.”

Information systems to manage data for market segmentation strategy support: Three cooperatives expressed this challenge as an important barrier their firm had encountered through the process of incorporating a market segmentation strategy into their strategic plan. This represents a challenge not captured by the web-based survey instrument. It highlights a barrier to
the successful implementation of a market segmentation strategy experienced by 3 retailers that segmented their respective markets.

“Trying to manage multiple offerings and manage the information; to blend [tailored offering information] into our accounting systems. It’s difficult when you are doing different things for different customers at different times. To keep your arms around all those different offerings [is challenging].”

“Software changes and computer changes [to support an electronic customer database] have slowed this process (market segmentation strategy) down. Those are part of the challenges sometimes; utilizing the tools that are available to us at the branch level.”

“Probably the biggest thing is trying to organize it…the information organization.”

Customer resistance to change (alienate customers who do not participate): Two independents and one cooperative acknowledged this challenge as an important barrier their firm had encountered through the process of incorporating a market segmentation strategy into their strategic plan. Although closely related to the implementation challenge regarding resistance to change found in the survey, the resistance here is on the customer’s behalf rather than the retailer’s sales staff. This highlights a barrier to the implementation of a market segmentation strategy experienced by 3 retailers that segmented their markets.

“One of the most significant things we encountered to start with is that you are beginning to do something your customers have never seen before. Because it’s different, and depending on how you are segmenting out there, you are going to have a percentage of your customers that don’t like it. It’s not the way it has always been done. And that puts some [customer] relationships at risk.”

“Finding a program that will fit a broad range of customers without affecting your other customers that choose not to participate.”

“Eighty years of continued service at that local branch level where we’ve been there so long, and the expectations for service are there, and to try and identify additional value and getting the farmer to recognize it. Why should I (customer) pay more for this when all I want is the crop scouting service and this had been provided for me in the past without the extra charge?”

Four of the 6 highest mean rated challenges on the survey were expressed in retailers’ interview responses, while 2 were never mentioned. Interestingly, lower mean rated challenges were reflected in retailers’ responses most frequently. These challenges included resistance to change by sales staff and sales managers, and rapidly changing market environments (market segments become obsolete quickly). Two retailers cited challenges unrelated to implementation of a market segmentation strategy. Both of these retailers were independents. An additional pair of implementation challenges were highlighted by 5 different retailers’ responses (1 independent, 4 cooperatives).
Benefits Resulting from a Market Segmentation Strategy

Similar to implementation challenges, retailers were asked to comment on important overarching benefits that they believed their firm had realized as a result of implementing a market segmentation strategy. Commonly cited benefits are compared and contrasted with mean importance ratings (refer to Table 2) from the web-based survey for similar benefits.

Overarching benefits from a market segmentation strategy cited by retailers (who segmented their markets) commonly included improved profitability (6) and increased sales/market share (6). These were the only benefits from the survey that were directly reflected in retailers’ interview responses.

Other specific benefits commonly cited by retailers in addition to those above included one or a combination of the following: identification of customers’ needs/desires (6); stronger/deeper customer relationships (3); improved job quality of the sales position (2); improved pricing discipline by sales staff (2); helped sales staff establish priorities (e.g. time allocation) (2); and identification of which customers not to serve (fire a customer) (2).

The following quotations from responses to the benefits resulting from adoption of a market segmentation strategy illustrate one or more of the additional benefits not identified specifically through the survey instrument:

“I don’t think there’s any doubt if you don’t address the needs of each [market segment] then it’s pretty hard to sustain or grow your business. We’ve recognized what the needs and desires are of each one of those segments, or we wouldn’t continue to sell that particular customer grouping.”

“It’s benefited our people a lot from the standpoint that they really do have something of good value to sell and they aren’t just getting beat up on pricing every time they go out. It’s helped our people realize wow I can really do something that does provide value.”

“If anything it continues to build better relationships with our customers which is beneficial for the long-term. I think that’s probably one of the biggest things coming out of it in the long-run.”

“We have less price issues with [our] customers as we are showing the value [of our offerings], so I believe bottom-line performance is affected. And then, when you start to build a better relationship with [customers] you also get the opportunity to talk about other [sales opportunities]. I think we spend more valued time with customers through this whole process. It allows us to prioritize our time spent with customers and it’s probably not to the full extent that I’d like it to be done, but I see that process continue to evolve, improve.”

“I’d say it’s helped [our employees] quite a bit. We’ve got to be careful … saying that it’s ok to walk away from customers, or to fire them. But, it is ok to walk away from a customer and fire them because it’s not good for us, nor is it good for them.”

Based on survey results, the overall mean ratings for the benefits resulting from adopting a market segmentation strategy were all important (mean > 3.00). Retailers directly cited two of
these benefits in their interview responses: improved profitability and increased sales/market share.

A host of other specific benefits commonly cited by retailers included: identification of customers’ needs/desires; stronger/deeper customer relationships; improved job quality of the sales position; improved pricing discipline by sales staff; helped sales staff establish priorities (e.g. time allocation); and identification of which customers not to serve (fire a customer). These benefits could translate into the broader benefits listed on the web-based survey instrument. For example, identification of customers’ needs/desires could foreseeably lead to improved efficiency when servicing customers, or lead to insights for new product/service offerings, or elimination of product/service offerings. Improved pricing discipline by sales staff might translate into improved profitability, and in turn improved competitive position. Identification of highest value market segments was the highest mean rated benefit based on survey responses, yet was never directly cited during retailers’ interviews. However, direct quotations from responses to other questions of the telephone interview support this survey finding.

Summary and Conclusions

Table 3 maps the 17 firms who segmented their markets against the seven key steps of a market segmentation strategy as suggested by Best. Firm type is denoted by a ‘C’ for cooperative and an ‘I’ for independent. Steps which the firm executed are marked with an ‘X.’ Execution was evaluated based on telephone interview responses to questions that were specifically mapped against each of Best’s descriptions of the seven key steps in a market segmentation process. The table clearly shows two natural breaks in market segmentation strategy sophistication levels within this sample, leading to three distinct groups. Those characterized by successfully executing at least four of the seven steps were deemed to have a sophisticated/complete approach to their market segmentation strategy and are described as Full Strategy. Those that executed exactly three steps are considered to be of mid-level sophistication with their market segmentation strategies and are described as Partial Strategy. Lastly, those executing less than three steps had less sophisticated/incomplete market segmentation strategies and are described as Aware Only.
### Table 3 Successfully Executed Key Steps in a Market Segmentation Strategy

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<td>7</td>
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*Firm which did not create tailored offerings, but described a way in which an ‘acid test’ on generic offerings was performed prior to widespread market introduction.
The key gaps in a market segmentation strategy for this sample of small to mid-sized crop input retailers were identified as steps two through seven shown in Table 3. Interview responses revealed that market segment attractiveness was rarely evaluated on factors such as market access, market growth, and competitive intensity, as suggested by Best. The most common attractiveness measures included some metric of firm profitability or sales volume from serving a particular segment; however, only one retailer measured segment/customer profitability effectively. Two retailers focused on the 20 percent of customers that made up 80 percent of their sales volume as the highest priority portion of their customer base. As Young and others stated, “heavy users make up such a large proportion of the sales volume that they are the only relevant target.” For some retailers, this concentration of customers may undermine (or replace) the successful execution of this key step in a market segmentation strategy.

Segment profitability was estimated by most retailers based on the perception that their services generated higher margins than did their product (fertilizer, chemical, seed) sales. While this perception may be accurate, retailers also expressed that they had difficulty tracking some of the costs associated with serving customers. This would suggest that any profitability tracked could be inaccurate. Common themes from interviews revealed that lack of information systems which could organize, and track/assign costs associated with providing services were needed to achieve this refined measure of segment profitability. This process of organizing information and assigning costs to certain activities was considered expensive and time consuming. This general area was also cited as an important challenge to market segmentation strategy implementation through the web-based survey.

Segment positioning first involves the creation of a tailored offering followed by a product-price positioning strategy for each target market segment. The greatest difficulty creating the positioning strategy was developing unique prices for tailored offerings. Retailers in this sample perceived there to be a great deal of price discovery in the market which made it difficult to differentiate prices without jeopardizing customer relationships. This was reinforced during the interviews as the most frequently mentioned over-arching challenge to market segmentation strategy implementation. Web-based survey responses also showed that inability to tailor bundles (product/service/information) to fit individual market segments was an important challenge to market segmentation strategy implementation.

The segment acid test was the step which was executed by the largest proportion of retailers who segmented their markets. There were four retailers who did not create tailored offerings, yet executed on the segment acid test. These four firms tended to rate ‘inability to tailor bundles’ and ‘too much variation across the market’ as important challenges to implementation of a market segmentation strategy. This might explain why these firms did not create formal tailored offerings. When these four firms did introduce a new product/service bundle into the market, it may have been desired to assess its receptiveness due to the perceived customer variation across the market. The remainder of the retailers who did not execute on the segment acid test, also did not execute on the previous key step of creating a tailored offering with a unique product-price positioning strategy for each identified market segment. Accordingly, it appears that if retailers did not take the time, or lacked the expertise to develop
tailored offerings with unique positioning strategies, they also did not proceed with the segment acid test.

The successful execution of a marketing-mix strategy hinges on sales strategy implementation. Only six retailers successfully executed the communication of a sales strategy for a new tailored offering to their sales staff, and then reported a method used to ensure its intended implementation through the staff. As one retailer said regarding sales strategy implementation, “We don’t have a way to sit down on top of people and say you will follow this exactly. That’s just not been our style and culture inside the business.” This retailer articulated an important challenge reinforced throughout the web-based survey: inexperienced managers who have difficulty incorporating a market segmentation strategy into the firm’s strategic plan.

The promotion element (non-personal communication) of the marketing mix represented a less important barrier for retailers in this sample, as nine retailers executed on delivering a different communication strategy to each of their identified market segments. One retailer stated this regarding communication strategy: “I personally think that the communications with growers does not vary as much as you might think per segment. I am always preaching to my sales staff that we need to spend the time where we are getting the dollars.” This retailer illustrates the personal side of the communications strategy, but does not allude to any non-personal forms such as direct mail, web-sites, or other non-personal means of communication cited by the retailers of this sample during the telephone interviews. This articulation represents limited access to marketing expertise, which was also rated as an important challenge to successful implementation of a market segmentation strategy in the web-based survey.

Incorporating these marketing mix elements (sales and non-personal communication) represents a key gap in these retailers’ market segmentation strategies. Both challenges to adapting sales and promotion strategies in the segment positioning strategy were acknowledged in the web-based survey and through interview responses.

Measuring progress with segments was the seventh and final key step assessed in these retailers’ market segmentation strategies. While no retailers cited ways in which they specifically measured customer satisfaction within market segments, five retailers did report previously using customer surveys to measure customer satisfaction across the entire firm. This suggests that if retailers had names to identify specific surveys (or some other method of coding), that they would have the ability to group those surveys based upon the customer’s market segment. However, 12 retailers did not report using customer surveys to measure satisfaction, and were therefore said to currently have no way to measure customer satisfaction within segments.

Table 4 summarizes the common themes from interview responses for each of the key steps, highlighting the similarities and differences among sophistication/completeness levels. The sample is divided into three sophistication/completeness levels as described previously in the discussion of Table 3. The high-level group consisted of two cooperatives and one independent. The mid-level group was comprised of three cooperatives and two independents. The low-level group contained five independents and four cooperatives.
<table>
<thead>
<tr>
<th>Key Steps</th>
<th>Sophistication/Completeness Level</th>
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<tbody>
<tr>
<td></td>
<td>Low – Aware Only</td>
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<tr>
<td>1 Segment Identification</td>
<td>Demographics, personality traits and behaviors</td>
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<tr>
<td></td>
<td>Tend to have 3 or fewer segments</td>
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<tr>
<td>2 Segment Attractiveness</td>
<td>Do very little segment attractiveness evaluation, if any</td>
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<td></td>
<td>Priorities based on level of retailer loyalty</td>
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<tr>
<td>3 Segment Profitability</td>
<td>Profitability by segment is not evaluated</td>
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<td></td>
<td></td>
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<tr>
<td>4 Segment Positioning</td>
<td>Tailored offerings are rarely created</td>
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<tr>
<td></td>
<td>Positioning relies heavily on product instead of price</td>
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<td></td>
<td>Equal treatment of customers is emphasized</td>
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Table 4 Continued

| 5 | Segment Acid Test | • Methods to evaluate the receptiveness of an offering exist within these firms | • Typically test tailored offerings | • All but one firm tested tailored offerings |
|   |                  | • Because tailored offerings are not created, the tendency is to not perform the acid test | • Methods of personal communication with small groups of target customers and test market by location used equally among group | • Personal communication with a small group of target customers collectively is the method used |
| 6 | Marketing Mix | • Sales strategy is communicated to sales staff | • Sales strategy is communicated to sales staff | • Sales strategy is communicated to sales staff |
|   |                | • Sales training is an emerging focus for this group | • Sales staff are formally trained | • Sales staff are formally trained |
|   |                 | • Rarely was a way to ensure intended implementation cited | • Rarely was a way to ensure intended implementation cited. | • Intended implementation of the sales strategy is ensured through periodic follow-up by sales managers and/or team selling |
|   |                  | • Varying communication strategy from segment to segment rarely occurred within this group | • Communication strategy differs between segments | • Communication strategy differs from segment to segment |
|   |                 | • Common differences in strategy were time spent personally communicating and type of conversation that took place | • Common differences include time spent personally communicating, type of communication, and information services provided | • Common differences include time spent personally communicating, type of communication, and information services provided |
|   |                  | • Some use different non-personal communication approaches | • Some use segment-specific non-personal communication approaches | • Some use segment-specific non-personal communication approaches |
| 7 | Segment Progress | • No ways to measure progress within segments | • No ways to measure progress within segments | • No ways to measure progress within segments |
|   |                  | • Some use of surveys to measure customer satisfaction | • Some use of surveys to measure customer satisfaction | • Some use of surveys to measure customer satisfaction |
**Implications for Agribusiness**

The key gaps identified in these retailers’ market segmentation strategies reveal opportunities to improve current market segmentation strategy execution within small to mid-sized crop input retail firms.

To address the gap in evaluation of market segment attractiveness and profitability, information systems need to be developed/utilized which have the ability to account for complex and diverse tailored offerings. Because these retailers cited difficulty in tracking activities (costs) associated with providing these services, small to mid-sized crop input retailers require solutions to assign costs to these activities. Subsequently, this would aid in retailers’ ability to track profitability by market segment.

In order to address the key gaps in execution of segment positioning, performing a segment acid-test, adapting the marketing mix to the segment positioning strategy, training programs addressing these topics must be developed and made accessible to these retailers. Specifically, instruction and guidelines on how to identify target market segments through measurable and accurate market segment characteristics such as growth rate, access and competitive intensity would be useful.

Sales training programs for sales management and sales staff alike must be developed to emphasize the importance of market segmentation/target marketing strategy in practical application. Acquiring employee buy-in from all levels of the organization, especially from sales staff would help to ensure consistent, intended sales strategy implementation. Evaluation of a market segmentation strategy’s success relies on this consistency. Training programs should also include guidance on adapting non-personal forms of communication to various market segments. This could help close the execution gap for those retailers who do not successfully execute on adapting the marketing-mix to their segment positioning strategy. Such training programs must be highly pragmatic – the issue is not a lack of intuitive understanding of market segmentation, the issue is translating this understanding into specific actions given the market realities faced by crop input retailers.

Finally, other tangible measures by which to track progress within market segments must be identified to provide retailers with a set of benchmarks by which to evaluate the success of their market segmentation/target marketing strategies. While customer satisfaction within market segments is generic, specific quantifiable measures such as acreage enrolled, acreage retained, or new acreage enrolled under a specific tailored offering may need to be tracked in order to effectively assess the success of a new tailored offering. Additionally, if profitability per market segment were tracked accurately, it could be utilized to measure progress within market segments.

**Conclusions**

The objectives of this research were: 1) to identify if market segmentation/target marketing was currently employed by crop input retailers; 2) to compare and contrast keys to successful market segmentation/target marketing strategy as suggested by the small business and marketing literature with those currently practiced by the crop input retailers; and 3) to identify the reasons for not pursuing this strategy if it was not employed and the barriers to its successful implementation. In meeting these objectives, this research explored market segmentation/target marketing practices, describing its sequential processes, involvement with, and sophistication/completeness in small to mid-sized crop input retailers. Ultimately, useful insight into actual practice was provided that should prove helpful to
industry professionals as they work to profitably serve the needs of a continuously evolving customer base.
References

Akridge, J., Alexander, C., Boehlje, M., Downey, D., Falwell, A. Foley, D., Gray, A., Whipker, L., and Wilson, C. “Serving Commercial Producers: Meeting Needs, Adding Value.” Commercial Producer Project, Staff Paper #04-04, Department of Agricultural Economics, Purdue University, 2004


Appendix A. Zoomerang Web-Based Survey

Market Segmentation Practices of Crop Input Retailers (Questions marked with an asterisk (*) are mandatory.)

1. *What is your primary position/area of responsibility within your firm? (check one)
   - Owner/general manager
   - Branch/location manager
   - Departmental manager (agronomy, marketing, etc.)
   - Precision/application manager
   - Technical consultant/agronomist
   - Sales/sales management
   - Other, please specify

2. *Is your firm a: (check one)
   - Privately-owned (non-cooperative, independent) retailer
   - Cooperative retailer
   - Retail joint venture of a private/public firm and a cooperative
   - Other, please specify

3. *Approximately how many TOTAL retail crop input locations does your firm operate? (enter TOTAL number of RETAIL locations)
   - Number of locations open year round
   - Number of ADDITIONAL locations open only part of the year

4. *What is the geographic scope of your total firm’s RETAIL crop input market territory? (check appropriate response)
   - Regional (multi-state)
   - Within a single state (indicate state here)

5. If you selected REGIONAL (MULTI-STATE) in the previous question, please check all the regions in which your firm operates.
   - Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT)
   - Appalachian (KY, NC, TN, VA, WV)
   - Southeast (AL, FL, GA, SC)
   - Delta States (AR, MS, LA)
   - Lake States (MI, MN, WI)
   - Corn Belt (IL, IN, IA, MO, OH)
   - Northern Plains (KS, NE, SD, ND)
- Southern Plains (OK, TX)
- Pacific (WA, OR, CA)
- Mountain (CO, WY, UT, ID, MT)
- Southwest (AZ, NV, NM)

6. *What were the total retail sales of crop inputs (fertilizer, crop protection chemicals, seed, and services) sold directly to farmers for your TOTAL FIRM in fiscal 2006? (check one)

- None
- Under $15 million
- $15 – under $25 million
- $25 – under $50 million
- $50 – under $100 million
- $100 million - $1 billion
- Over $1 billion

7. *Your firm’s lines of business (es) are: (check all that apply)

- Petroleum (fuel, lubricants, etc.)
- Grain merchandising (storage, marketing, etc.)
- Feed/animal nutrition products
- Agronomy (crop protection chemicals, fertilizer, seed, agronomic services)
- Other, please specify

8. *Does your firm provide custom application of fertilizer or crop protection chemicals or custom seeding?

- No → go to Question 12
- Yes → continue with Question 9

9. *In fiscal 2006, approximately how many TOTAL ACRES did your firm custom apply for its growers (fertilizer, chemicals, seeding – TOTAL ACRES including multiple applications)?

10. *In fiscal 2006, approximately what proportion of your firm’s TOTAL fertilizer sales were custom applied by your firm?

11. *In fiscal 2006, approximately what proportion of your firm’s TOTAL herbicide/pesticide/fungicide sales were custom applied by your firm?

12. *In which of the following ways does your firm use precision (site-specific) technology? (check all that apply)

- Soil sampling with GPS
- Soil electrical conductivity (Veris) mapping
- Field mapping with GIS
• Yield monitor data analysis
• MANUAL controlled GPS (light bar), STANDARD RATE application of fertilizer, lime and/or chemicals
• CONTROLLER-driven GPS (auto-steer), STANDARD RATE application of fertilizer, lime and/or chemicals
• Controller-driven GPS, SINGLE NUTRIENT VARIABLE RATE application (fertilizer, lime, and/or chemicals)
• Controller-driven GPS, MULTIPLE NUTRIENT VARIABLE RATE application (fertilizer, lime, and/or chemicals)
• Satellite/aerial imagery for internal firm purposes
• Agronomic recommendations based on GPS/GIS data
• Don’t use precision technology

13. *In your opinion, how much (if any) ‘excess capacity’ currently exists in your firm’s market area? When you consider the total crop input needs of all farmers in your market area (tons of product, application needs, etc.), what is your perception of the total amount of retail dealer capacity (your firm and all competitors) available: (check one)

• Capacity not adequate to serve farmers’ needs
• Capacity about equal to farmers’ needs
• Slightly more capacity than required (1% - 50%) to serve farmers’ needs
• Considerably more capacity than required (51% - 100%) to serve farmers’ needs
• More than double the capacity required (100% or more) to serve farmers’ needs

14. *From your perspective, how would you rate your firm’s performance in each of the following areas relative to the ‘average’ or ‘typical’ competitor in your market? Please rate your performance in each area on a scale of 1 (far below the average/typical competitor in your market) to 4 (about equal to the average/typical competitor in your market) to 7 (far superior to the average/typical competitor in your market).

• Product prices
• Providing grower access to latest products and technologies
• Service prices
• Site-specific technology and service offerings
• Overall cost of doing business
• Customer relationships (individual attention, trust, loyalty, etc.)
• Convenience (hours of operation, location, ease of doing business, etc.)
• Frequency of introduction of new services to growers
• Sales force (technical knowledge, business savvy, communications skills, etc.)

15. *KEY accounts are customers of strategic importance due to their size or influence. Consider your KEY accounts to be those accounts that comprise 80% of your firm’s TOTAL sales revenue. What is the (approximate) average acreage farmed (size) of your KEY accounts as defined here?
16. *What percentage of your TOTAL accounts make up 80% of your TOTAL sales volume (TOTAL sales and service revenue)?

17. *Based on the definition of KEY accounts above, for what percentage of your KEY accounts do you track the following customer data ELECTRONICALLY?

- Name, address, phone number
- Additional descriptive information (farm size, crop rotation, land rented vs. owned, etc.)
- Customer-specific sales/ purchase history
- Soil test results
- Application acres
- Up-to-date email addresses
- Customer-specific complaint history
- Customer-specific sales calls/ personal contacts
- Gross margins by account
- Profitability by account
- Customer specific business and/or personal goals
- Information on use of competitor products, services

18. *A market segment is a specific group of customers who share unique needs, desires and identifying characteristics. Target marketing involves identifying these groups of customers and then selecting segments to target with a marketing program tailored to each segment’s unique needs. Do you segment customers in your firm’s marketing strategy?

19. *How effective is your ELECTRONIC database in supporting your market segmentation strategy? Please indicate the appropriate rating on a scale of 1 (ineffective) to 5 (highly effective), or select 6 (N/A=not applicable).

20. *What are the primary challenges/obstacles your firm has encountered in developing its market segmentation strategy? Please rate the following on a scale of 1 (was an easily surmounted challenge/obstacle) to 5 (challenge/obstacle served as a significant barrier to implementation), or select 6 (N/A=not applicable).

- Resistance to change (sales staff and sales managers)
- Expensive and/or time consuming
- Inexperienced managers (lack expertise incorporating market segmentation strategy into the firm’s marketing/strategic plan)
- Rapidly changing market environment (market segments become obsolete quickly)
- Obtaining data or data quality (customers resistant to share information)
- Limited access to marketing expertise to develop and/or execute a market segmentation strategy
- Lack of practical guidance on what elements are necessary for a successful market segmentation strategy
- Inability to tailor bundles to fit individual market segments
- Too much variation across market for any market segmentation strategy to work
- Lack of evaluation criterion for market segmentation strategy (no way to determine effectiveness, measure benefits, or success)
- Benefits to a market segmentation strategy are unclear/not proven

21. *What are the primary benefits you feel your firm has realized as a result of implementing a market segmentation strategy? Please indicate the appropriate rating for the following benefits on a scale of 1 (realized little or insignificant gain) to 5 (realized significant gain), or select 6 (N/A=not applicable) or 7 (Don't Know).

- Identification of highest value market segments
- Improved firm profitability
- Improved efficiency when serving customers (resource allocation, cost savings)
- More accurate forecasts (future market trends)
- Insights into new product/service offerings
- Elimination of products/services which do not create customer value
- Improved competitive position
- Increased cross-selling opportunities
- Increased sales/market share
Appendix B. Telephone Interview Questionnaire

1. Describe the key customer segments that your organization has identified (key characteristics, needs/preferences). How is market (customer) segmentation done within your organization?

2. How do you prioritize key segments? Do you determine each segment’s potential profitability? If so, how do you measure segment profitability?

3. How do you create a tailored offering for each segment?

4. Do you have a way of gauging the receptiveness of the tailored offering before its introduction into the market?

5. What steps do you take to communicate a new marketing strategy (tailored offering) to sales staff and then ensure its intended implementation through sales staff? How specifically do you train your sales staff to communicate new offerings to customer segments? Does the communication strategy vary between segments?

6. How has your market segmentation program affected sales management practices?

7. How has your market segmentation program benefited your organization?

8. Does your market segmentation program include a means to measure customer satisfaction within segments? What measures or methods are used?

9. What are the most significant challenges your organization has encountered (or continues to deal with) through the process of incorporating a market segmentation program into your marketing plan?