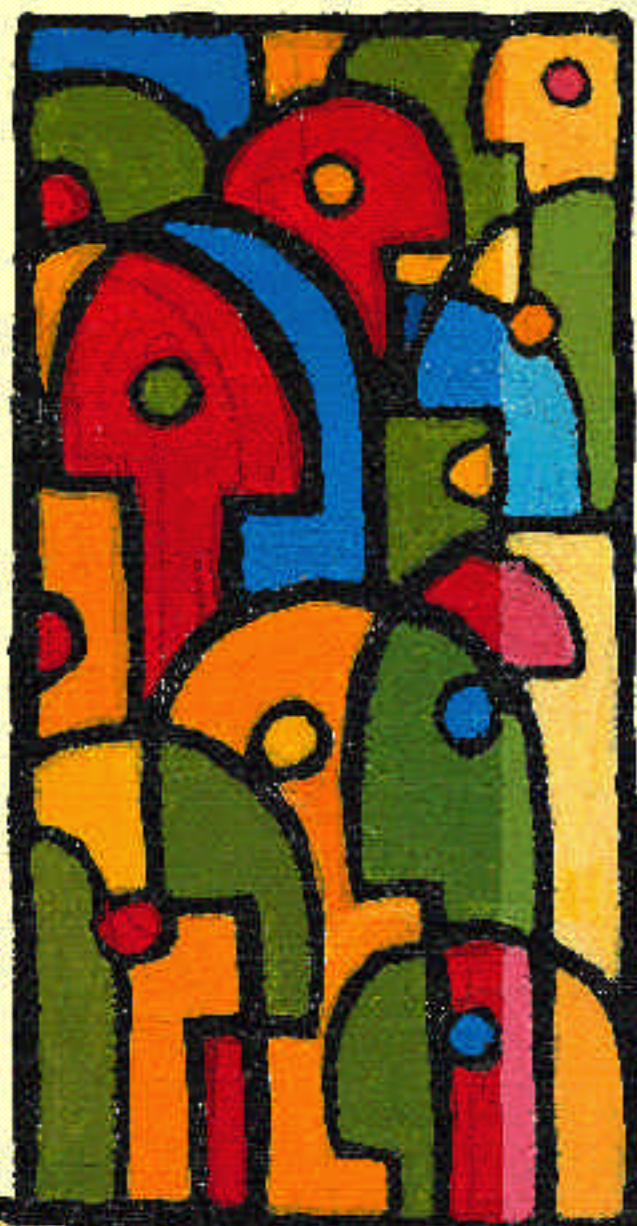# Putting Your Segmentation Where It Belongs

Implementation Tactics for Taking your Segmentation off the Bookshelf and into the Marketplace
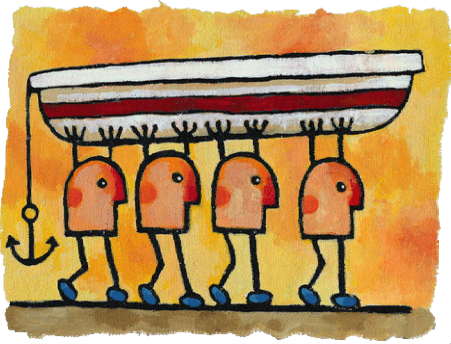
PUTTING YOUR SEGMENTATION WHERE IT BELONGS
Implementation Tactics for Taking your Segmentation off the Bookshelf and into the Marketplace

For many firms a market segmentation strategy is essential for effective and efficient marketing management. Well-segmented markets allow the firm to craft specific product and value propositions to individual customers and prospects. However, for many firms, market segmentation has failed. Not so much because there was a failure to find appropriate segments, but more often because there was an inability to translate the segment definitions to customer and prospect databases, thus making it difficult to efficiently reach those segments and address their specific needs.

This white paper will demonstrate a method of leveraging widely used commercial segmentations, like PRIZM, Personicx and P$YCLE to develop customized segmentations. These customized segmentations make a direct linkage to customer and prospect databases extremely easy. In addition, having the custom segmentation based on widely used commercial segmentation allows companies to link diverse data sources to build very powerful marketing databases. This white paper will show how this technique was successfully employed in the context of a case history in the telecommunications industry. This approach works effectively for any B2C company using databases of customers and prospects to drive their marketing program. Other closely related industries that could easily apply these techniques include, telecommunication, cable, media, energy, real estate/housing, financial, hospitality/travel/leisure/recreational, computer, and healthcare insurance industries.

> *"For many firms, market segmentation has failed, not so much because there was a failure to find appropriate segments, but more often because there was an inability to translate the segment definitions to customer and prospect databases."*

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You just finished your segmentation and feel really good about the segment descriptions and color glossy pictures that go with them. Now comes the easy part, the implementation. To start, you first have to assign each customer and prospect to your newly formed segments. The information that you collected from the respondents told you so much about what they buy and why they buy, however, you do not have this same rich information on your customers and prospects. So now you need to build a model that takes the information you do have on your customers and prospects and score them into the new segment definitions. This isn't looking so easy because the information that you do have on your customers and prospects is so limited and has so much missing data in it. Now you need to get the database people to clean up the databases to fill in missing data and to program in this new scoring model. Finally you need to have the sales group add any additional new fields to the new customer information form so all new customers will have the necessary data to score them. Clearly, effective implementation will not be easy. In addition, implementation might get held up due to a lot of database issues, and the segmentation might end up on your bookshelf and not the marketplace.

A large national telecommunications company fought this battle for many years and working with SDR Consulting finally came up with an approach that develops segments based on needs and behaviors and at the same time allowed them to accurately classify customers and prospects into segments by simply knowing their address. The key for this success was to develop segments by first aggregating respondents by PRIZM clusters and then segmenting on PRIZM clusters rather than segmenting directly on respondents. PRIZM is an industry standard commercial segmentation, developed by Claritas, that divides the US into 62 socio-economic clusters. Commercial segmentation like PRIZM allow a company to assign a customer or prospect to one of their pre-profiled clusters by simply knowing their address.

TRADITIONAL SEGMENTATION APPROACH

The essence of any segmentation is to allow a firm to craft specific product/service and value propositions to individual customers and prospects. There are numerous methodologies to develop a segmentation scheme. The most widely used approach is to execute a primary research study among a representative sample of customers and prospects. From this sample, needs, values and behaviors associated with the product/service category would be collected. The next step would be to group together respondents with similar motivations for purchase into segments. For example, segments might be developed around brand loyal, price sensitive or feature sensitive respondents.

After the segments have been developed they are described in detail by other information collected in the survey. These profiles help the marketing manager better understand what each segment values and the product/service benefits they

"So even though the segmentation is based on very specific needs and values, the assignment of customers and prospects to these newly formed segments is constrained by the accuracy and relevancy of information contained in company databases."

are seeking, whether they exhibit different behavior in the category, and who they are demographically.

In certain cases the segmentation ends at this point. The marketing manager knows the relative size and benefits sought by the different segments in the marketplace and can develop specific offerings, pricing strategies and communications messages. However, these very targeted strategies can only be communicated to the overall marketplace since the marketing manager does not know which customers and prospects belong to each segment. This increases marketing costs and limits the effectiveness of developing specific marketing strategies to target segments.

In order to target these offerings to the correct audiences, current and prospective customers need to be divided into these newly defined segments. Obviously, if the detailed survey information could be collected from all customers and prospects, then it would be simple to assign current and prospective customers to a segment. Clearly this would be cost prohibitive. Therefore, most companies try to build a model that forecasts which segment each current and prospective customer belongs to.

This is usually where a lot of segmentations fail, in that companies do not have enough predictive information about their customers and prospects in their existing databases to develop a meaningful predictor model. Even those companies who end up building models, often sacrifice a lot of accuracy in segment membership assignment since the information that they have about their customers and prospects is not as rich as the primary data collected in the segmentation survey. So even though the segmentation is based on very specific needs and values, the assignment of customers and prospects to these newly formed segments is constrained by the accuracy and relevancy of information contained in company databases.

In addition, most companies have very rich databases on a transactional basis. These databases contain critical measures on items like purchase volume, price elasticity, churn, channel preference, and adoption to new products. Linking this information with the needs, benefits and attitudes from the primary research study would be very insightful, not only for the development of the segmentation, but also on an on-going tracking basis. However, in most cases this information cannot be directly linked to the survey-based segmentation scheme. This is because most segmentation studies should not be just limited to a company's customers, so these measures would only be available for some of the respondents. In addition, by the nature of the transactional data, a given customer will only have very limited information about certain items like price elasticity and churn. Utilizing these types of databases would be much more meaningful on an aggregate basis where measures can be computed across enough customers to make projections.
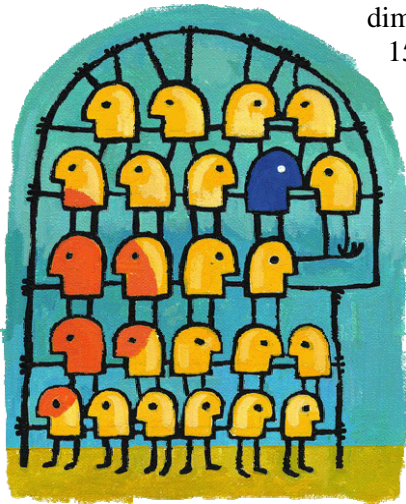
Due to the difficulties with implementing these value based segmentations and incorporating rich transactional data, many companies develop segmentations built around easily obtained customer and prospect information like usage and do not use these value-based segmentations. The problem with usage segments, is that more frequently than not, the benefits sought really do not vary by these usage segments. This significantly limits the understanding of target customers and prospects and the unique performance attributes they are willing to pay for.

BACKGROUND

The keys to a successful segmentation are to be able to understand the unique needs and values associated with different segments of customers and prospects, and then to have an easy and systematic way to identify which segment a customer or prospect belongs to. In the case of the large national telecommunications company, they had developed a consumer segmentation and with a good understanding of the overall marketplace, but they were never able to implement the segmentation. What was working for them was the use of PRIZM clusters, but there were several issues with using just the standard PRIZM clusters that prevented the company from getting the full benefits of their targeting efforts.

PRIZM develops socio-economic groups along two easily identifiable dimensions, affluence and urbanization. In the US market, PRIZM has identified 15 groups breaking down into 62 clusters. The large national telecommunications company had profiled their customers by these clusters, and identified several key clusters which helped them target future prospects. But they were unable to develop specific products/services that met the unique needs of these clusters. The telecommunications company could not effectively respond to changes in the marketplace since they did not know what was driving their customers' decisions. They also found it difficult to communicate to 62 different clusters to their marketing group. The company then decided it wanted to develop a segmentation scheme that could help them better understand what was driving purchase in the category and at the same time was easy for their marketing group to understand. The key objectives for the segmentation were to insure that the segments could be easily linked to customer and prospect databases, easily understood by their marketing team, and applied to specific selling propositions and package offers.

To meet these objectives a hybrid segmentation approach was used. This approach employed a traditional segmentation survey, but once the survey was completed, the respondent level data was then aggregated by PRIZM cluster and segmentation was built on grouping PRIZM clusters rather then respondents to form segments. The thinking here was that if a similar values-based segmentation could be developed by PRIZM clusters rather than respondents,

then no additional modeling would be necessary to align the segmentation scheme with the company's customer and prospect databases. All that would be needed is just the customer or prospect's address to assign them to a segment. In addition, since all of company's transactional databases could also be summarized by PRIZM code, the data contained in these databases could also be used to assist in developing the segments and greatly enhance follow up tracking.

COMMERCIAL SEGMENTATION

Before discussing the development of the segments, it is important to review some background on commercial segmentations, like PRIZM, and how they can be modified to help companies develop their own custom segmentations. Commercial segmentations have been around for a long time. Typically, these systems are based on modeling various behavioral activities across socioeconomic, urbanization and life stages groups. Through modeling the behavioral differences between these groups, approximately 60 to 70 clusters are developed. It's not unusual for companies developing these segmentations to analyze over 100 million records from secondary sources and over 100,000 from primary data collection. In addition, third party data from sources like Simmons, MRI, Polk, and Echelon are used to profile the segments by lifestyle, automotive, financial, communications, energy and discretionary spending behavior. These commercial segmentations allow companies to move from 5-digit ZIP code to Census Tract to Block Group to Zip+4 depending on the information they have in their databases. In addition, most of the commercial segmentations provide households assignments for about 60% of the US. These systems are generally designed to help companies improve their direct marketing through improved profiling and locating a company's best customers.

As powerful and as easy to identify key customers as these commercial segmentations are, they do not provide industry specific measures necessary to develop customized segmentations. In order to develop an effective segmentation, a company must understand the motivations behind purchase in their category, e.g., brand value, price elasticity, feature affinity, etc. In addition, a company can only reasonably deal with four to eight different market segments, rather than as many as 60.

"As powerful and as easy to identify key customers as these commercial segmentations are, they do not provide industry specific measures necessary to develop customized segmentations."

The basic idea behind this approach to segmentation is to aggregate the respondents by commercial segmentation clusters, and then group the clusters rather then respondents. The key to making this work is that the 60 or 70 clusters in the commercial segmentation represent similar behavior patterns, as there would be on a respondent level. The reason that these commercial segmentation clusters appear to work as well as they do is that the granularity of the 60 to 70 clusters, representing socioeconomic, urbanization and life stages differences, is enough to reflect behavior patterns similar to those on a respondent level.

To illustrate the granularity of the commercial segmentations type clusters, look at Figure 1 below which shows results from selected questions from the segmentation relevant to a telecommunications company.
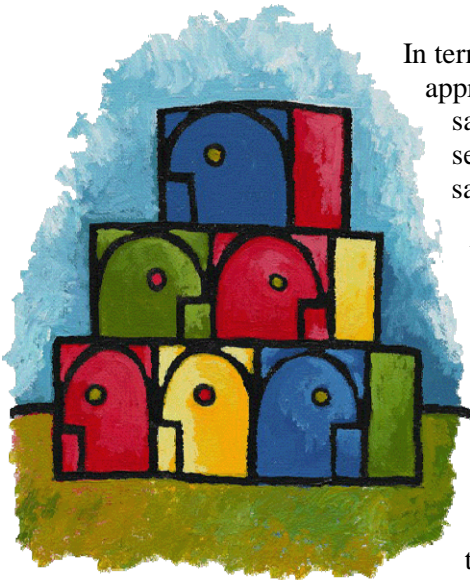
FIGURE 1 – DIFFERENCE BETWEEN PRIZM CLUSTERS ON KEY STUDY ITEMS

	Min. Across Clusters	Max. Across Clusters
WIRELESS SERVICE		
How much do you pay per month for wireless?	$43	$68
How many times have you switched providers?	1.0	1.9
LOCAL SERVICE		
How much do you pay per month	$37	$58
LONG DISTANCE SERVICE		
How much per month do you spend on LD?	$21	$51
How many times have you switched providers?	1.3	2.2
INTERNET SERVICE		
How much spend per month?	$18	$27
How many times switched internet providers?	1.0	3.0
RATING OF COMMUNICATION NEEDS		
Pricing Plan	76	95
Coverage Area	66	93
Price	83	99
Brand Name	32	59
Customer Service	75	91
Call Quality	85	95
Custom or Advanced Features	43	79
Bundling	32	64
Billing	60	89
DEMOGRAPHICS		
Age	39	56
Presence of Children or Teenagers	11%	56%
Income	$35,526	$89,886
What % of work do you do from home?	2%	24%
Occupation-Professional	14%	50%
Occupation-Craftsman / Blue Collar	0%	22%
Occupation-Self-Employed	2%	32%
Race-White	5%	100%

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The values in the table show the numbers associated with the PRIZM clusters that had the lowest and the highest values on the indicated item. Having differences in the demographics would be expected since demographics were used in the development of the PRIZM clusters. The real test would be to see if there are differences in benefits sought and the behaviors across the PRIZM Clusters. In fact there were significant differences on almost all questions in the survey, which strongly supports the rational for using PRIZM clusters as building blocks for a customized segmentation for this industry. Experience in using commercial segmentations in other industries also indicates similar very significant difference across their clusters.
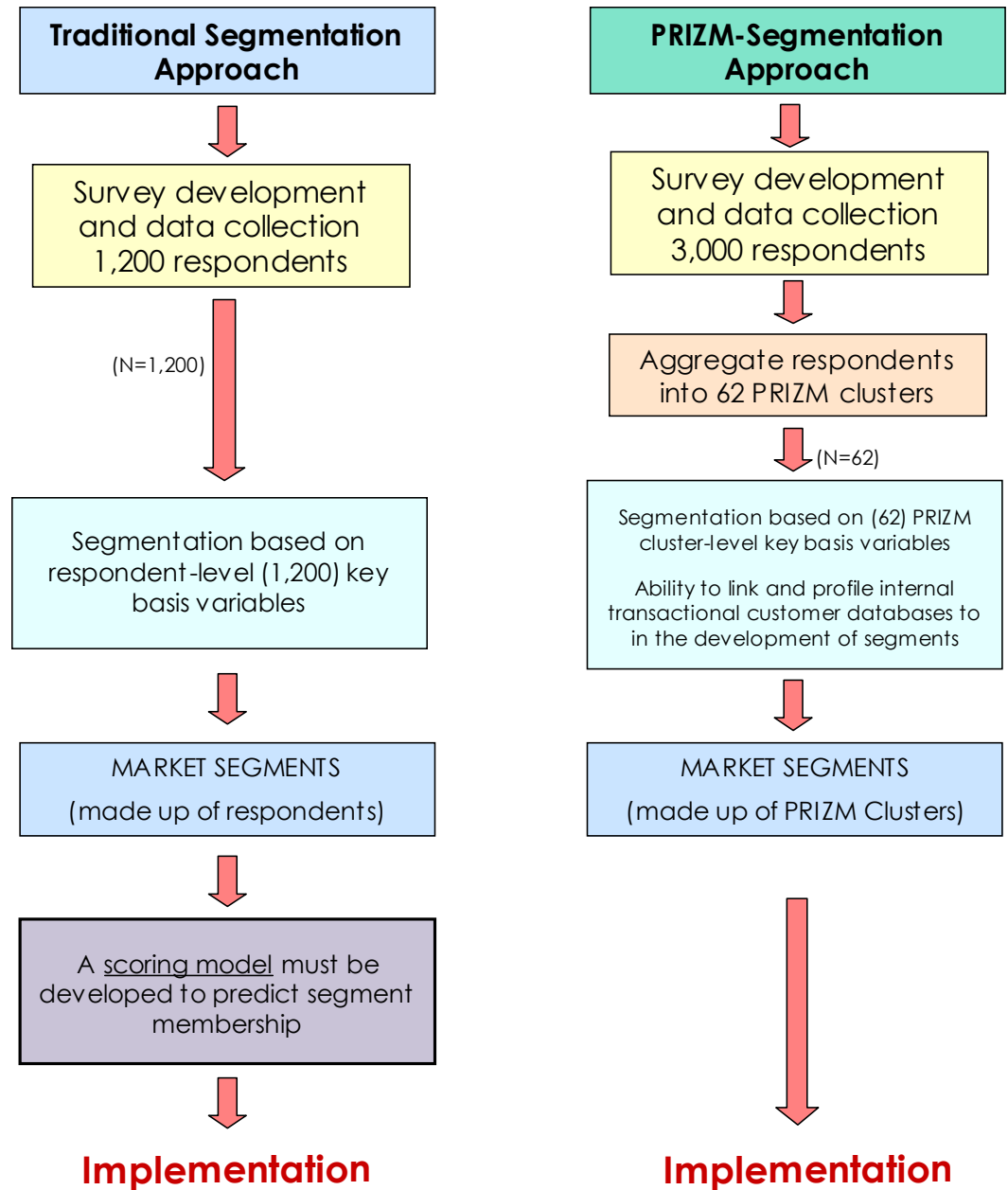
TRADITIONAL VERSUS COMMERCIAL SEGMENTATION APPROACH

To better understand how this commercial segmentation approach is different from a traditional segmentation, look at the flowchart shown on the next page. To begin, the survey would be exactly the same with either approach and would need to be very comprehensive and include industry specific questions on needs, benefits, and behaviors. For the national telecommunications company the survey included questions on usage of and benefits sought for wireless, local, long distance and internet services, as well as questions on technology adoption, and demographics.

In terms of sampling and total number of respondents to be interviewed, the two approaches would need to be different. In a traditional segmentation approach, sample sizes are typically around 1,200 to allow development of 6 to 8 segments with high reliability. Also, the sampling plan is typically a random sample pulled from the target population. For the commercial segmentations approach, the sample size needs to be larger and the sampling plan needs to be balanced by commercial segmentation cluster within the target population. In the telecommunication example, a sample size just over 3,000 completed surveys was used so that at least 50 surveys were completed for each of the 62 PRIZM clusters. The potential respondents for either approach would come from a list of the company's customers and prospects.

Continuing to look at the flowchart, after the data has been collected, under the PRIZM segmentation approach there will need to be an extra step to first aggregate the respondent level data by PRIZM cluster. For the national telecommunications company, the 3,000 surveys were aggregated into 62 PRIZM clusters by simply averaging the responses to all the questions by PRIZM code. For example, if a Yes/No question was asked a respondent, then the respondent level data would have a 1 or a 2 for a Yes and No code respectively. After the data was aggregated by PRIZM code then the response to the Yes/No question would be a number between 1 and 2, for example 1.5, which would indicate for that PRIZM code half said Yes and half said No.

FIGURE 2 – SEGMENTATION PROCESS FLOWCHART

Traditional Segmentation Approach	PRIZM-Segmentation Approach
Survey development and data collection 1,200 respondents	Survey development and data collection 3,000 respondents
(N=1,200)	Aggregate respondents into 62 PRIZM clusters
	(N=62)
Segmentation based on respondent-level (1,200) key basis variables	Segmentation based on (62) PRIZM cluster-level key basis variables. Ability to link and profile internal transactional customer databases to in the development of segments
MARKET SEGMENTS (made up of respondents)	MARKET SEGMENTS (made up of PRIZM Clusters)
A scoring model must be developed to predict segment membership	
Implementation	**Implementation**

The next step in both approaches is to select the basis variables that will be used in the segmentation. Basis variables are the ones that are used by the clustering program to group together either respondents or commercial segmentation

clusters, into segments. Many different types of variables can be used for the clustering, including values, needs/benefits, behavioral, usage, geographic, and attitudinal. The use of the particular basis variable will vary based on the objectives for the segmentation, but it's important not to try to use all the survey variables in the clustering, but rather, use one set of variables to determine the segments and the rest of the variables to profile the segments. The rule of thumb should be the fewer basis variables, the better. For the national telecommunications company, customer's and prospect's values sought for the different communication offerings were used as the basis variables. All the other attitudinal, usage/behavioral and demographic variables are used to profile the segments.

In addition, since the telecommunications company was using PRIZM clusters with their customer files, it was also able to profile the segments by their internal customer databases. The company's customer database consists of monthly billing records. In order to link the customer databases to the segmentation, the transactional databases had to be summarized by household and by time so measures of usage, profitability and churn could be developed. The household level measures were then aggregated by PRIZM code so they could be directly linked with the survey data and be used to profile the segments.
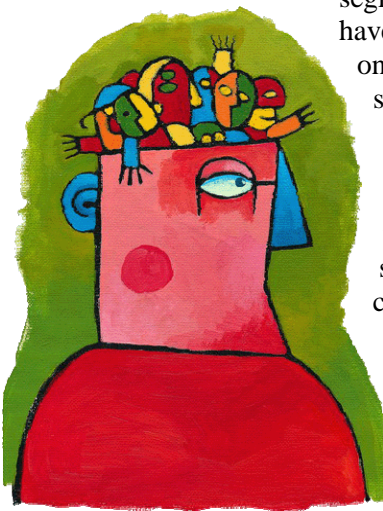
Another advantage of a commercial segmentation approach, is the ability to look at which commercial segmentation clusters are associated with each segment. Normally, when clustering respondent level data, the development of the segments comes from inspecting the mean scores of the basis variables for each of the segments and identifying the variables that most differentiate each segment from the others. In the commercial segmentation approach, in addition to looking at the mean scores of the basis variables, it can be very helpful to better understand how and why the segments are forming by looking at which commercial segmentation clusters belong to each segment. In the national telecommunication company case, there was an urban/rural dimension that was very critical to the firm's marketing, and some adjustments were made to the segment membership by moving certain PRIZM clusters from one segment to another.

A major consideration in developing the segments is the particular clustering algorithm that is used. There are no absolute rules, but for use with commercial segmentations, using Hierarchical clustering can be very insightful. With Hierarchical clustering, all respondents start in their own segment and the algorithm goes through an iterative procedure of grouping the observations based on similarities. For example, if you had 100 respondents, the algorithm would start with 100 segments and then find the two that are the most similar to form 99 segments. This procedure continues until all respondents are grouped into only one segment.
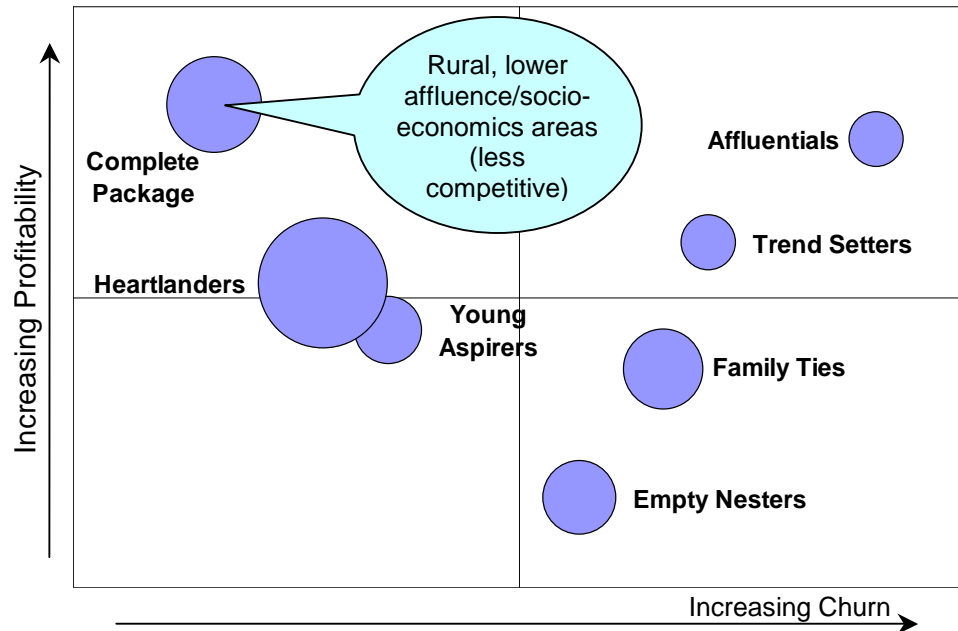
The output from Hierarchical clustering provides a Dendogram which reveals hierarchical structure of how the respondents are linked together. Being that the respondents are clusters, with their own personality, looking at these Dendograms makes it very easy to visualize the structure of the marketplace and why certain types of customers and prospects are grouping together.

The next step in both the traditional and commercial segmentation approaches is the development of the segments. With both steps this is where the groupings from the clustering are examined and the potential segments are profiles by the non-basis variables and the overall development of the segments takes place. The outputs from this step are the segment names and descriptions, and the development of marketing tools to provide the ability to drill down into the survey data by segment. In the case of the commercial segmentations approach, customer database information, like profitability and churn, are also added to the marketing tool.

For the national telecommunications company segmentation, they developed 7 segments. These segments defined 7 very different groups of customers who have strong differences in their communications needs and their behavior based on the company transactional databases. The key here is that the richness of the segment descriptions is in no way reduced due to using commercial segmentations clusters rather than respondents. At this point the telecommunications company was ready to implement their segmentation and assign customers and prospects to the newly defined segments. Since their customer and prospect databases already contained PRIZM codes, segment membership was just a simple lookup of which segment the PRIZM code belonged to.

One of the first things the telecommunications company did with the segmentation to help them strategically better address their market needs, was to develop a map of profitability by churn by segments. On the next page this map can be seen. On the map the size of the circles indicates the relative size of each segment in the marketplace. For example, The *Heartlanders* segment is the largest and the *Trend Setters* is the smallest segment. The ideal positioning on the map would be top left, since that represents the highest profitability and the lowest churn. The key targets identified on the map are the two largest segments of *Complete Package* and *Heartlanders*. The *Complete Package* segment has the highest profitability and the lowest churn. The *Heartlanders* segment does not score as high on both profitability and churn, but does represent the largest potential number of customers. The Affluentials segment have high profitability but they are more likely to change carriers. In looking at the PRIZM codes that make up the *Complete Package* segment, they tend to be in the rural and lower affluence/socioeconomic areas where there tends to be less competition from other major providers.   The telecommunications company focused their efforts

FIGURE 3 – MAP OF PROFITABILITY BY CHURN BY SEGMENT

in these areas and achieved high levels of profitability from both the *Complete Package* and *Heartlanders* segments.

In the traditional segmentation approach, once the segments have been defined and described, a scoring model needs to be developed in order to determine the segment that customers and prospects belong to. The development of the scoring model will be dependent on the information available in these databases and typically the same information that is available from the customers and prospects databases would have been included in the survey. This insures that all the respondent data can be used in the modeling. In any case, having to score customer and prospect databases creates an extra step and will be constrained by the accuracy and relevancy of information contained in company databases.

OPTIONS FOR COMMERCIAL SEGMENTATIONS

A commercial segmentation approach can be enhanced by selecting the commercial segmentation which best matches an industry to the different pre-defined segmentations. The key is to examine how the alternative commercial segmentations develop their segments. As mentioned above, PRIZM develops social groups and specific clusters developed along two dimensions, affluence and urbanization. In the US market, PRIZM has identified 15 social groups breaking down into 62 clusters. The original 62 PRIZM clusters could only be

mapped to Zip+4 and/or census tract basis. More recently, PRIZM was updated to PRIZM NE and includes 66 clusters and is available on a household basis. With most of the newer household capabilities, only about 60% of the US is covered on a household basis. Companies using these segmentations can only purchase the ability to assign cluster membership on a zip+4 basis. Household level assignments are only available through the provider of the commercial segmentations. In terms of industry association, PRIZM might work better in telecommunication, cable, media and energy.

Another commercial segmentation is Personicx, which is a household level commercial segmentation, which classifies all U.S. households according to consumers' different stages of life and related purchasing behaviors. Personicx, developed by Axiom, has identified 21 life stages groups breaking down into 70 clusters and is available on a household basis. Another commercial segmentation is P$YCLE. P$YCLE, developed by Claritas, models segments of customers by evaluating the economic and demographic factors that have the greatest effect on their financial behavior, such as total household income, age of household head, home ownership, and a proprietary measure of Income Producing Assets (IPA). P$YCLE categories households into one of eight groups, which have distinct usage patterns for financial products and services, and 42 sub-segments within those groups, and it is also available on a household basis.

Considering some of the different industries, PRIZM might work better in the telecommunication, cable, media, and energy industries with its focus on affluence and urbanization. Whereas Personicx might work better in the real estate/housing, hospitality/travel/leisure/recreational and healthcare/insurance industries with its focus on life stages groups. Finally, P$YCLE might work better in financial with its financial focus.

CONCLUSIONS

"The biggest advantages of a commercial segmentation approach are the ease of implementation, and the ability to link rich primary surveys with customer and prospect databases."

While traditional and commercial segmentation approaches to developing a custom segmentation are quite similar, segmentations using a commercial segmentation can offer significant advantages for companies looking to better communicate with their target customers and prospects. The biggest advantages of a segmentations system approach are the ease of implementation, and the ability to link rich primary surveys with customer and prospect databases. Commercial segmentations can make a difference in where your segmentation ends up, either on the bookshelf or in the marketplace.