COMPARISON OF SEGMENTATON PLANS FOR RESIDENTIAL ENERGY CONSUMERS

Submitted to:

Sarah Castor
Energy Trust of Oregon, Inc.
851 SW 6th Avenue, Suite 1200
Portland, Oregon 97204

Submitted by:

Dethman & Associates
Linda Dethman
David Thomley

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≈ EXECUTIVE SUMMARY ≈

The good news is that in our analysis, the high priority segments to pursue for energy efficiency appear to make up 50-60% of residential customers.

INTRODUCTION

Market segmentation has been shown to be a powerful tool in speeding customer adoption of products, services, or desired behaviors, from computers and software, to beverages and restaurants, to reducing tobacco use.[1] Consider, for a moment, Apple's Mac strategy to capture the creative thinkers (and their pocketbooks) of the world, first by focusing on educators and graphic artists and then by appealing to other segments who want to "think different." Who doesn't know the "PC" and "Mac" guys, with Mr. PC so bottled up in his suit and haircut and Mr. Mac so relaxed in his jeans and hipness? And who doesn't know about Apple's success?

Segmentation assumes that markets are heterogeneous and require approaches that recognize this diversity. Segmentation schemes divide markets into distinct groups based upon their shared characteristics, needs and preferences. Programs and marketing can then be tailored to reach the groups with the most potential to use services, buy products, or change behavior.

Energy Trust sponsored this investigation because they, and a number of other energy agencies in the western United States (Puget Sound Energy, Bonneville Power administration, Snohomish PUD, Tacoma Power, BC Hydro, and Sacramento Municipal Utility District), have undertaken segmentation efforts with their residential customers in the past five years. We set out to see what might be learned about customer segments and about how seven agencies are conducting segmentation research and putting it into use. We reviewed segmentation materials and interviewed key contacts at the agencies. We also relied on various books and articles on segmentation. This executive summary addresses the conclusions and implications of this research and recommends next steps for Energy Trust to consider for its segmentation efforts.

CONCLUSIONS

- Most segmentation for energy efficiency programs has been based on convenient utility divisions – for instance, residential and commercial or geographical sectors – rather than a nuanced understanding of consumer needs and preferences. The "status quo" marketing and program segmentation approaches, while valuable, do not take advantage of the power of consumer-based market segmentation approaches that are

[1] See, for instance: Steven J. Moss, M.Cubed, "Market Segmentation and Energy Efficiency Program Design," Prepared for CIEE Behavior and Energy Program, November 2008,, p. 6, Malcolm McDonald and Ian Dunbar, "Market Segmentation: How to Do It, How to Profit From it", and Loren Lutzenhiser, "Segmentation Overview," BECC Presentation, Sacramento, CA 2008.

widely used in other industries. The seven segmentation schemes developed by energy agencies in the west that are examined in this study rely on consumer variables – attitudinal, behavioral, and consumptive – and offer the potential for better programs and more savings.

- Agencies using these customer-based schemes say they have fostered new thinking about their residential customers, resulting in new types of program design and marketing and more careful tracking of program response by segment. The agencies furthest along have seen positive results in terms of program uptake and they expect to reap greater savings due to their segmentation efforts.
- Our industry has focused on narrow adoption of more efficient technologies and has assumed most decisions are driven by rational and economic factors. These seven segmentation schemes clearly show that consumers think about and pursue energy efficiency in various, complex, and sometimes inconsistent ways and are influenced by a wider set of factors than a "rational economic man" model suggests. Those interviewed for this project stress, however, that it is hard to overcome the inertia of long-standing operating assumptions about customer thinking and program delivery.
- The segmentation schemes presented in this report vary significantly in purposes, methods, results, and application. Our analysis clearly shows that the variables used to develop the segments greatly affect them and that selection of variables and wording of survey questions is an imperfect process. The most useful approaches appear to incorporate awareness, attitudinal, behavioral, and consumption variables, and to collect a large amount of data which is then winnowed down. Yet sponsors stress that it is the commitment and iterative process of using segmentation, not the perfection of the scheme that is important. They say that if reasonable care and thought are put into segmentation approaches, and they meet basic segmentation criteria, they all provide a stepping stone to a more sophisticated understanding of customers, how to reach them, and how to influence greater energy savings.
- The segmentation process underscores that markets are not monolithic and that customers vary -- by awareness, knowledge, values, attitudes, circumstance, and behaviors. This perspective is useful for changing "business as usual" in energy efficiency agencies. Those who believe in segmentation would also say that such an approach is essential for reaching the remaining substantial, but more challenging, savings opportunities.
- Our analysis across segmentation approaches in this study revealed 10 segments that could be prioritized by their potential; however not all of these segments were in all schemes. Still, this amalgamated approach will hopefully further thinking about useful ways to segment the residential market according to the "concern, capacity, and conditions" framework presented. In addition, in this analysis, the "high priority" segments make up 50-60% of the residential markets – meaning that they offer strong potential for influence and savings if programs and services are targeted to their needs.

- The most robust segmentation situations within the energy agencies are those that have taken a long-term view and that have gathered broad and integrated organizational support. These agencies have allocated adequate resources to do the initial segmentation research, to try out pilot programs using segmentation, to conduct further research with segments, and to collect metrics about results. In addition, the most successful use of segmentation studies also appears to be driven by sponsors who are pursuing very challenging and firm energy savings goals.

- Puget Sound Energy, Tacoma Power, BPA, and SnoPUD collaboration on a "regional approach" to segmentation offers the potential of a common platform for all energy agencies in the Northwest to use. The efforts have resulted in more communication among the utilities about how they are reaching customers and more coordinated approaches. It has generated a good deal of enthusiasm, momentum, and learning for all involved. In addition, they have developed a small set of questions (see Appendix C for BPA's "Gearbox" surveys) that they can use to accurately categorize respondents into the segmentation scheme. (Note: BC Hydro also has developed a shorthand approach for their scheme.)

- Of all the agency efforts reviewed in this study, Energy Trust has made the least use of its segmentation scheme. This is likely due to the segmentation being an "add-on" to the tracking survey that allowed a limited set of variables to be measured in the first attempt and to the low level of organizational buy-in and support prior to the effort. In addition, some segments of the first round of research did not appear viable to evaluators and the scheme was not promoted internally. Comparison of the first scheme to the other segmentation schemes analyzed in this study showed limited overlap of ETO variables with variables in the other studies – especially the basis variables used to assign customers to their segments. The second tracking survey gathered a greater wealth of data for the segmentation analysis, resulting in a more compelling and usable scheme and more consistency with the other schemes.

RECOMMENDATIONS

1. Given the positive regard for and experience with segmentation of the other energy agencies examined in this study, the increased regional and national interest in developing new approaches to save more energy or use more renewables, and the opportunities for increased savings by using customer-based market segmentation, Energy Trust should further its commitment to putting segmentation into practice. It will be helpful to review the steps for successfully incorporating segmentation into program design, marketing, and evaluation, as described in Section 1. This study suggests two avenues for moving ahead:
   - Internally market and champion the scheme they have developed through their own research. Given the current low level of visibility and buy-in so far for using this scheme, overcoming organizational inertia will take time and commitment. Champions from the top down will need to be identified and resources will need to be provided. Still, Energy Trust is known for its innovative programs and pioneering ideas and the

current scheme is available for action now, without further delay. Baby steps could be taken almost immediately, especially by trying out segmentation with pilot programs.

- Internally market and champion joining forces with other utilities in the Northwest to use a common segmentation platform, potentially using the Northwest's regional short-form "gearbox" survey to collect data and to categorize segments. This approach offers the benefit of having a coordinated segmentation scheme in use throughout the region and greater collaboration across agencies with similar interests.

2. If Energy Trust decides to actively use segmentation, they need to review how their market assessment, data tracking, and measurement tools can be used to further the understanding and use of customer segments. This review will likely result in the need for more resources to support qualitative research with individual segments; market assessments or pilot programs that incorporate segmentation; and program surveys that gather segmentation information about program participants.