



**Case Study:**

**Consumer  
Segmentation and  
Your Utility**

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# 1 Background

For most of us, each day is full of communications; emails, phone calls, texts, phone notifications, and social media, not to mention the variety of advertisements coming from every direction. All of these are attempting to capture the attention of our minds across most waking hours.

As an often taken-for-granted electric utility, how can you capture your members' attention long enough for them to understand why what you're doing is important; and how new programs being offered are beneficial? Or even more important, to continue building trust. Your communications and the programs you offer must stand out and connect with your members. This connection is needed in order to drive engagement, satisfaction, effectiveness...and ultimately SUCCESS. So, in this time of unprecedented transition in the electric industry, with many competing voices, what can you do to increase success?

At PSE, we believe that your members' preferences and attitudes concerning electricity are changing - certainly not everyone, but generally there is significant fragmentation and/or movement occurring. *Consumer Segmentation Studies* can cut through the noise, the biases, the assumptions, and drive fresh understanding for your staff, and board members. Consumer segmentation studies use data collected through surveys, meter data, census data, and/or focus groups to assess and classify consumers based on shared characteristics.<sup>1</sup> In doing so, you can better understand the membership and improve the success of various member-focused initiatives.

## What is Consumer Segmentation?

As a practical definition, segmentation is a process used to identify homogeneous groups of consumers within a larger heterogeneous population based on psychographic, demographic, and geographic characteristics.<sup>1</sup>

# 2 Industry Impacts

The transformation occurring in the electric industry is affecting how cooperatives do business. It is driving innovation and opportunities. In response, cooperatives are managing and exploring new programs and pricing such as:

- Time of use Energy or Demand Rates
- Managed Charging EV Rates and Programs
- Beneficial Electrification Programs
- Price-based or Equipment-based Demand Response
- Residential Demand (3-part) Rates
- Increasing Fixed Charges
- Subscription (a.k.a. Lifestyle) Pricing
- DG Policies and Compensation

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<sup>1</sup> Customer Preference and Behavior. ERPI, (pg. 1-1).

To usher in these changes, it is necessary to create effective communication, trust, and understanding with members. Without this, new rate designs can be met with increased resistance or lack of participation and engagement. Leveraging the results of a Consumer Segmentation Study can help staff develop targeted programs, maximize the impact of limited budgets, increase customer satisfaction through personalized messaging, increase rates of adoption on new programs, and enable more informed decision-making.<sup>2</sup>



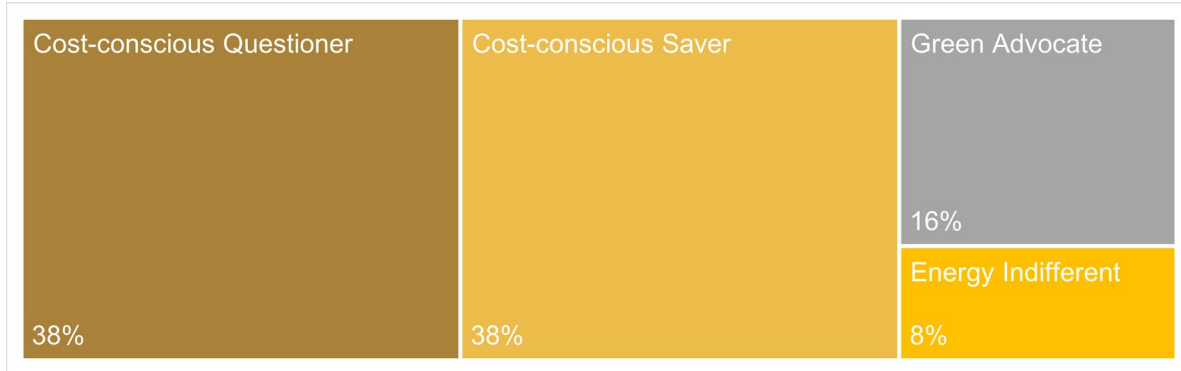
### 3 Consumer Segmentation Case Study

Recently, PSE conducted a Consumer Segmentation Study (Study) for a 12,000-member cooperative client in Wisconsin. The goal was to gauge member attitudes and beliefs around the service provided by the cooperative, understand member interest in new technologies, and determine the motivations around the membership to participate in alternative rate design programs.

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<sup>2</sup> Market Segmentation and Energy Efficiency Program Design. CIEE, Oakland, CA: 2008 (pg. 8); Customer Preference and Behavior. ERPI, (pg.1-1).

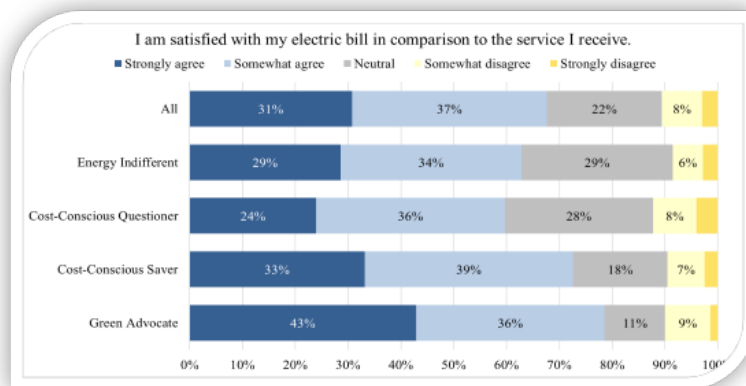
Another key takeaway for the cooperative was gaining additional understanding of how to effectively message and engage with the membership. The Study involved administering a customized survey to the membership, evaluating the survey responses, grouping (i.e., clustering) results, discussing the results with management and the board, and summarizing the results and insights in a report.



The responses to the survey revealed that respondents could be segmented into 4 groups: Green Advocate, Cost-Conscious Saver, Cost-Conscious Questioner, and Energy Indifferent. Each group represents a set of different attitudes and motivations driving consumer decision-making. For example, a Green Advocate views sustainability as their highest motivation whereas a Cost-Conscious Questioner is focused entirely on the impacts to utility rates and their electric bill.

In this Study PSE found that 70% of respondents support the cooperative’s investments in renewable energy resources but only 40% of respondents were willing to pay more on their bill for these resources. This helps put factors like affordability and sustainability in perspective. It gives context that can impact the cooperative’s messaging around renewables, such as its community solar projects or DG policies. The insights can also impact decision criteria that the cooperative applies to renewable projects to bring greater alignment with member interests and expectations. Additionally, the results highlighted that the cooperative’s messaging should focus primarily on renewables being an effective way to reduce power costs, rather than focusing primarily on the “green” or environmental aspects.

The Study also provided executive team and board members with a better idea of their consumer base, helping the utility reduce “blind spots” in their perceptions. In this regard, one critical finding from Study was that the Green Advocate group had the highest satisfaction rating. The results surprised the cooperative which had the impression that they would score low on satisfaction from Green Advocates. A minority of dissatisfied Green Advocates had biased the overall impressions of Green Advocates to the board. The Study was able to provide a more transparent and “honest” assessment of various member

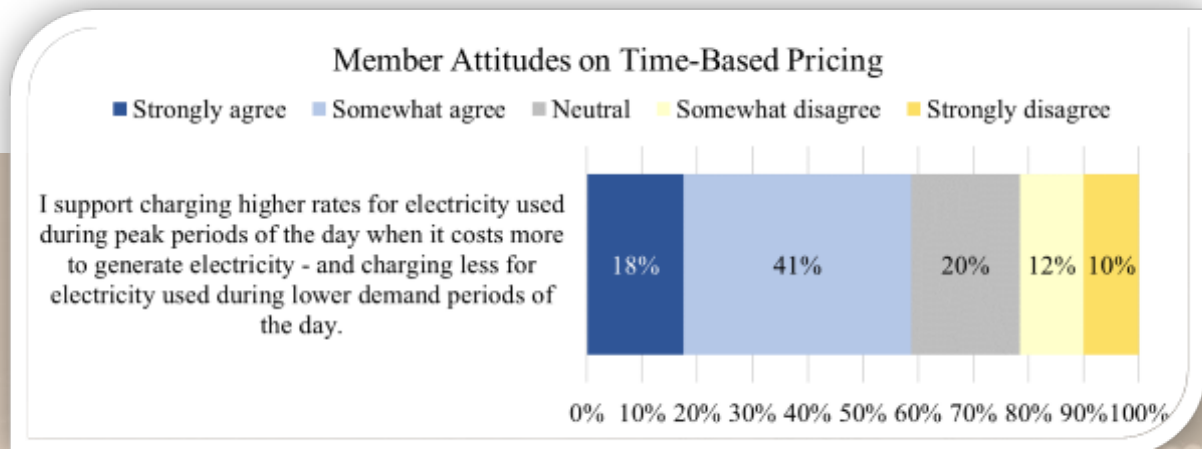


groups that can either confirm or correct previously held biases that can be holding us back and distorting our focus.

Another integral result of the Study was the high support for demand-side management (DSM) programs such as time of use rates; 59% of respondents supported charging higher rates for electricity during on-peak times and less for electricity during off-peak times. For a rate program that provides a financial incentive for shifting electricity usage, support jumped to 74%.

Additionally, when asked if respondents would shift electricity usage to avoid carbon-intensive resources, 61% indicated they would consider doing so. These results inform board members that there is value in evaluating and potentially adopting effective DSM programs.

The cooperative can speak to matters of peak costs, shifting usage, and avoiding use of carbon-intensive resources to connect with values of the membership. By doing so, we would expect both higher participation rates in these types of programs and higher overall satisfaction as the cooperative provides opportunities that align with member interests.



In addition to looking at DSM, the Study asked about issues around electric vehicle (EV) and roof-top solar interest and expectations. Surprisingly, current EV and roof-top solar adoption are lower than expected with only 4% of respondents owning an EV and 8% having roof-top solar. The survey also revealed that 10% of respondents consider it likely that they will buy an EV or install solar within the next five years. Again, this can confirm or correct expectations at the cooperative that can affect the urgency with which changes are made concerning service sizing/standards, charging station investments, rate re-design, etc.

Even at a 10% increase in electric vehicles consumer demand is likely to shift; particularly when the survey shows areas where the responses are clustered across the service territory. This may be an indication where DSM programs or infrastructure upgrades are the most effective in the short-term. Additionally, it gives an opportunity for the cooperative to begin preparing and implementing solutions/programs to get influence the load and load shape impact of EVs and roof-top solar.

## 4 Conclusion

Overall, in an industry that is rapidly evolving and with a world overflowing with content, it is increasingly important to effectively communicate and personalize information to members. Consumer Segmentation can be an effective way to approach these challenges. PSE offers specialized services for Consumer Segmentation studies in the utility industry. PSE was founded in 1974, has been serving electric cooperatives, municipals, investor-owned utilities, and industrial consumers for 50 years. Since our founding, PSE has provided industry leading engineering, economic, and planning solutions that combine innovation with proven approaches to meet our client's needs.