How Rebates Interact With Customer Purchases of White Goods

Stephanie Greenberg, Pacific Gas & Electric, San Francisco, CA
David C. Lineweber, Ph.D., YouGov **|** *Definitive Insights, Portland, OR*

ABSTRACT

While many customers have used the rebates that PG&E has offered toward the purchase of more efficient white goods (e.g., refrigerators, washers, dishwashers), the company has had a limited understanding of exactly how those rebates contribute to decisions about which appliance customers conclude should acquire. This is especially true within retail appliance markets that involve a broader range of options for making a purchase, and more sources of information than customers used to have. Without this insight, it is difficult for PG&E to know where, when, and how they should communicate with customers about the availability and relevance of rebates.

In late 2011, PG&E conducted research on these issues with customers who made recent white goods purchases. The research used a novel technique that allowed the team to map all of the steps that appliance shoppers took from the point that they first considered the idea of acquiring a new appliance to the point of acquisition – considering both online and offline options.

Using this data, PG&E identified different "purchase paths" which described the steps that appliance purchasers took throughout their purchase process. Within each purchase path, PG&E was able to see where, when, and how, PG&E rebates came into play, and the impact that those rebates had on final purchase decisions. The company was also able to determine the extent to which purchase paths played out differently across different appliances, different reasons for purchase, and different types of residential customers. Based on these new insights, PG&E has been able to identify key purchase paths – and key points in those purchase paths – where the company can maximize the impact of its rebate messaging.

Background

Like many utilities, PG&E has – for many years – offered both residential and business customers the opportunity to receive rebates when they purchase qualifying energy efficient appliances and equipment. Over this time, the company has consistently conducted market research that helped the company understand when and where rebates were being used, and this work yielded useful insight that helped the company understand how to talk to customers about rebate options.

Over time, however, appliance markets have become more complex, which also means that the question of when, where, and how rebates should be offered has become more complex. Historically, when most residential customers decided that they needed a new appliance, they might review print materials of one form and another, but then they would most often go to a brick-and-mortar store to acquire the appliance. As long as brick-and-mortar sales staff were familiar with, and supportive of, utility rebates, and qualifying products were properly identified, PG&E could reasonably conclude that rebates would be taken into account as customers make their white goods purchases.

More recently, of course, the paths that customers pursue as they learn about, and acquire, new appliances can be much more complex. The expansion of online sources of information – with both basic descriptive information, as well as evaluative reviews and analysis – combined with the opportunity to actually purchase appliances online raises questions about how customers are currently doing business as they consider which new appliance to acquire, and how they actually do so. Are their appliance assessment and purchase processes changing and, to the extent that they are, what are the implications of this for how PG&E offers and communicates about its offers for appliance rebates?

The company sponsored research with YouGov|Definitive Insights to explore the following objectives:

- Understand the customer shopping journeys involved as residential customers acquire new (to them) in-home major appliances
- Understand the role that energy efficiency plays in customer decisions regarding the acquisition of new major in-home appliances vis-à-vis other qualities or features that may affect those decisions
- Specifically understand the role that utility information and rebates (and specifically PG&E rebates) can, and do, have on final purchase decisions
- Develop insights on how all of these factors should impact PG&E's retail strategy

Research Approach

The research that PG&E commissioned was designed specifically to address the objectives outlined above. Basic elements of that design included:

- 800 total survey respondents, with all respondents completing a 22 minute (on average) survey online during late November – early December 2011
  - Since the surveys were all completed online, this meant that all respondents had to have access to a computer and the internet
  - 349 respondents were sampled from PG&E lists of rebate recipients and recruited by email
  - 451 respondents recruited from online panel sources
- All 800 respondents had purchased a qualifying appliance (refrigerator, dishwasher, clothes washer) within the last year (for the panel sample) or the last two years (for the PG&E sample), and among these:
  - 408 were classified as rebate users
    - These came primarily from PG&E sample sources, but some (59) were self-identified from the online panel
  - 392 were rebate non-users
    - These respondents were screened from online sample sources
- The distribution of respondents across the appliances purchased was:
  - Clothes washer - 350
  - Refrigerator - 243
  - Dishwasher - 207

The central feature of the questionnaire design was a set of unique modules that allowed the team to capture detailed information about each respondent's shopping journey. Essentially each respondent was shown a series of content boxes, each of which represented a "step" in their purchase journey. The questionnaire asked the respondent to think of the first thing(s) they did as they first starting thinking about acquiring a new or replacement appliance, and provided them with a list of "activities" in which they might engaged. They were asked to "drag and drop" each of the "activities" they selected into the "Step 1 box." Once they completed their selection of all of the "activities" they did in Step 1, they moved on to the same task for Step 2, etc.

Respondents were allowed to identify as many steps as they wanted to specify, and they could add as many "activities" as they wanted in each step. The "activities" that they were offered to put into each Step included the following:

- Went online using a PC to explore information about [appliances]. . .
- Went online using a mobile device . . .
- Used a mobile app . . .
- Looked at print media . . .
- Visited 1+ appliance retailers to look at models in-store
- Visited 1+ appliance retailers to talk to a salesperson
- Looked through weekly flyers/circulars for sales or deals
- Looked at used or refurbished options
- Consulted friends or family for advice
- Consulted a home professional for advice
- Something else (please specify)

By analyzing these responses, the team was able to define a purchase path for each survey participant, understanding how many steps were involved in their individual purchase journeys, and what each person did at each step. By mapping these findings to other responses, the team was also able to determine when and where the PG&E rebate came into play and how it affected the ultimate appliance purchase.

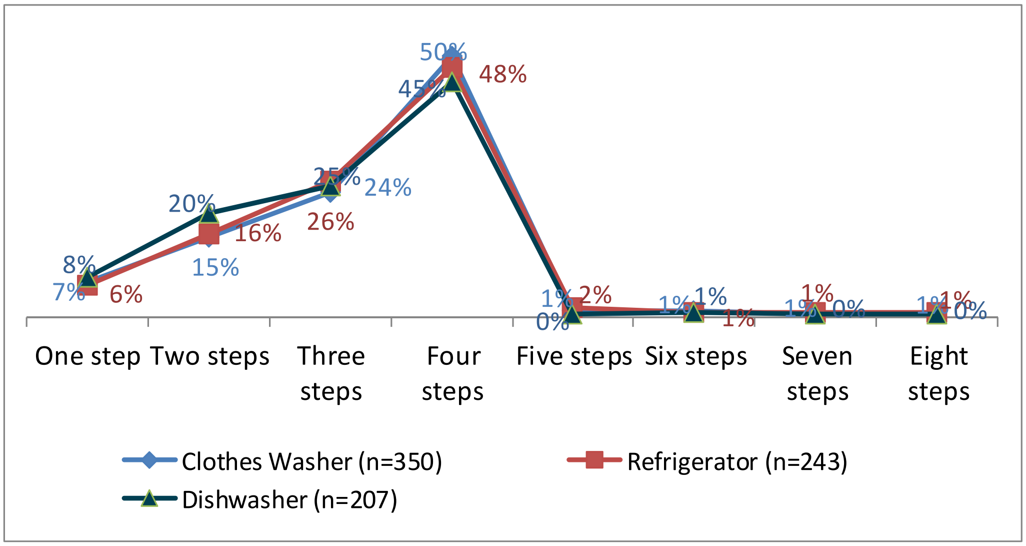
Purchase Journey Findings

The team's initial investigation into purchase journeys revealed some findings that are largely true for most customers (across appliance types):

- Shopping journeys involve multiple steps and take more than a few days (even, usually, for emergency replacements)
- Going online is the most common place to start a shopping journey and most people do this at some point
- But, people are still buying in stores, and stores are still very influential in the final purchase decision

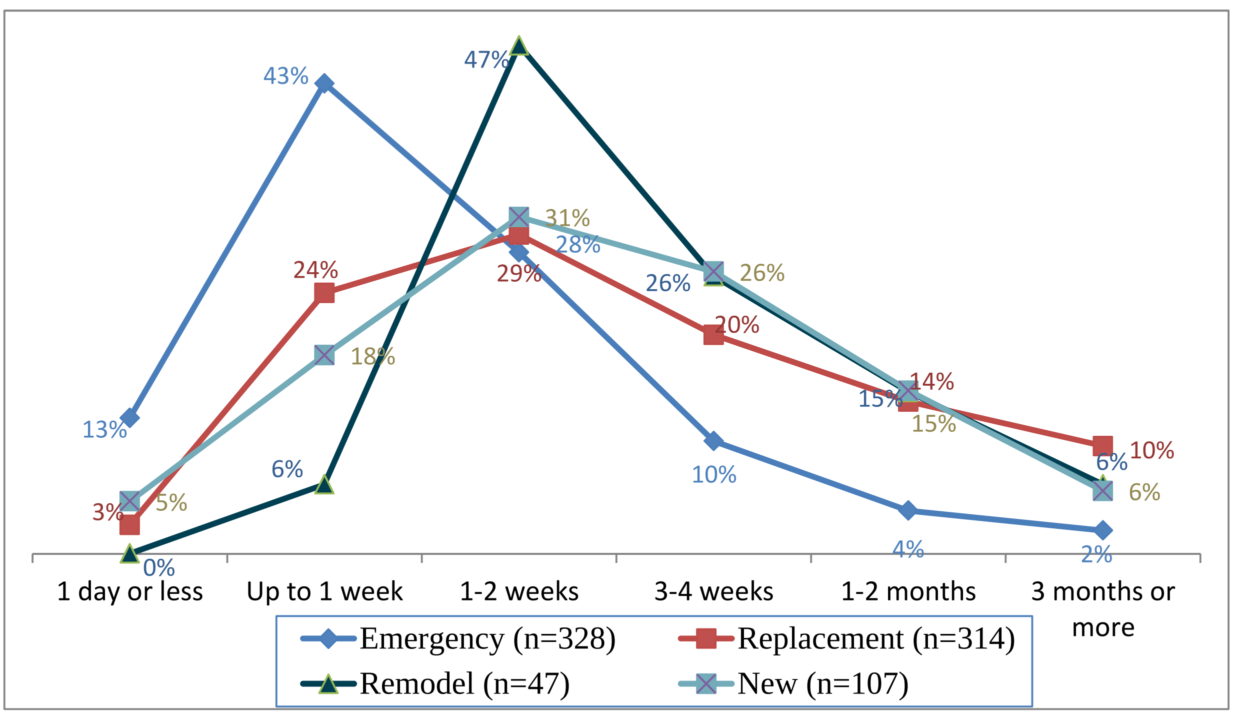
As Figure 1, below, suggests for example, only a handful of purchases require more than four steps, and most commonly, they involve three or four steps, regardless of the type of appliance being acquired.

Figure 1: Number of Shopping Steps Used by Appliance (all respondents)



And most purchase journeys (through the purchase decision, not taking into account delivery time) take at least one or two weeks, though it is not unusual for them to take a month or more. Even emergency replacements (in the aggregate) are most commonly reported to take a week or more, with relatively few (primarily refrigerators) (13%) being completed within a day.

Figure 2: Total Time to Purchase By Reason For Purchase

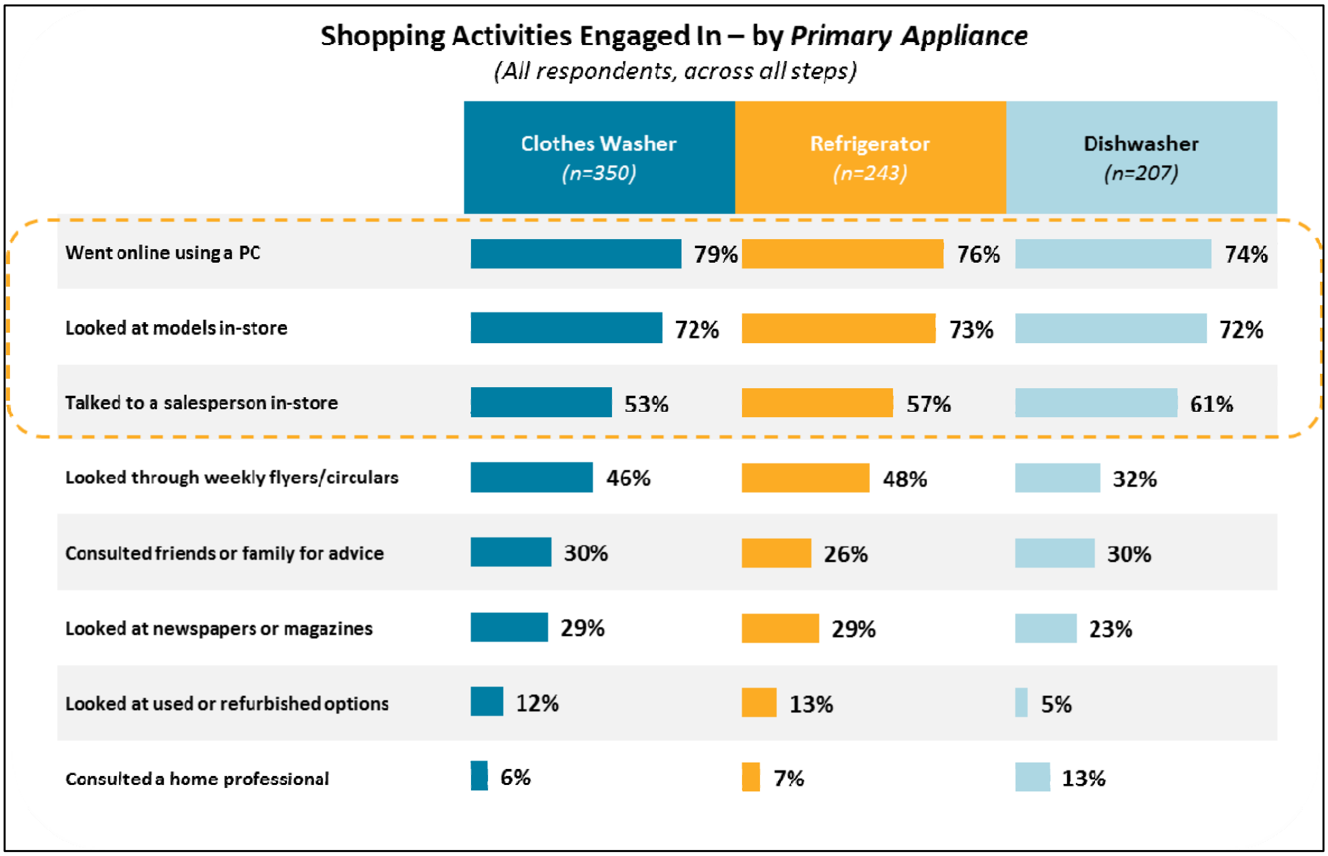


Moving on to the issue of what people do in the first few steps of their purchase journey, the team found that the most common action reported was to go online and search for information (45%

overall), while 23% said they went to a physical store as their first step (either to talk to a sales person, or just to look at models).

Considering all of the shopping steps taken, however, it becomes clear (see Figure 3 below), that in-store visits are at least as important to the shopping process as is online research. While 76% of refrigerator buyers (for example) access the internet at some point for information relating to their purchase, 73% of these customers say they went to a store to look at appliance models and 57% said they went to a store to talk to a salesperson.

Figure 3: Shopping Activities Engaged In Across All Steps



And not only are in-store visits still important, but online activity maps closely to in-store visits. As Figure 4 below shows, most customers visit retail store websites when they go online, and as Figure 5 shows, the retail store websites they visit online are the same retail stores they tend to visit in person, and the same retail stores where they tend to make their purchases.

Figure 4: Online Information Sources Used (Clothes Washer Buyers Only)

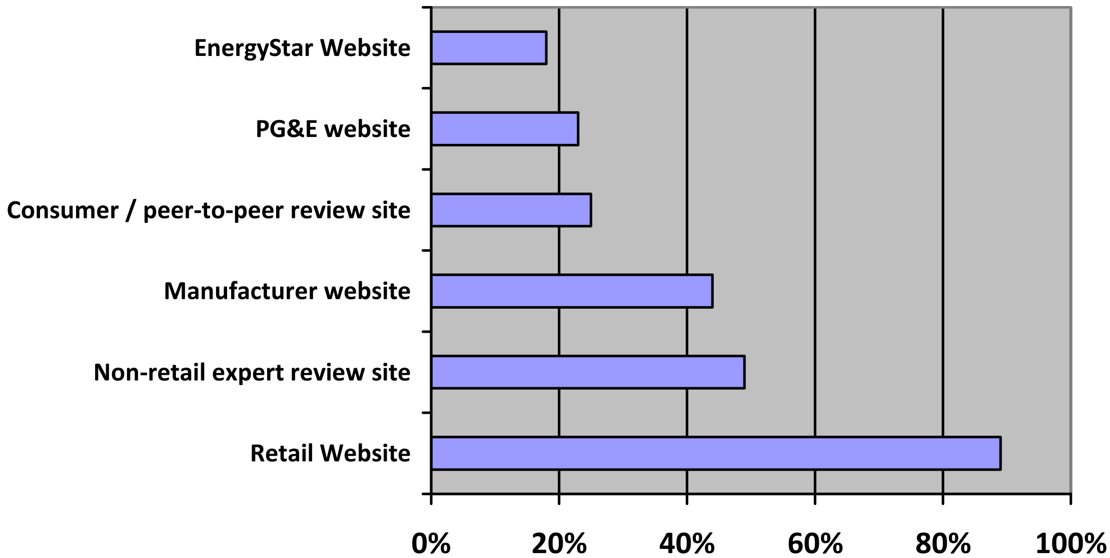
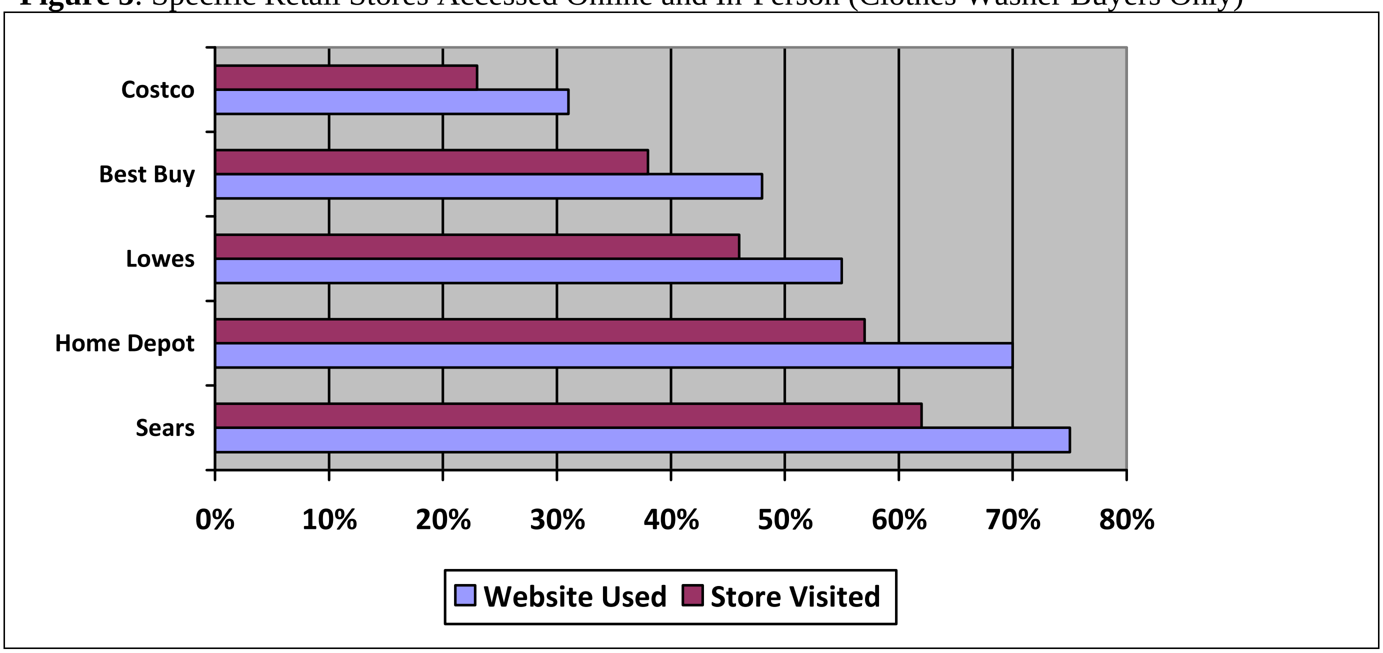


Figure 5: Specific Retail Stores Accessed Online and In-Person (Clothes Washer Buyers Only)



Purchase Journey Findings: Key Takeaways

While there were a variety of findings that came from the purchase journey analysis, key takeaways from the team's analysis of the structure of purchase journeys for the purposes of this discussion include the following:

- Most major appliance purchase decisions are not rush decisions
    - Even emergency decisions
- People typically include at least some online research and a visit to a physical store to look at models as they make their purchase decision
- Both the websites and the brick-and-mortar retail locations they use in this process are those of the same national big box and department stores, including most often Sears, Home Depot, Lowe's, and Best Buy
- As a result, while online research is an important part of the appliance purchase journey for many shoppers, the websites for large brick-and-mortar stores are the most common site shoppers access when looking for information about appliances, and those same physical brick-and-mortar stores are the place where most final decisions, and purchases, are actually made

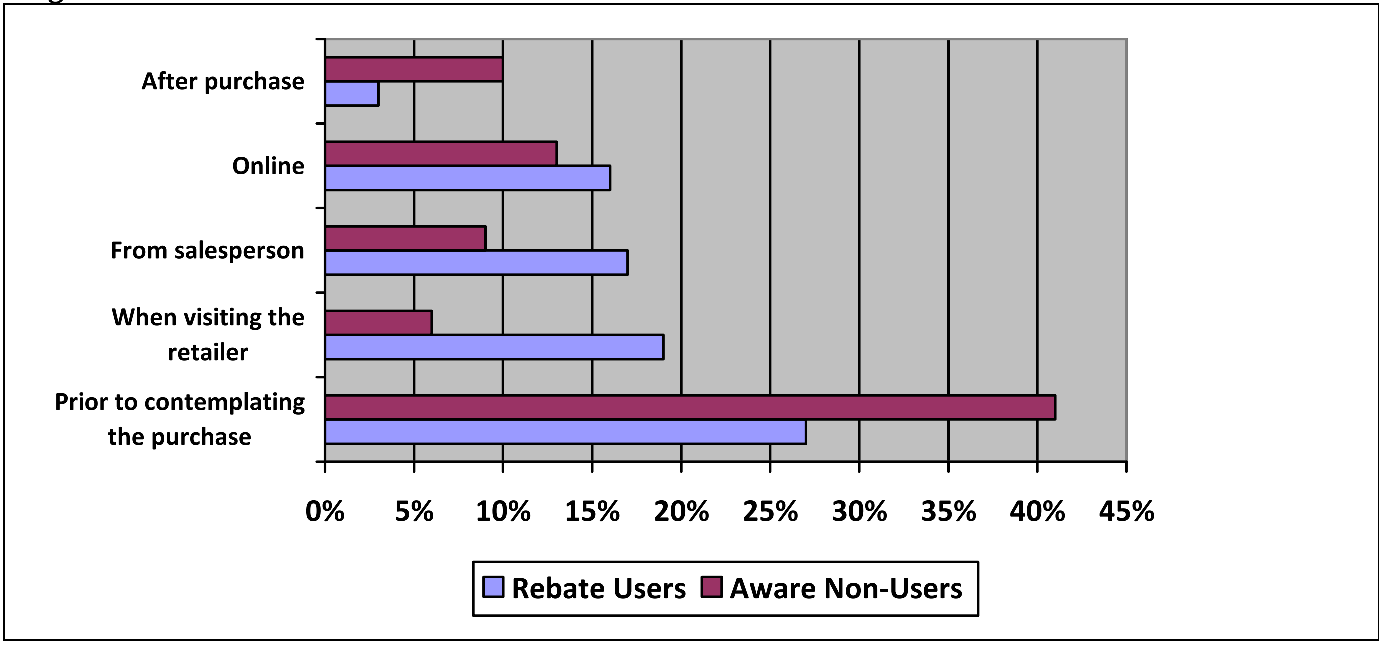
The Intersection Between Purchase Journeys and Rebates

Even though there were many similarities in customer purchase journeys across reasons for acquiring a new appliance and across the different types of appliance that were acquired, PG&E wished to know if there were differences in the way that rebates came into play for different customers. In order to explore this question, the team sorted respondents into three different categories, in order to explore the differences that did exist among:

- Rebate users
- Aware rebate non-users (customers who were aware that a rebate existed, but who either purchased a non-qualifying appliance or chose not to apply for the rebate)
- Non-aware non-users (customers who were not aware that a rebate was offered for some models of the class of appliance they purchased)

Perhaps the single most important finding regarding rebate awareness (see Figure 6 below) is that most customers either know about the rebate before they even contemplate making a purchase, or find out about it at the retailer. While customers often use a variety of information sources as they search for appliance information, in other words, information about rebates is something they have either heard about before they started, or something they learn about at the retailer. Other sources of information are really not contributing significantly to creating rebate awareness, at least at this time.

Figure 6: How and When Customers Became Aware of PG&E Rebates



Beyond this fact, the team also learned that Rebate Users really did appear to have a somewhat different customer profile compared to the other two groups – particularly in terms of their attitudes, their approach to appliance shopping, and their demographics, though less so in terms of their purchase journeys. Rebate users differ from the other two groups in that they:

- Make their appliance purchase in less time
  - And are more certain that they made the right decision
- Visit more than just retailer websites
  - Including PG&E.com, the EnergyStar website, as well as manufacturer, and non-expert review sites
- Are even more likely to have known about the existence of rebates before they visited a store, and more often before even starting their search for this appliance
  - In fact, half had received a rebate for another appliance or end-use previously
- Say that energy efficiency is their primary criterion for selecting an appliance, while rebate eligibility and purchase discounts are immediate motivations to buy
- Say that energy efficiency is important to them generally, and have more experience with energy efficient options

Compared to Rebate Users, the other two groups:

- Value energy efficiency less highly, and focus more on total purchase price and features
  - Even so, most say they buy energy efficient options and most believe that energy efficiency is an important (if not the most important) appliance choice criterion
  - Ultimately, however, these customers "want what they want," regardless of rebate availability
- Are more downscale in terms of their demographics
- Would like a rebate process that is easier / faster

Conclusions

Key takeaways of the analysis for purposes of this discussion suggest that, overall, appliance shopping journeys include multiple steps and sources, but ultimately come down to a small set of decision making criteria and locations. Specifically:

- Appliance purchases are almost always decisions that people take time with (taking 1-2 weeks, at least) – even when they are for “emergency” replacements
- People are already pretty smart about energy efficiency and rebates
  - Most report buying energy efficient appliances
  - Most know that Energy Star labels indicate high efficiency
- In fact, many say they knew about PG&E rebates before they started shopping
- People tend to say that price matters (and being on sale helps) to their ultimate product selection, but that energy efficiency is the next most important thing
- Most people pursue multiple sources of information as they shop, including online, in-store, and print
  - While the order in which they use these sources differs, the key thing is that most purchases still occur only after visiting a physical store
- People typically pursue online information from the websites of the same stores in which they physically shop (Big Box stores (such as Best Buy or Home Depot) and large Department stores)
- Rebate Users are experienced with rebates and believe most strongly in energy efficiency
- Aware non-users and those unaware of rebates are less focused on energy efficiency, more downscale, and more price sensitive, while also wanting the right feature set
  - For this audience, a sale event is more likely to change what they would buy in order to get a fuller feature set, even if that appliance is not EE or eligible for a rebate

Given these conclusions, the team identified a series of important implications for PG&E. Specifically here, the team determined that:

- PG&E does not need to convince people about the value and importance of energy efficient options
  - This recognition already exists among most customer households
- What PG&E has been doing to promote its rebate program has been working and should be continued
- Most people – even many of those who do not use rebates – are aware of the program
- There is no down side to promoting the program – people tend to think more positively of PG&E due to the program, and even non-users do not think worse of the company
- Continue promoting the program through non-point-of-purchase channels
  - And since appliance purchases are not seasonal, maintain this presence all year long
- Having said this, since most purchases still occur in physical stores, enhance in-store signage and other point-of-sale presence and ensure that floor sales staff are knowledgeable proponents of the program
- If possible – since people tend to access multiple sources of information – communicate across multiple channels:
  - Promoting rebates on relevant pages of most commonly used retailer websites
  - Ensuring that rebate information is easily accessible on the PG&E website
  - And, while print communications are generally not very compelling, there may be some

role for providing standardized sheets that compare appliance options within a given class of appliance or provide Total Cost of Operation calculations

- Since price – and being on sale – are sometimes important components of the purchase decision (at least for purchase timing), explore the potential of linking rebate promotions to major store sales
- Explore the potential of moving to an “instant rebate” at the point-of-purchase – this would almost certainly increase uptake, especially among those who are more likely to forget to apply for the rebate