DERA: Prosumer Workshop

Devren Hobbs, Director of Product at Tendril
Brainstorming Best Practices

• Break into small groups
• Set a clear outcome: “How might we…”
• Independent brainstorming first
• Encourage weird, wacky, and wild ideas
• Prioritize quantity
• Defer judgement or criticism
• Build off of each others’ ideas
### Morning Workshop

**Goal:** Identify 3-5 top problems to solve for prosumers

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>10:30 – 10:40</td>
<td>Introduction</td>
</tr>
<tr>
<td>10:40 – 10:50</td>
<td>Team formation</td>
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<tr>
<td></td>
<td>• Introductions</td>
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<td></td>
<td>• Assign: scribe, coach, timekeeper</td>
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<tr>
<td>10:50 – 10:55</td>
<td>Independent brainstorm</td>
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<td></td>
<td>• Write ideas on sticky notes</td>
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<tr>
<td>10:55 – 11:10</td>
<td>Group discussion</td>
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<td>11:10 – 11:15</td>
<td>Dot voting</td>
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<td>• 5 votes each</td>
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<tr>
<td>11:15 – 11:20</td>
<td>Prep for presentation</td>
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<tr>
<td>11:20 – 11:40</td>
<td>Team presentations and discussion</td>
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<tr>
<td>11:40 – 11:45</td>
<td>Finalize top 3-5 problems to solve in the afternoon session</td>
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Problem / Opportunity identification

The prosumers group split into 4 sub groups, and each was assigned a persona. Their goal was to identify the top 3-5 problems their persona faces with DERs.

- Adam: The gadget geek. Works in technology, and is a first adopter when it comes to gadgets, believes strongly in the Connected Home.
- Tom: The pragmatic homeowner. Chose solar because it made the most financial sense for his family.
- Angela: Time and cash conscious. Frequently chooses to turn off the air conditioner rather than face a higher bill.
- Lindsey: First-time Thrifty Homeowner. Is interested in dynamic pricing but is worried it may cause her unplanned expenses.

Then, each group shared their ideas with the larger group, and we organized them together into common themes.
Tom
The Pragmatic Homeowner
Chose solar because it made the most financial sense for his family.

Angela
Time and Cash Conscious
Frequently chooses to turn off the air conditioner rather than face a higher bill.

Lindsey
First-time, Thrifty Homeowner
Is interested in dynamic pricing but is worried it may cause her unplanned expenses.

Adam
The Gadget Geek
Works in technology, and is a first adopter when it comes to gadgets, believes strongly in the Connected Home.
1. Knowledge / Lack of Awareness
   a. Difficult to understand new technology: includes solar, storage, smart devices, software that connects it all
   b. Bills are complicated: what’s a kWh? What are all of these service charges? Problem is worse if there is a complicated rate like TOU or net generation.
   c. Lack of understanding demand charges: nearly impossible to know what my demand is at any given time. What if I have family over for dinner for the holidays and my usage spikes, and I have a big monthly bill because of it?
   d. Lack of education: I don’t have a good understanding of options available to me.
   e. Too many sources of information: I’m not sure where to go -- solar websites? Utility website? Who can I trust? And is there one place that has it all?
   f. Lack of options: On the other hand, I don’t have that many options when it comes to net metering or utility rates.
   g. Lack of awareness of options: I don’t know what I don’t know. How do I even know what to ask? Where to search?
2. Trust
   a. Distrust of utility: Why would the utility offer me energy savings? If I make an investment now in solar, how will that affect my rates in a year? In 5 years?
   b. Distrust of information sources: Who can I trust?
   c. Fear of making the wrong decision: A solar system is thousands of dollars. What if I choose the wrong thing? It’s not easy to change later. It’s easier just to do nothing.

3. Lifestyle / comfort
   a. How comfortable can I afford to be? I’m worried that air conditioning is too expensive. Will I just have to be too hot and suffer through it?
   b. Too many decisions: I don’t know if smart devices make sense for my lifestyle. What brand smart thermostat should I get? How will it work with everything else in my home?
4. Technology
   a. New tech - quality problems: Will the new technology work as expected?
   b. Lack of integration: Will all of my smart home devices work together?
   c. What do you do with new tech when it’s old? I like having the latest and greatest -- how do I dispose of the old system? What is the cost of upgrading?
### Afternoon Workshop

**Goal:** Identify 3-5 top ideas for solving each problem identified during the morning session

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>2:15 – 2:20</td>
<td><strong>Introduction</strong></td>
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<tr>
<td>2:20 – 2:30</td>
<td><strong>Team formation</strong></td>
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<td><strong>Independent brainstorm</strong></td>
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<td><strong>Dot voting</strong></td>
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<td></td>
<td>• 5 votes each</td>
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<tr>
<td>2:55 - 3:00</td>
<td><strong>Prep for presentation</strong></td>
</tr>
<tr>
<td>3:00 – 3:20</td>
<td><strong>Team presentations and discussion</strong></td>
</tr>
<tr>
<td>3:20 – 3:30</td>
<td><strong>Determine top 3-5 solutions to share</strong></td>
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Solutions

In the afternoon session, the group split into 4 sub groups again -- this time, focused on the 4 problem areas above. Each group brainstormed the top 3-5 solutions for each problem. Then, each group shared their ideas with the larger group, and we organized them together into common themes.
1. **Consumer protection**

   a. **Consumer advocacy group**: a group advocating for the rights of utility consumers. A trusted source of information.
   
   b. **Bill of rights for consumers**: perhaps the first action of the consumer advocacy group.
   
   c. **DOE standards (like energy star) for smart home integration**: When consumers buy an energy star appliance, they know they can be confident in their purchase. What about a similar standard for connected home devices and DERs?
2. Standards and simplicity
   a. Simple formats for bills: Like nutrition labels, these should be designed for the consumer and easy to read
   b. Green button standard format: Use this standard format for accessing not just usage and billing data, but generation data as well.
   c. Standards for solar proposals: It’s difficult for customers to compare bids from different solar companies, since they may use different methods for price and benefits. All proposals should be in a standard format, much like credit cards or mortgage loans.
   d. Standards for how to model demand: For solar bids, different companies model demand in different ways, which can result in very different proposals. This makes it hard for consumers to pick the best option.
3. **Outbound notifications**
   a. **Push savings to customer:** Instead of assuming customers are browsing the utility website for savings information, send outbound notifications like emails or SMS to customers.
   b. **Utility savings tips through social media:** Meet customers where they are - share DER information as ad placements on YouTube or Facebook.
   c. **Peak pricing alerts:** Send customers text messages when peak pricing times begin.
   d. **Integrate offers and tips with bill pay:** When customers are online paying a bill, that’s the right time to offer a new rate plan or savings information.
4. Tech solutions
   a. **Battery installation for reliability**: Storage can help keep customers comfortable and reduce usage during peak times.
   b. **Different options for different lifestyles**: Some personas are “set-and-forget,” while others want a lot of data about what’s going on in their home. Offer packages to meet both needs.
   c. **Smart device - learn from lifestyle AI**: I don’t want to program all of the details of my schedule and preferences, I’d rather the system use artificial intelligence to optimize everything for me.
5. Marketplace and Community forums

a. **Utility preferred installer programs**: The utility is in a great position to recommend installers and contractors - this can help give customer peace of mind.

b. **Peer reviews / community forum**: The utility could host an online forum where customers can share tips and review products and services.

c. **Utility-hosted vendor marketplace with ratings and review**

d. **Library of 3rd party rated plug-ins**: For solar proposals, the utility or a 3rd party could provide a standard template that’s a plug-in for Excel documents.