

# Usability Testing Data Visualizations

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Data visualization pedagogy often focuses on data literacy, data visualization best practices, and data storytelling, along with how to use various data visualization tools. Missing from this instruction is how we can evaluate whether a data visualization meets its intended users' needs. Usability testing, a technique commonly used in website development, can fill this gap. This simple observation activity helps us determine: 1) Is a data visualization intuitive, and easy to use or learn? 2) Does it help users reach their goals? and 3) Do users actually *want* to use it? Applying the technique helps us evaluate the effectiveness of our data visualizations and build better data visualizations for our users. This lightning talk outlines how to conduct a usability test on data visualizations.

The image shows a screenshot of a data dashboard and a usability test scenario. The dashboard is divided into two main sections: 'Contacts and Cultivation' and 'Open Proposals and Solicitation Plans'. Each section contains three data tiles with counts and information icons. To the right of the dashboard are filter and sort controls. Below the dashboard is a usability test scenario with five tasks (A-E) and moderator actions with interaction notes.

Category	Item	Count
Contacts and Cultivation	Prospects without Recent Contacts	3
	Recently Contacted Prospects without a Plan	65
	Prospects without Recent Stage Movement	53
Open Proposals and Solicitation Plans	Past Due Proposals and Plans	4
	Upcoming Proposals and Plans	5
	Proposals and Plans Requiring Review	3

**Filter by:**  
 Assignment Type: Relationship Manager

**Sort by:**  
 Sort Prospects: Name  
 Sort Proposals: Name

**Task A - Chocolate Chip Cookies**  
 • Where would you go to find prospects who have been stuck in a stage for too long?

**Task B - Oatmeal Raisin Cookies**  
 • Where would you go to find prospects you need to reach out to?

**Task C - Snickerdoodles**  
 • Where would you go to find prospects you need to log a solicitation plan on?

**Task D - Sugar Cookies (v1)**  
 • Where would you find proposals that were expected to be closed by now?

**Task D - Sugar Cookies (v2)**  
 • Where would you find asks that were expected to have been made by now?

**Task E - Shortbread Cookies**  
 • Where would you find proposals or plans that...

**Moderator action**  
 Hand out the scenario and read it aloud.

**Q3: Where would you go to find prospects you need to reach out to? (Follow-up: What does "Prospects without Recent Contacts" mean to you?)**

**Interaction note**  
 Expected action: user looks at Prospects without Recent Contacts tile

**Moderator action**  
 Allow the participant to proceed until you don't feel like it's producing any value or the participant becomes frustrated.

**Q4: Pick one of the prospects. What else would you like to know about this prospect? (Follow-up: Where would you go to find that information?)**

**Interaction note**  
 Expected action: user looks at the detail table and at the tooltip in the table