Smart Meter Texas: Site Evaluation

Shannon Graf Confidential & Proprietary, 2013

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Summary of Research

| Background | In an effort to improve the overall user experience (UX) of the Smart Meter Texas consumer portal, Solutions Cube Group, on behalf of Smart Meter Texas, commissioned a usability site evaluation. |
|-------------|--|
| Methodology | The evaluation consisted of an overall assessment of the website's usability, navigation, and taxonomy, among other industry standards and design principles. Both business objectives and user needs were factored into the evaluation to determine actionable recommendations as next steps toward enhancing the consumer portal. |
| *Results | The evaluation resulted in strategic recommendations for the key stakeholders to consider ahead of the site redesign. The tactical findings and recommendations have been categorized by topic and severity rating, to assist the development team in prioritizing tasks for the redesign. |

*Results apply to both the English and Spanish versions of the site unless otherwise noted

Key Takeaways: Summary of Findings

Strategic

- Create awareness to increase traffic to the site.
- Align on business and user goals.
- A targeted marking initiative is recommended to promote the site and its value to users as a resource.
- Ensure these key questions have been answered before the redesign begins:
 - Who is the target consumer?
 - Why do they need the portal?
 - When will they be most likely to access the portal?
 - How often will they return?

Tactical

- Usability findings and fell into five categories, all of which were classified as 'High' or 'Medium' severity:
 - Ease of use how easy or difficult the site is to use and comprehend for users of all levels.
 - Navigation elements which comprise ways in which users move through the site.
 - Organization location and layout of content.
 - Look and feel visual appeal
 - Actionability features that drive users toward an end result.

Caveat for Recommendations

- The recommendations in this report are offered to give direction. These are not the only solutions and are not intended to creative direct your application.
- It is highly recommended that *A/B concepts be created, particularly for global elements such as navigation and organization of content.
- Prior to finalizing concepts for the new design, it is recommended to conduct either:
 - Concept focus groups to gauge overall awareness, provide insights as to next steps, as well as inform design direction and communications strategy;
 - One-on-one A/B testing to compare the two concepts and extract best-of-breed elements to include in the site redesign.
- Finally, key usability changes should eventually be tested to ensure they address and do not add to the existing issues.

*A/B refers to a methodology that is used to gauge elements of two different design concepts (Concept A, Concept B); can be used to compare and test for layout, navigation, organization, or "best of breed" elements to drive design decisions

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- Create awareness and engage the end-users
 - Reassess the existing ways in which consumers are learning about the portal.
 - Identify new ways in which the portal can be promoted: target marketing campaign, direct mail, digital ads, social networks, local / neighborhood events, SMT ambassadors, reps, etc.
 - Leverage existing promotions like the incentive program and ensure this is communicated on the portal, as well as any new promotions that consumers can easily identify and correlate from a mailer, media ad, to what they see when they arrive to the site.
 - Consider creating a team of SMT ambassadors and engaging in neighborhood or nonprofit community events, where they can provide face-to-face education.
 - Additionally, work with neighborhood / local businesses (who are SMT users, perhaps) to display marketing collateral.

Align on business objectives

- Ensure key stakeholders are in agreement on the business needs that drive the intent of providing the consumer portal.
 - This should be clearly summed up in a concise statement of 3-5 sentences and shared internally.
 - Identify and document key performance indicators (KPIs) that the site can be evaluated on to determine strengths / pain points for both the business and end-users.
- Leverage analytics which speak to entry and drop-off points; this will help stakeholders to understand how users are arriving to the site today, and where they navigate before they exit.
 - Analytics should be monitored on an ongoing basis to measure KPIs and provide direction for ongoing site enhancements.
- Assign a liaison to bridge the gap between stakeholder objectives, site requirements and the portal development team; this will ensure that all needs are being clearly communicated and accounted for during the redesign.

- Identify the target audience
 - -Who is the intended audience for the consumer portal?
 - Are they primarily new users, registered consumers, or both?
 - -Why are they driven to visit the consumer portal?
 - -When are they coming to the site: only on hearing about SMT, after receiving their meter, both?
 - How often are they returning to the site?
 - Are the value proposition and any accompanying features compelling enough to drive consumers to register / add their meters and monitor them over time?
 - Does the site educate new users enough to drive them to learn more or acquire and register a meter?

• Align on end-user objectives

- Consider the reasons which drive users to the portal today and ensure that features and functions are prominently displayed to help them achieve each.
- -Keep the 'what's in it for me?' factor in mind: if users don't get the value, they won't go.
- Internal business communications should clearly outline the site's intent based on both enduser and business objectives to provide visibility and alignment across key stakeholders – where there is disagreement / confusion, there is cause for reassessment of these objectives.
- Understand the key objectives for users and ensure the site delivers on them:

| User Objective | SMT Obligation |
|----------------|---|
| Learn | Educate |
| Create Account | Clear Call to Action (CTA) to Get Started |
| Add Meter | Clear CTA to Step-by-Step Process |
| Monitor Usage | Clear Path to Account Info |

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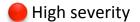
Summary of Research & Objectives

Strategic Recommendations

Tactical Findings & Recommendations

Overall Performance: Findings and Recommendations by Topic

| Торіс | Performance | Recommendation |
|---------------|---|--|
| Ease of Use | The intent and relevance of the consumer portal is not initially obvious to the end-user. Due to the text-heavy nature of the site, the user is required to read / comprehend when this process could be streamlined. | Clarify the intent by categorizing primary content on the homepage into residential vs. business and reducing heavy paragraphs by using visual treatments (imagery, graphs to communicate usage, etc.) instead. |
| Organization | The content is available, but both buried and disconnected, (e.g. the 'Friends' feature is standalone and unclear as to intent within the current context). | Surface content that communicates, at-a-glance, the value, intent, and calls-to-action and any additional features that supplement the experience. |
| Navigation | The navigation is redundant, leading users to pages with buried content that can be much more streamlined to guide users to content that is most relevant to them, when they need it. | Relocate some of the secondary navigation links and add them to a global navigation bar. Reorganize the content to surface relevant content with minimal clicks. |
| Look and Feel | The visual appeal of the site can be enhanced to accentuate key features / functions, and give prominence to sections with action options like the virtual tour or Green Button. | As a rule, use up to five colors in the scheme, with one being the primary and the remaining as accents. Regarding typography, stick with Georgia or Arial, 18-29 pixels font size and limit varying sizes: one for header, sub-header, and body copy. |
| Actionability | Most common actions taken from the site are buried within the body copy and not obvious at-a-glance. | As previously mentioned, it's important to provide a global persistent navigation atop the page, and surface key links to features / functions as they become relevant in context of what is being viewed. |



Ease of Use & Organization: Homepage

Observations

 At-a-glance, the intent of the site is unclear: there are no images of the meter or how it is used, and the prominent text does not communicate what to do – the user has to read the body of text in detail.

Recommendations

- Reduce the amount of text and allow users to scroll through 'Business', 'Residential', 'About Us', and 'Get Started' intro modules within a slideshow animation in the body of the Homepage.
 - Each module should include brief text explaining the value and providing relevant imagery, as well as a link to learn more and view the virtual tour.
- The 'Green Button' should remain static within the slideshow.



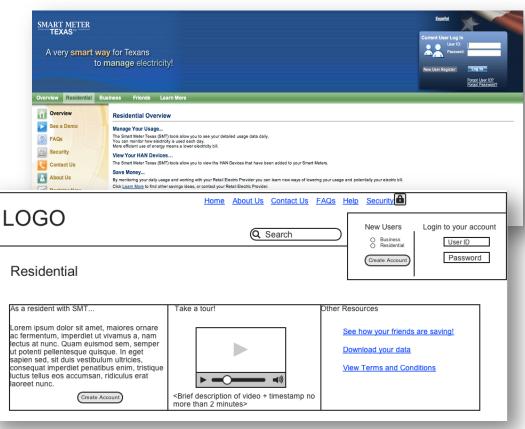
Ease of Use & Organization: Landing pages (not logged in)

Observations

 As previously mentioned, due to the textheaviness, there is significant cognitive load involved in determining what the user should pay attention to, and what steps they should take next.

Recommendations

- As a rule, a user should be able to identify what they need / where to go within five seconds of arriving to a page; break up the text with relevant imagery or video thumbnails.
- The recommended groupings are as follows: additional details needed before creating an account, virtual tour or tutorial (at this level), and additional helpful resources such as the 'Friends' feature, downloading usage, and link to 'Terms and Conditions'.



SAMPLE

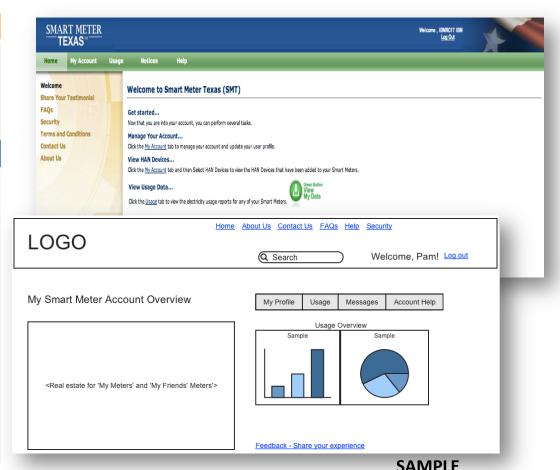
Ease of Use & Organization: Landing pages (logged in)

Observations

 There is not a significant difference in the layout from an unauthenticated and authenticated state and information can be easily overlooked if it appears redundant.

Recommendations

- Maintain the global navigation as previously recommended, but add a secondary navigation bar within the body of the content, based on the user's login credentials (RES, TDSP, NRC, etc).
- Reconfigure the landing page to provide a dashboard snapshot of the user's data with visuals, allowing for clickable options to view each module in greater detail from within the 'Usage' page.
- Use natural language for taxonomy across the site. For example, it is recommended that 'Notices' be renamed to 'Messages'.



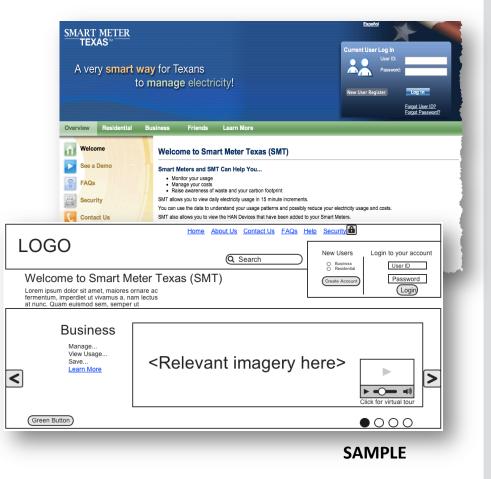
Navigation

Observations

- Many of the links within the secondary navigation are industry-standard global navigation links which typically appear atop every page on the site.
- Here, they appear as a secondary navigation, relevant to the body copy and create a sense of redundancy.

Recommendations

- In addition to the global navigation, adding a visual navigation via the homepage modules on the homepage provides four distinct intentions for the user: to learn more, create an account, read about SMT for businesses, or residential visitors.
- On logging in, users should be presented with a secondary navigation, based on their credentials.
- Consider adding a glossary of terms to the site, accessible via a 'Glossary' link in the global navigation, (e.g. HAN).



Additional Findings and Recommendations

| Finding | Recommendation |
|---|--|
| When clicking to view 'Terms and Conditions', the user is taken to a separate page with no prompting. | Consider displaying the terms within a light box, overlaid on top of the page from which the link was clicked. Alternatively, present a popup, informing the user they are leaving the page. The same prompt should apply if a user accesses an external site from within the portal. |
| When entering a meter number incorrectly, the error message appears atop the page as opposed to in the context of where the error occurred. | Ensure all error messages display inline or around the context of the error; additionally, explicitly provide the user with step-by-step instructions (where necessary) to remedy the issue. |
| Once the user has logged into a browsing session and logs out, they are cookied and unable to return to the unauthenticated homepage. Instead the user is taken to a login error page and asked to reenter the correct username and password. | This is a bug that can be addressed on the backend. |
| The logo does not link to the global homepage, leaving the user with only the option to access SMT by logging in or clearing cache. | Ensure that the SMT logo is hyperlinked back to the homepage throughout the site. |

Additional Best-Practice Recommendations

- Ensure that form fields across the site are consistent. For example, if one date field calls for mm/dd/yyyy, every date field should follow suit.
- Optimize all content, features, and functions for mobile browsing within smartphones and tablets. Additionally, ensure the site is designed responsively.
- Ensure that all features, functions, and elements of the site can be viewed from within the latest versions of the most commonly used browsers: IE, Firefox, Safari, and Chrome.
- Implement a Search feature within FAQs so users can easily locate their question / answer. Additionally, consider surfacing most frequently asked questions and displaying them within a 'most popular' curated section atop the page.
- Any images on the site need to have alternative text (ALT text) added to the site code to describe the image or graphic. Adding the ALT text will help users who do not have text-only browsers, have graphics turned off or are using the site with assistive technology such as screen readers to understand the design and function of the page and its attributes.
 - An additional benefit of including the ALT text is that it provides extra search engine optimization opportunities and higher search engine rankings.
 - ALT Text should describe the content of the image, not the file.

Video Demonstration

- The video demonstration does not provide users with a clear timestamp as to the duration.
 - Ensure that videos within the site do not exceed two minutes, if they are intended as overviews / walk-throughs, and clearly display the timestamp and total run time.
 - In the copy surrounded the video, include verbiage such as "brief two-minute video."
- The video is labeled as a demonstration, which can mislead users into thinking they are receiving a demonstration on Smart Meter usage, as opposed to the website.
 - Consider breaking the video up into two: a step-by-step 'virtual tour' of the site for those who are newer visitors, and a tutorial for those who are logged in / registered users.
- At times, the voice-over is less audible than others, which is an accessibility concern for the hearing impaired.
 - Ensure consistency in audio clarity by recording all audio in the same session, preferably in a sound studio with padded walls to mute ambient noise.
- The player capabilities are limited and are not resizable outside of Flash preset parameters for those who may be visually impaired.
 - Consider switching to an HTML5 player which opens in a resizable lightbox, overlaid atop the center of the page from which it was launched.



Next Steps

- Step I: In parallel (4-6 weeks)
 - Strategic: Marketing and Communications teams to outline short-term and longterm marketing campaign per the strategic recommendations
 - Tactical: Communications team to take on reorganization of content per the tactical recommendations on organization of information
 - Tactical: Design / development team to mock up new site concepts per the tactical recommendations on layout, look and feel, and functionality
 - Evaluation of third party concepts, (including report of findings and recommendation)
 - Plan and preparation for deep dive focus groups
- Step II: Execute deep dive focus groups (2-4 weeks)
- <u>Step III</u>: Stakeholder debrief and strategic planning session

Thank You

Questions or Comments?

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