Document 1: EPA Clean Air Markets wireframes

I created this set of prototypes for the US Environmental Protection Agency (EPA), while I worked in ICF Virginia in 2008. EPA approached my company wanting a tool that would:

- 1- enable their clients (energy companies, construction companies, nuclear plants, etc) report the amount of greenhouse gas emissions released by their company or plant.
- 2- Enable citizens query the database of emissions, to monitor the greenhouse gas emissions of companies or plants in their cities.

I was the main information architect / usability specialist on this project.

I proposed the solution seen in the document attached. There was not already a querying and reporting tool on the EPA web site; there were however spreadsheets of data for me to work with. Once the idea behind how clean air markets was explained to me, and I had read up some more on how emissions trading worked, I was able to create a solution that allowed unambiguous reporting, seen in the document EPA_CleanAir_Wireframes.pdf attached.

My main challenges in the creation of this prototype were the following:

- 1- Putting together the bits and pieces of a tool that the EPA had, then filling in the missing pieces through a consistent and cohesive interaction design.
- 2- Accounting for irregular data in the spreadsheets, and how to prototype the display of these data without confusing the programmers who would create the functioning tool.
- 3- Creating a tool that requested data in steps, not in a 'form' manner, which would have been too confusing. It was important to break up all the decision points and display them in bits, not to overwhelm the user with the complexity of choices at any given stage. To do this, I had to understand the data enough to know what filters should come first, second, etc.

I think the wireframe reflects my solutions to these challenges. The prototype was subsequently transformed to a higher-fidelity prototype (not by me), which was proposed to the EPA. We didn't win the bid, but this remains one of the projects I am proudest of.

(please see Page 2 for explanations of attachments 2 and 3)

Explanation of wireframes and supporting document provided by Kunmi Otitoju (continued)

Documents 2 and 3: OCHR sitemap and wireframe samples

The completed OCHR (US Department of the Navy's Office of Civilian Human Resources) web page can be viewed at http://www.donhr.navy.mil/

In 2008 when I joined the project, the OCHR webpage was a singular landing page with a list of 200-300 links to documents, PowerPoint presentations, PDFs and so on. I think it was built in the 90s when US Departments were still new to the use of a web, and saw it more as a repository of links.

My role as the information architect on this project was exciting because unlike several other projects, I was creating something from scratch. But it was also a complex project. The OCHR has nine sub-divisions within it, and my main role at the initial stages was to meet on-site with the heads of each subdivision to find out what their group did and figure out how to define their web presence.

There were also many documents, about half of which were turned into site content, the other half of which were discarded. Figuring out which was which was a very hands-on experience, where I worked with two assigned OCHR staff to go through over 800 documents one-by-one.

Once I had filtered the information to be represented, I began to create structures/site maps to convey my thinking to the stakeholders. I held meetings with representatives from each of the subdivisions to see if my idea of their content's hierarchy melded with theirs. An example of the site maps is shown in the second document (OCHR_SESdivision_sitemap.pdf). This was an iterative process and took about 50% of the allocated hours.

Once we had the sitemaps in place, I began to work with the project principal and the overall head of the OCHR on how to design their web site. It had to be cohesive, for example, if a retiring Naval staff wanted to look up his retirement benefits and also locate the Human Resources office nearest to him, he had to be able to do so seamlessly, without getting 'lost' on the site. For me this was one of the major design challenges. Another challenge whe amount of information I had to process (about 800 different documents, sometimes hundreds of pages long) to create a web site that didn't look too daunting to the average employee or retiree.

The final document attached, OCHR_Homepage_wireframeOptions.pdf, shows some of the initial ideas I generated for the home page. We would meet and discuss these with the stakeholders, and refine them. The end result is more or less seen on the current OCHR homepage, http://www.donhr.navy.mil/.

My role on the project was completed in August 2009, and the web site went live in 2010.