Qualcomm.com

Qualcomm had a problem. Even though they made amazing things for customers, those same customers had no idea who Qualcomm was. When it came time for the inevitable legal battles that ensued, Qualcomm faced juries who had no idea who they were. So the decision was made to give Qualcomm a more human face.

As the lead on the redesign of qualcomm.com, I analyzed Qualcomm's marketing department's research, supplemented my own with some audience sampling and created personas to design against.



My insight into the

audience was that the personas broke down into two large groups, those who had dealt with Qualcomm previously and knew what they were looking for and the new crowd, those who had little experience with Qualcomm and were more open to being told a Qualcomm story.

This insight lead to the basic page design for the major landing pages and the strategy for lower level (informational) pages. The home page would have a basic navigation at the top for the information hunters, but the bulk of the page would be a visual system that allowed the user to pick their own interest and the page would reconfigure to give them a number of options related their interest.



In this way the 'hunters' were given a quick method to find their information while the 'grazers' were led to more visual, more immersive environments to tell the Qualcomm story.

Via this method, Qualcomm kept their current users while giving naive users an enjoyable introduction to Qualcomm.

The IA for this project was fairly simple, the only complication was the products section. Qualcomm's produces tech for every conceivable use, and unfortunately, has four large divisions who often overlap.

4.0 Products & Services

I've encountered this problem before and knew enough to separate my contact (Marketing) from the people who have a vested interest in the divisions to allow us to create a product section that was sensible rather than following company lines.

Even with this blank canvas, the products section took at least 7 iterations, and I relied



- Chris Nordling, UX Architect http://www.cnordling.com/



ATM, Multi-national Bank

A multi-national bank (who does not want to be named) had an old ATM interface. It was nearing a dozen years old, relied on 800 pixel screens, and was never really well liked within the company much less amongst its customers.

I approached this project by doing some very simple primary research - observing people using ATMs and by using every ATM I could find. One of the more interesting things I learned is that everyone waits for ATMs to 'flip over' to the welcome screen, thinking (incorrectly, I later found out) that if the system wasn't back on the intro screen, then their info was vulnerable.

I solved this problem by adding a "Next Customer" button to the terminal screen for each transaction, giving the user the power to 'flip over' the ATM rather than requiring them to stand and wait.

Thank You, Have a nice day!

Next Customer

Another discovery, in talking to the bank's business analysts, was that the interface for withdrawals with unusual amounts was designed to allow the least objectionable error. The choice was made that rather than let someone accidentally withdraw \$1200, they would instead lead them to try to withdraw \$12, which would throw an error screen. A sensible compromise, but I preferred to design for no error at all.

On seeing the drawers behind the ATM, I thought it would be better to expose that information to the user and let them explicitly pick the currency they wanted in the amounts they wanted. I created a simple visual tap withdrawal screen that would visually crete a stack of currency as the user was

2.6 Other Amounts							
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	28/	3	Bill Buttons	On click the bill amount is added to the stack below and to the amount to withdraw.	Only bills that are currently available in the ATM are shown.	This could show multiple currencies, but that crea UT issues.	
	fee \$3 Withdraw \$70		- + buttons	On click that bill type is removed/added to the stack below and to the amount to withdraw.			

Finally, in thinking deeply about the transactions that take place within an ATM, I realized that all transactions other than a balance enquiry, could be boiled down to 'take this stack of money and transfer this amount to that stack of money.'

From that realization it was obvious that the ATM could be rendered in a single interface with choosers to determine the source, amount and destination of a transaction. There were complications with international screens (currency choosers, for example) but with some work the ATM could be streamlined to a single screen, which could remember the last transaction.

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This is important because statistically speaking the most common use is withdrawal and the majority of users withdraw the same amount of money every time. With a single transaction screen, those users would literally accomplish their goal with a single button press.

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Humira, Abbott Labs

Humira is an anti-inflammatory drug that is used for a number of diseases that have clinical similarity. In the case of Crohn's Disease, it often has positive results, but only after 10 or more weeks of taking the drug.

This presented a problem for Abbott Labs because patients' memories of their symptoms were so subjective and unreliable after 10 weeks, that they often didn't acknowledge positive results. Since Humira is expensive and painful to administer, Abbott Labs were seeing many patients stop using the drug just as its effectiveness took hold.

As an attempt to stop this loss, Abbott decided that a mobile application given to the users would allow them to record their symptoms, take the drug correctly, and most importantly, replace the feebleness of memory with charts showing their actual progress.



The symptom recording was a fairly easy interface problem. A simple scale, 1 to 5 let the user record their symptoms in a matter of seconds.

I designed it so it could either be a slider or a press. I also made sure that it was vertical, since the end result was going to be a chart that showed the symptoms vertically.

Originally the metaphor of "up is good" which tested well in the symptom chart was carried through into the symptom recording, but further testing showed the users were more

confused by the symptom scale being reversed in symptom recording than in the charting, so even though they record 'up as better' in this interface, the reports show 'up as better'. It is inconsistent, but user testing confirmed this disconnect is consistent among users. Another requirement for the drug required an innovative design. There are four places on the body that the user can inject the drug, but if they inject too often in the same place they risk tissue damage. This meant the user had to keep track of where they last injected the drug and how many total times they injected a spot.

My solution was to draw the user's body with the four spots marked with numbered buttons. Each time the user records an injection, they tap the spot and the number on the button is incremented. The next time they see the interface, the last injection spot is highlighted (not in red, testing said it was too 'painful') so they could choose a new spot.



0.4.2 Record Dose



Finally, the user is given the opportunity to see their results graphed in time. Each major symptom change is marked with a flag and the user is given the opportunity to explain the flag to the doctor. The goal of the chart is to discuss with the doctor so in addition to

the onscreen version of the report, there is the option to send a full report to your doctor (data is sent to a database and the doctor gets a URL to see the report and/or print it.

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Skiff, eReader

Skiff was an eReader, a brilliant bit of kit with a full page sized e-Ink touchscreen wrapped in a futuristic plastic and metal panel. The battery lasted weeks and the newspapers and magazines available ran the gamut from the Philadelphia Enquirer to the San Francisco Examiner.

Display PostScript, 3G, WiFi, My job was to create the operating shell for the eReader, the settings, the navigation. I went beyond that and added a few 'extras.'



The female spouse or wide The female ruler of a duch The citations they made were then saved in an exportable bibliography (Word doc) that took care of citing the references properly in one of 7 different citation styles. For students, scholars, lawyers or other writers, it was as easy as swiping a finger and typing a few notes.

More groundbreaking (for the time) was the ability to share any section of the reading material via Facebook or other social networks, complete with the user's note on the text. Again it was just a simple swipe or circle, a keyboard and share dialog would be called, and the user need only add an optional note and hit 'share.' Once that



was done, the screen went back to the text and after a couple seconds the tools would fade into the background.

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Unfortunately, two things doomed the Skiff. The management of the company overspent on the development of the software and prototype and didn't have the money to mass produce the actual product. Second, the iPad came out and was an instant hit - every one of the executives at Skiff bought one the day they came out.

- Chris Nordling, UX Architect http://www.cnordling.com/



My primary goal in the design was to get out of the way of the reading experience, so the navigation faded out automatically after a few seconds of idle time.

The page functions were still available, just not explicit. For example, if you wanted to bookmark a page, you had to only touch the upper right hand corner. (Since editing bookmarks was available elsewhere, I even dispensed with the 'are you sure' dialog).

User could tap on words to get a definition, which was fairly standard in eReaders by then. What was not standard was the opportunity to make an annotation and have notes saved as an external document. There was even a section in the Settings that allowed the user to choose what annotation style they wanted.