

# Amazon.com: Overwhelming for first time users?

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CSE 510 – Lab 1

I first used Amazon.com about 6 months back. I was looking for a web camera. It took me over an hour to finalize on one. I have seen many other first time users face the same difficulties I did. Amazon.com being one of the leading e-commerce web sites with probably several million hits each day can surely be designed better. In this report, I enumerate the difficulties faced by first time users and propose design modifications which would make the task of buying items on Amazon.com easier and faster.



Figure 1: Opening page of Amazon.com



Figure 2: Search results for web camera

## Human Subjects:

I used 5 human subjects to observe the usage of Amazon.com. 3 out of the 5 human subjects were non-CS major graduate students (A, B, C), 1 person was aged between 50-60 with basic internet browsing knowledge (D) and 1 was a CS Graduate student (E). All human subjects were first time users of Amazon.

## Design Flaws and Observations:

Above are two snapshots of web pages from Amazon.com. Having observed the difficulties faced by the human subjects, I categorized them into 2 types:

1. *Searching for a product.* The opening page is heavily cluttered. Many first time users of Amazon.com looking for a particular product take a long time to fathom the information. There are about 16 different types of information (labeled in figure 1) on the opening page which is 4 pages long. I have only shown the 1<sup>st</sup> page of the opening page which itself contains 8 different types of information. I define *search time* to be the time between giving a task to the user and the time when the user comes up with the 1<sup>st</sup> set of results. When asked to look for a web camera, the human subjects had the following *search times*: (A, B, C) 2 min (on average), (D) 5 min, (E) 15 sec. The most distracting aspect of the opening page is labeled as **5** in figure 1. When looking for a web camera, users were lost in the subcategories list under the category “Electronics & Office”. There are 4 potential subcategories: Electronics, Audio & Video, Camera & Photo, Office products. The pages corresponding to each subcategory are as heavily cluttered as the opening page. Moreover, none of these subcategories list a web camera in the products section! This confused users A, B, C, D and they ended up moving back and forth between the main page and the subcategories looking for a web camera. Most users finally figured out to use the search feature, which is shown with label 2 in figure 1. This is the time I noted as the *search time*.
2. *Product Comparison is impossible.* The ordeal of the users does not end yet. After successfully figuring out to use the search feature and searching for ‘web camera’, the users end up with the page shown in figure 2. This page has many design flaws as well. To begin with, the ‘related search’ feature (label 2) is the most disappointing one. Amazon recommends *related searches* for “webcam”, “web cam”, “Logitech web cam”. Why doesn’t Amazon simply include the search results for these searches as well, instead of asking the user to try them all? Moreover, users cannot compare the features of all search results. At least there should be an option to sort the results by price, which would help the user. Instead the user is lost in searching for a product in his price range. For products with similar prices, the user has to individually read and remember the product reviews and details for all products. Even after the user has finalized on a particular product, he is unsure whether he has got the best deal as there are other *related searches* which are mentioned above. Users looking for a web camera have the following shortlist criteria: *price, resolution, compatibility with instant messengers, product reviews*. Having a “sort by” feature for each of these criteria would help the users a great deal. Even the most advanced human subject (E), took about 30 min to finalize on a particular product and wasn’t satisfied with the deal.

### **Possible Design Improvements:**

1. Simple search interface: Users of Amazon.com are *search oriented*. They go to the website looking for a particular product, rather than go Amazon.com and then look for a product. All human subjects eventually ended up using the search feature for any subsequent tasks and their *search time* reduced to merely 5 s. This is a strong motivation for making the design *search oriented* from the present cluttered and confusing design. A simple search interface would make the search faster and easier. The opening page should be restricted to feature 2 (in figure 1).
2. Enable product comparison. The results page does not allow the user to compare the features of various products. As mentioned earlier, the most obvious way to improve

the product selection page is to add a “sort by” feature for each criterion the user is likely to use when comparing products. This would make the product selection faster, easier and more satisfactory. Moreover, features 1, 2 and 4 from the search results page should be removed and results from related searches should be included with the results as well.

### **Design Motivation:**

Why did Amazon.com, the leading e-commerce web site choose to design its pages in such a confusing way? The changes mentioned above could potentially increase its sales by several millions. We know that each design is a result of compromises and several factors may have played a role in the design. The opening page is long and cluttered probably for historical reasons. Users have figured out their own ways to search for products in the current design. Any changes to the design will require users to adapt to the new design which they may not like to do. For example, there might be users who use some of the 16 features (recommendations, deals etc) on the opening page and getting rid of these features in order to make the design simple and search oriented will hurt them. The lack of a product comparison feature on the search results is more difficult to explain. I guess it is because there is no standard format enforced on the product details submitted by the manufacturer, making it difficult for Amazon to index them. The manufacturer should be asked to submit the product details in a standard format (e.g. XML) from which Amazon can extract the criteria which the users are likely to look for (price, resolution etc.). Features such as sponsored links (feature 4 in figure 2) are necessary for commercial reasons and cannot be removed.