## Usability Metrics

## Britain Southwick Haley Young

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## Conclusion:

Between learnability, efficiency and satisfaction, I would rate satisfaction as the most important usability metric, followed by efficiency and learnability. Because there are similar interfaces for e-commerce (Ebay versus Amazon), the way a customer feels after they use the interface is going to make them come back or leave and find a different interface.

From the results, it can easily be seen that the users were overall moderately to highly satisfied with both Amazon and Ebay when it came to creating an account as well as searching for an item (see Table 3). But the big drop in satisfaction was on Ebay when it came to writing a review/leaving feedback. The user usually took at least a minute to find the feedback form and many users chose to give up after about two minutes. Because of this, Ebay got a very bad average score of 1.92 for satisfaction in relation to writing a review/leaving feedback.

The second most important usability metric, efficiency, was measured with the timing of each task. When it came to creating an account, Ebay usually had better times only because on Amazon, when a user clicked "start here", they were directed to a general login page and therefore usually missed the fact that they had to move a bubble from "Yes, I have a password" to "No, I am a new customer". Other than this, searching for items was pretty equivalent on both interfaces and the review/feedback issue created a lag in times on Ebay (as discussed above). I would say that since creating an account is a one-time thing, the efficiency of this is not as important as the efficiency of leaving a review/feedback, which could potentially be an issue every time a user buys something.

The third usability metric, learnability, was seen with how quickly new users were able to do tasks in relation to proficient users. From the results, it is easy to see that new users' times generally were not much longer than proficient users on all tasks except for creating an account on Amazon. The fact that the page was a general login page created a larger gap in average times between profficient users and new users (see Table 4 and Table 5) therefore proving that this task is not as easily learnable as the others. But overall, learnability turns out to be done extremely well on both interfaces.

So in conclusion, Amazon performed better on all three of these metrics

even though it had one slight problem with creating a new account. Therefore I would have to say that Amazon performed better than Ebay.

Name	Familiar?	Account	Score	Search	Score	Review	Score
Jonathan	No	10.2	4	15.3	8	70.0(Give Up)	1
Danny	Yes	6.9	6	17.7	5	51.2	2
Tyler	No	12.4	9	13.5	7	168.0(Give Up)	1
Eric	Yes	7.7	8	48.1	8	176.0(Give Up)	1
Masao	Yes	12.4	8	23.1	8	153.0	2
Marino	Yes	23.7	8	9.1	10	114.0	2
Haley	No	15.2	7	19.4	8	66.0	4
Alec	Yes	10.2	9	11.3	10	110.0(Give Up)	1
Olivia	Yes	12.8	10	37.6	6	168.0(Give Up)	1
Quin	Yes(more)	7.1	7	12.4	7	67.0	4
Braus	Yes	8.0	5	12.5	8	187.0	2
Marvin	Yes	21.7	5	29.4	8	52.9	3
Teresa	Yes	14.0	10	26.9	7	101.0	1

Table 1: This table shows the times for tasks on Ebay in seconds and the satisfaction score given to each task

Name	Familiar?	Account	Score	Search	Score	Review	Score
Jonathan	Yes	24.1	8	8.3	8	7.3	9
Danny	Yes	19.4	5	8.7	8	13.6	5
Tyler	No	45.4	9	11.5	9	11.2	8
Eric	Yes(more)	18.7	7	4.9	8	15.8	9
Masao	Yes(more)	25.5	9	12.3	9	8.1	10
Marino	Yes(more)	26.5	8	9.6	10	8.7	8
Haley	No	62.0	5	10.0	8	12.6	8
Alec	Yes	18.9	8	7.7	10	11.9	8
Olivia	Yes	13.6	10	18.7	10	19.4	10
Quin	Yes	14.7	5	15.3	7	21.1	8
Braus	Yes(more)	34.1	7	13.1	8	70.0	7
Marvin	Yes	26.7	7	20.5	8	5.8	9
Teresa	Yes	25.9	9	22.6	10	5.9	9

Table 2: This table shows the times for tasks on Amazon in seconds and the satisfaction score given to each task

Measurement	Ebay	Amazon
Account	12.48	27.35
Score	7.38	7.46
Search	21.25	12.55
Score	7.69	8.69
Review	114.16	16.26
Score	1.92	8.31

Table 3: This table shows the combined averages for the tasks for Ebay and Amazon  $\,$ 

Measurement	Ebay	Amazon
Account	12.6	53.7
Score	6.67	7.0
Search	16.07	10.75
Score	7.67	8.5
Review	101.33	11.9
Score	2.0	8.0

Table 4: This table shows the Learnability and Satisfaction averages for the tasks for Ebay and Amazon  $\,$ 

Measurement	Ebay	Amazon
Account	12.45	22.55
Score	7.6	7.55
Search	22.81	12.88
Score	7.7	8.73
Review	118.01	17.05
Score	1.9	8.36

Table 5: This table shows the Efficiency and Satisfaction averages for the tasks for Ebay and Amazon