

# Usability Metrics

Andrew Kowalczyk & Edward Bramanti

September 26, 2013

## 1 Introduction

For our tests, we chose the world of online shopping. For our three metrics, we chose learnability, efficiency, and satisfaction. For our shopping websites, we chose Amazon, eBay, and Shopzilla. For our three tasks, we chose:

1. Buying a product: a USB stick (test subject was told to find a USB stick they would personally buy)
2. Profile change: adding and deleting a credit card number
3. Narrowing a product down simply by using the navigation provided: Nokia Lumia 920

Some things to keep in mind for our tests:

- We assume that all testers have signed in
- For shopping websites eBay and Shopzilla, efficiency times are up until they reach checkout
- Test #2 is omitted for Shopzilla (will be evaluated)
- For Test #2 on Paypal, test modified to use Paypal as a guest (same as using a credit card)
- Satisfaction is based on a 1-10 scale (1 being absolutely unhappy, 10 being extremely satisfied)
- Learnability is on a scale from 1-5 (1 being difficult to familiarize with, 5 being easy to accomplish task)

## 2 User types

## 3 Tests

### 3.1 Test # 1: Buy a USB stick

Note: the efficiency for eBay is faster than both other shopping sites because it was only up to checkout.

#### 3.1.1 User #1

	Learnability	Efficiency	Satisfaction
Amazon	4	0:41s	7
eBay	3	0:24s	7
Shopzilla	2	0:39s	6

#### 3.1.2 User #2

	Learnability	Efficiency	Satisfaction
Amazon	5	0:37.5s	8
eBay	5	0:17s	6
Shopzilla	4	0:20s	7

#### 3.1.3 User #3

	Learnability	Efficiency	Satisfaction
Amazon	4	0:34s	10
eBay	5	0:25s	10
Shopzilla	5	0:34s	8

#### 3.1.4 User #4

	Learnability	Efficiency	Satisfaction
Amazon	4	0:20s	7
eBay	3	0:33s	8
Shopzilla	5	0:53s	6

#### 3.1.5 User #5

	Learnability	Efficiency	Satisfaction
Amazon	4	0:32s	8
eBay	5	0:22s	10
Shopzilla	5	1:01s	4

### 3.1.6 Average of all 5 test subjects

	Learnability	Efficiency	Satisfaction
Amazon	4.2	0:32.9s	8
eBay	4.2	0:24.2s	8.2
Shopzilla	4.2	0:41.4s	6.2

## 3.2 Test # 2: Profile change

### 3.2.1 User #1

	Learnability	Efficiency	Satisfaction
Amazon	5	1:01s	7
eBay	1	1:00s	5
Shopzilla	-	-	-

### 3.2.2 User #2

	Learnability	Efficiency	Satisfaction
Amazon	1	1:24s	7
eBay	3	0:49s	7.5
Shopzilla	-	-	-

### 3.2.3 User #3

	Learnability	Efficiency	Satisfaction
Amazon	5	1:08s	10
eBay	1	1:50s	2
Shopzilla	-	-	-

### 3.2.4 User #4

	Learnability	Efficiency	Satisfaction
Amazon	4	1:21s	9
eBay	3	0:50s	7
Shopzilla	-	-	-

### 3.2.5 User #5

	Learnability	Efficiency	Satisfaction
Amazon	5	0:47s	10
eBay	5	0:37s	10
Shopzilla	-	-	-

### 3.2.6 Average of all 5 test subjects

	Learnability	Efficiency	Satisfaction
Amazon	4	1:08.2s	8.6
eBay	2.6	1:01.2s	6.3
Shopzilla	-	-	-

## 3.3 Test # 3: List filtering

### 3.3.1 User #1

	Learnability	Efficiency	Satisfaction
Amazon	3	1:12s	5.5
eBay	3	0:45s	6
Shopzilla	3	0:25s	5

### 3.3.2 User #2

	Learnability	Efficiency	Satisfaction
Amazon	1	2:21.28s	6.5
eBay	3	0:53s	8
Shopzilla	3	0:28s	8

### 3.3.3 User #3

	Learnability	Efficiency	Satisfaction
Amazon	1	1:22s	8
eBay	1	2:25s	3
Shopzilla	5	0:41s	9

### 3.3.4 User #4

	Learnability	Efficiency	Satisfaction
Amazon	5	0:50s	6
eBay	5	0:41s	8
Shopzilla	1	0:28s	4

### 3.3.5 User #5

	Learnability	Efficiency	Satisfaction
Amazon	2	0:33s	9
eBay	5	1:01s	4
Shopzilla	1	0:38s	3

### 3.3.6 Average of all 5 test subjects

	Learnability	Efficiency	Satisfaction
Amazon	2.4	1:15.656s	7
eBay	3.4	1:09s	5.8
Shopzilla	2.6	0:32s	5.8