

Unit One Tutorial: Usability Measures

Write out a definition of each of the following usability constructs:

Effectiveness:

The effectiveness in Human Computer Interaction can be measured through the usability of a computer system by humans. In order for a computer system to be effective the Human Computer Interaction levels must be easy to use and efficient for every user. If it's hard to use then the people are not able to perform effectively meaning the system is not good.

Efficiency:

Efficiency in Human Computer Interaction can be defined as the resources burned or consumed by the user in relation to accuracy and completeness of goals achieved.

Memorability:

Memorability in Human Computer Interaction refers to the user's ability to leave a program and then remember how to use it whenever he chooses to return to it. It is very common for people to use systems once or even many times only to completely forget how to use them later, whether the time gap is days, months, or years.

Learnability:

Learnability considers how easy it is for users to accomplish a task the first time they encounter the interface and how many repetitions it takes for them to become efficient at that task.

Utility:

Utility in Human Computer Interaction refers to the usefulness of a products functions to perform a variety of task with the already existing functions.

Satisfaction: Computer user satisfaction in Human Computer Interaction is the attitude of a user to the computer system he or she employs in the context of their work environments.

For each of the products listed in the grid identify the type of user experience the product should create (where appropriate). Think about how the user should feel when interacting with the product. For some products this effective side of use is more important than others. Focus in particular on the Royal Caribbean website – what kind of experience should a travel website engender? **Does the site achieve that experience?**

| Product | Effectiveness | Efficiency | Learnability | Memorability | Utility | Satisfaction |
|-------------------------------------|---|---|--|---|---|---|
| PowerPoint | You would measure by checking how easy it is to make a presentation and make it presentable using powerpoint. | You would measure the time it takes to perform and complete a task on powerpoint. | You would measure the time it takes to learn a task in a set number of trials. | You would measure the average amount of time a user can go without using powerpoint and not forgetting how to use it. | You would measure the number of task you can tackle with powerpoint and the range of operations that can run within powerpoint. | You would measure the average user rating of powerpoint whether it is high or low rating. |
| Self-Checkout till in a supermarket | You would measure the ease in using the Self-Checkout | You would measure the time it takes to Self-Checkout | You would measure the time it takes to learn a task in a | You would measure the average amount of time a user can go without | You would measure the number of payment methods you | You would measure the satisfaction using the Customer |

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|-------------------------|--|--|--|--|--|--|
| | till in a supermarket | with till in a supermarket | set number of trials. | using the Self-Checkout till in a supermarket and not forgetting how to use it. | can use to check out in the Self-Checkout till in a supermarket | feedback by seeing if it is positive or negative. |
| Royal Caribbean Website | You would measure the ease in navigating towards relevant information like booking washing, dry cleaning, and a conference centre. | You would measure the time it takes to navigate towards relevant information such as booking washing, dry cleaning, and a conference centre. | You would measure the time it takes to learn how to navigate towards relevant information. | You would measure the average amount of time a user can go without using the Royal Caribbean Website and still remember how to use it. | You would measure the range of activities you can tackle in the website such as booking various activities and getting information on the Royal Caribbean. | You would measure the average user rating of the Royal Caribbean Website whether it is high or low rating. |
| An Online game on | You would measure the ease in using | You would measure the time it takes to | You would measure the number of | You would measure the average amount | You would measure the range of | You would measure the average user |

| | | | | | | |
|--------------------|--|--|---|---|---|---|
| | the online gaming platform | get into an online game | attempts it takes to learn a level of an online game | of time a user can go without playing the online game and still remember how it is played | activities you can do within the game such as playing different modes like missions, arena, quest and story mode. | rating of the Online game on whether it is high or low rating. |
| University Website | You would measure the ease in navigating the information | You would measure the time it takes to navigate towards relevant information such as applying for courses, booking hostel rooms and checking one's grades. | You would measure the time it takes to learn how to navigating towards relevant information | You would measure the average amount of time a user can go without using the University website and still remember how to use it. | You would measure the range of activities you can tackle in the website such as applying for courses, booking hostel rooms and checking one's grades. | You would measure the satisfaction using the Customer feedback by seeing if it is positive or negative. |

