

## User Experience Evaluation – Which Method to Choose?

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# User Experience Evaluation – Which Method to Choose?

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**Abstract.** User experience has many dimensions and therefore, it is tricky to evaluate it. When the goal of user experience evaluation is to investigate how people feel about using an interactive system, the traditional usability methods are hardly applicable. In this tutorial, we introduce a set of 78 user experience evaluation methods that we have been collecting from the user experience community 2008-2010. We give both an overview of the different types of methods and examine a selected set of methods in detail.

**Keywords:** User experience, Evaluation, Assessment, Method.

## 1 Introduction

High quality user experience (UX) has become a central competitive factor of product development in mature consumer markets. Improving UX of systems requires evaluation, but traditional usability testing methods are not adequate for evaluating UX. The evaluation methods for investigating how users *feel* about the tested system are still largely unknown.

Since 2008, we have been collecting a comprehensive set of UX evaluation methods (UXEM) both from academia and industry. We have collected the methods from workshops [2,3,4], a Special Interest Group session [1], online survey, literature, and existing smaller collections of experiential evaluation methods.

Based on a structured description of each method, we have been able to categorize the methods based on various criteria. Figures 1 and 2 show examples of UXEMs categorized by the time span of UX that is investigated and by the product development phase they can be used in.

In this tutorial, we will share our knowledge on UX evaluation methods by both giving an overview of the different types of UXEMs and by examining a selected set of methods to gain practical understanding of the method.

Evaluating emotions	Evaluating an episode	Evaluating long-term UX
<b>Observation</b> Facial, body, vocal expressions (e.g. smile, lean back, sigh)	<b>Observation</b> Experience think aloud	<b>Self-reporting</b> Questionnaires, Laddering, iScale, Repertory Grid Technique
<b>Psychophysiological measurements</b> Muscle, pupil, heart, skin reactions detected with sensors	<b>Self-Reporting</b> Experience sampling, AttrakDiff, Interviews, Day Reconstruction	
<b>Self-reporting</b> Verbal: PANAS, AffectGrid Non-verbal: EmotionSlider, EmoCards, PrEmo		

Figure 1. Examples of UX evaluation methods for studying different periods of experience

Concepting	Non-functional prototype	Functional prototype
<b>Visual design</b> Emotional expressions, reactions	<b>Visual design</b> Emotional expressions, reactions	<b>Lab test</b> Emotional expressions, reactions AttrakDiff
<b>Idea description</b> Expert evaluation, Role play: Perspective-Based Inspection	<b>Interaction</b> Experience think aloud	<b>Field study</b> Experience sampling, Diary, Day Reconstruction Method
		<b>Market feedback</b> Questionnaires, UX Curve / iScale

Figure 2. Examples of UX evaluation methods for different phases of product development

By the end of this tutorial, participants will know

- the general targets of UX evaluation
- the various kinds of UX evaluation methods available for different purposes
- how to choose the right method for the purpose
- the basics of the selected UX methods of different types
- where to find more information on those methods

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