Summary

Introduction to Usability Testing

Usability testing is the technique of assessing how usable your product is by testing it with users under controlled conditions. As a PM, it's an important tool for you to identify problems related to the usability of your product and figure out the solutions, ultimately creating a better and more usable product for your end users.

The Basics of Usability Testing

In product development, usability is the ease with which a user can use your product's interface, be it a website, an app, or a mobile site. According to Jakob Nielsen, 'Usability is a quality attribute that assesses how easy user interfaces are to use.' For example, if your compare the home pages of ClearTrip's and EzeeGo's websites, you would see that, for a first-time user, the experience of using a simple and streamlined website like ClearTrip would be much easier and more pleasant than using a disordered one like EzeeGo.

As per Nielsen, usability has five components:

1. Learnability: The ease of using a product for the first time; e.g. in the Swiggy app, it's fairly easy for a first-time user to complete the task of placing a meal order.
2. Efficiency: The ease of accomplishing tasks for an experienced user; e.g. each step of the workflow in Swiggy has been iterated upon to maximise efficiency.
3. Memorability: The amount of information a user can retain after a visit; e.g. as Swiggy's UI is fairly intuitive, the user remembers how he/she took actions the previous time. Not only that, but the app also remembers important details for the user, like addresses and payment information.
4. Errors: Details about the types of errors made by the user, their severity levels, and the methods of recovery from these errors; e.g. Swiggy's design makes it easier for the user to go back and correct errors if need be, such as changing the quantity of an item.
5. Satisfaction: The preference of the user for the product, and the possibility of his/her recommending it to others; e.g. Swiggy keeps track of user satisfaction by asking for feedback after every delivery. The possibility that the user might recommend your product to others can be assessed through tools like NPS, which you learnt about earlier.

A product that is difficult to use would not help the user achieve his/her goals, and thus lead to high drop-off rates. On the other hand, a product that is easy to use would create a positive brand image and lead to higher conversions and revenue.

Usability testing is the process of testing out your product with its users to evaluate how usable it is. Based on this, you can channel your resources into building a better and more user-friendly product. Through usability testing, you can understand what the user likes or dislikes, and thus create a more usable UI. You can leverage the user's expressions, words and actions to figure out his/her pain points. The result of all

this is that the user would enjoy using the product and thus keep coming back to it, and also recommend it to others.

You saw an example of a usability test conducted at Practo. Upon testing the product out with its users, i.e. doctors, the team at Practo realised that the user did not understand what the pencil icon in the profile section meant. This is a fairly common icon used to indicate an option to edit details, but the target user was less tech-savvy and did not comprehend it. In the end, they had to change the copy to explicitly state instructions like 'Edit' or 'Add an experience detail'.

Similarly, at Housing, one user misinterpreted 'List your property' to mean 'a list of properties' that he could browse through. With insight into how text on their website could be misinterpreted, the team changed the copy to 'Sell your property' to make it clearer.

Different Purposes of Usability Testing

The different purposes of usability testing are as follows:

- Exploratory: Test your product early in the design phase to gauge the user's reactions and mental models. E.g. some mental models operate across products, such as shopping for items on an ecommerce app is similar to ordering food on a delivery app.
- Assessment: Evaluate the effectiveness of the conceptual design and test metrics such as task completion rate.
- Validation: Check whether the time and effort you estimated for the user is accurate. A form of stress testing, this kind of usability test would help you figure out how your product works on wi-fi, 3G, and other such conditions.
- Comparative: You can compare two different designs to assess their usability; e.g. A/B testing the order flow of a food delivery app.

Usability testing can be done at almost any stage of product development, such as on live or ready-to-ship features, at the staging level, or on prototypes.

Conducting a Usability Test

The process of conducting a usability test includes the following steps:

1. Develop a test plan
2. Conduct the usability test
3. Analyse the data you've collected

While developing the test plan, you have to consider the following:

- The purpose for which you want to conduct the test
- The stage at which the product currently is
- Your goal for conducting the usability test
- The duration you would want your test sessions to be

- The schedule and location for the sessions
- The nature of the equipment you would require, including recording equipment
- The different roles each team member would play during the usability testing sessions
- The number and profiles of the participant (according to Nielsen, 5 is the ideal number of participants as it allows you to identify the broad patterns of usability concerns)
- The scenarios you would give the participants during the test
- The metrics you would measure to assess usability

Scenarios are the stories which describe the reasons why the users come to your website or app, and how they achieve their goals. These are usually created keeping in mind the user and his/her motivations and expectations. The table below contains a few examples of how to write them:

User Goal	Correct Scenario	Incorrect Scenario	Why?
Go through Amazon and purchase an item	Go to amazon.com and buy a pair of shoes under ₹ 1,500	Go to amazon.com and buy something	Scenarios should be specific, not generic
Book a flight	You're staying in Mumbai and planning a 2-day trip to Bangalore from 24-26 July. You need to book flight tickets. Go to makemytrip.com, book a ticket for Mumbai to Bangalore for 24 July.	Book your ticket using makemytrip.com	Scenarios should not sound like instructions; rather they should create a situation for the user to act upon naturally
Start a product management course	Go to learn.upgrad.com and resume the product management course	Go to learn.upgrad.com, click on Course tab, select the product management course, click on 'Resume course'	Scenarios should not disrupt the participant's natural behaviour through too much leading
Find all course information on UpGrad's website	You're a working professional and want to know about the kinds of courses UpGrad offers. Go to UpGrad's homepage and find information on different types of courses.	You're a working professional and want to know about the kinds of courses UpGrad offers. Go to UpGrad's homepage and comment about its visual hierarchy.	Scenarios should not use jargon that the user would not understand e.g. 'visual hierarchy'

The metrics that you use during a usability testing session can be quantitative as well as qualitative. Quantitative metrics are as follows:

- Effectiveness: The percentage of participants who manage to complete a task. E.g. if the task is to order meal from Swiggy, and 8 out of the total 10 users manage to do it, the efficiency of this task would be 80%.
- Task time: The duration of the task, i.e. the time taken from the moment the user finishes reading the scenario to the moment the user completes the task. E.g. in Swiggy, you could measure the task time for ordering, right from looking for a restaurant, picking an item, checking out, to filling out addresses and payment information.
- Turnaround time: This is something that is at your end — the amount of time between the end of one operation and the beginning of the next. E.g. for Uber, it would be the time taken from the user booking a cab to the driver accepting the booking.
- Errors: A user can recover from non-critical errors with ease, e.g. filling in your mobile number in the email field. However, if the user makes an error and there's no way to go back and recover, this is termed as a critical error, e.g. not being able to find the 'Buy Now' button and thus failing to place the order.
- Error-free rate: This is the percentage of participants who complete a task without any errors.

The qualitative metrics for usability testing are:

- Task-level satisfaction: The ease/difficulty of completing a particular task for the user. This could be measured on a Likert scale of, say, five or seven.
- Test-level satisfaction: The overall ease of completing the entire test session for the user, and his/her level of satisfaction with the product
- Likes/Dislikes: The elements of the product which the user liked or disliked the most during the test
- Recommendations: The extent to which the user would recommend your product to others

While conducting the usability session, the following things should be kept in mind:

- Make the participant comfortable
- Let him/her know that you're testing the product, not them
- Do not lead the participant
- Take detailed notes throughout the session

In order to analyse the data collected through usability testing, you have to follow these steps:

1. Sift through the qualitative and quantitative data you've collected
2. Identify usability problems and figure out the reasons behind them
3. Categorise the problems according to their severity levels
4. Convert them into actionable items
5. Execute these action items and solve the usability issues

For example, if you conduct usability testing on the login flow of your product and you discover that the user has trouble filling out the details and receiving the one-time password, you would have to look into the OTP provider as well as your login design. The actions items would be to change your OTP provider and improve the login flow to make it more seamless and user-friendly.

At Housing, a usability test was conducted to check if users could retrieve listings they had contacted before. It was found that they had a difficult time figuring out how to do this. Through analysis of this data, the team decided to create separate tags for 'Search Results', 'Shortlisted/Contacted', and 'Recommendations'.

You should be able to:

- Understand what usability testing is and its significance in product development
- Develop a test plan for a usability test
- Conduct a usability test by following the guidelines for the same
- Analyse the data collected through usability testing