**Introduction**

Usability testing is the process of evaluating a product by testing it on users. It is finding out how simple or challenging it is for users to interact with the product. It can be conducted using websites, apps, online courses, or any other product a business provides. It primarily focuses on measuring a product’s capacity to meet its intended goal. It involves examining the participants under controlled conditions to determine how efficiently people can use the product. A typical usability testing session includes a researcher, also referred to as a moderator, and participants. Moderator is the one who navigates and asks participants to perform tasks, mainly using one or more specific user interfaces. While the participants are involved in each task, the moderator notes the participant’s behavior and listens for feedback. There are three roles involved in the usability test i.e.

1. **The Facilitator** is the one who guides the participants through the test process. They give instructions, task scenarios and walk through any question or grievances raised by the participants, and asks follow-up questions accordingly. Their role is to ensure that the test results are valid and relevant to the issue and not influenced by the participant’s behavior.
2. **The participants** – They are the realistic use of the product or service being studied .

Often participants are the users that are using the product or service being studied. In other cases, they are carefully screened with specific requirements. Participants are encouraged to think out loud, as it helps in getting more insights from the facilitator.

1. **The tasks** – These are usually realistic activities that the participant might perform in real life. This can be very particular or open-ended, depending on the research questions and the type of usability testing. Task instructions are mostly delivered to the participants orally or handed to them. Furthermore, the wording of the task is equally prominent in usability testing. Minor errors in the phrasing can create misunderstanding among the participants about the task, which can result in approaching the task, which is referred to as priming.

**Importance of usability testing**

Conducting usability testing in the right way, with the right participants eliminates the risk of building the wrong product. It helps reveal the real issues and be aware of the user experience while using their website, service, or product. The testing requires research that gives in-depth information about the product and the way users interact with the product. It also helps in standing out the minor errors and gaining feedback from the user. Besides that, for the moderator, it develops empathy as working gives a lot of insights into the user behavior. The main aim of the test is to examine real individual interaction with an app, website, or other product and observe their behavior toward it. The purpose of usability testing is to reveal areas of confusion and come up with solutions to improve the overall user experience.

**Examples of usability testing**

Some examples of usability testing are as follows

A large clothing company their online sales are low despite strong marketing and affordable prices. to help solve this problem, they could conduct usability testing for their website, to make sure that the customers have easy access to navigate, search for what they are looking for, and buy the product. For this, the test can be done over a video chat where the research asks the customers to perform a given task on the website itself. Then monitor the comments and actions, as well as note how long it takes for them to add an item to the basket.

-A Dell scanner is showing an error message. How do you get rid of the error message? The facilitator then carefully examines the participant's actions on the webpage or any digital platform and evaluates the process.

you are considering getting a new credit card from Bank of America. please visit Bank of America’s website and decide which credit card you might choose and want to open if any.

It is best to give instructions to the participants rather than orally asking them about the process. This helps to give more insight into the process of the product used by the consumer and how they assemble the product or fix the issue. It can be used in an array of situations.

**Types of usability testing**

**Qualitative usability testing** – It involves observing the users and comprehending how they experience the product and the reason they performed certain actions. It is more focused on collecting findings, and insights about how people use the product or the service. It is suitable for discovering problems in the user experience. For a common qualitative usability study, five participants are recommended to unravel most of the problems. It is well for identifying the main problems in a design. For instance, a qualitative study is done to see what prevents a user from submitting a document successfully and based on it the moderator determines the further process.

**Quantitative usability testing-**It evaluates the user’s performance and is focused on collecting metrics that describe the user experience. The result contains more numerical data, percentages, and statistics. The quantitative study usually involves many users, and the data are recorded indirectly while the participants complete the task. When quantitative studies are carried out correctly, the results are sounder.

**Moderated vs unmoderated** – The moderated testing session is initiated in person or remotely by the researcher who introduces the test to participants. A moderator guides the participants throughout the session. Whereas an unmoderated test is done without direct supervision or the absence of a moderator. The participants are more likely to be in their own homes, using their own devices. Moderated testing gives more in-depth results because of the face-to-face interaction between the participants and the researcher but can be expensive compared to unmoderated testing. Unmoderated testing is focused on more specific questions or observe and measuring behavior patterns.

**Remote vs in-person** – Remote usability tests are conducted over the internet or by phone whereas in-person testing is conducted face to face with the presence of a moderator. Person, testing is comparable to more expensive and time-consuming. On the other hand, remote testing doesn’t go as deep into participant reasoning but covers a large number of participants from different geographical regions. This method is cheaper compared to a personal usability test. However, the moderator has less authority over the test and procedure, which is why it’s important to choose the right tools and devices for it.

**Explorative vs comparative vs assessment testing**

 In explorative, participants are made to brainstorm, give opinions and express ideas and concepts. The information is usually collected in the early stages of product development which helps in formulating ideas for the further process. It is also often referred to as formative testing. This method is used mostly in open-ended questions to evaluate the findings of the users

 Comparative research methods involve asking users to choose which two given solutions they prefer and are used to compare a website with its primary competitors. Various types of findings can be discovered from this method such as preference, effectiveness, and satisfaction

Assessment research is used to test a user’s satisfaction and how they are using it. It is mostly used to evaluate and uplift the product’s functionality.

**Cost of usability testing**

As research is conducted for consumer satisfaction and aims to give them what they’re asking for discount usability studies can be inexpensive, though most of the time requires paying a few hundred dollars as incentives to participants. The testing session can take place in a conference room. Whereas the cost can go up to several hundred thousand dollars for more meticulous studies. The cost of usability testing depends on the platform required such as desktop or phone and several users accessing the product. Other would have cost in advertising or any bulk email costs which add up to the usability cost. If the testing is carried out on an international level, it will add up to more expenses. Also, there are other things such as the cost of translating and re-translating the response, which can make the test costly.

**Methods for recruiting users to usability studies are**

-     **Guerrilla Testing** – it is the simplest method where anyone can participate depending on the proximity of the research conducted. These can be people in the office or, people in the local coffee shop. This process should be short (not more than 15 minutes). Most participants are rewarded with small gifts or coffee for their participation. However, the drawback of using this method is that sometimes the participants might not be the candidate for the research which can give weak feedback or solution

-     **Existing Users** – If usability testing is done on an existing product, one of the coinvent sources is using the existing user base. Sending email requests, pop-ups on the website, and requests on social media groups are some of the ways to reach out to them. This method usually provides very solid feedback on usability.

-     **Online service recruitment** – online services such as crag list, usertesting.com, and mechanical Turk allow the researchers to post for specific research and adverts to solicit research participants. The description of the testing should be clear and simple. this kind of recruitment takes offers incentives to the willing and qualified participants

-     **Panel agencies** – they maintain thousands of databases and have huge amounts of demographic information. For this, you must google for an agent that best suits the research and charge to use the service for around 20-50 dollars.

-     **Market research recruitment** – this is the best and also the most expensive way for getting the users. the market research recruitment company works on behalf to get the users, for which they charge around 250 dollars and more.

**Challenges in usability testing**

Challenge one- finding the right participant for the test can be tricky as the testing itself have some requirement and finding the right one can take more time. Advertising online to find the right people and offering incentives helps in getting the right candidates.

Challenge two-no clear objective/purpose can create weak usability testing, as well as the result drawn from the test, cannot be reliable. A clear objective will also help when trying to buy in from internal stakeholders. For instance, the requirement for testing a new feature is distinct from testing an updated feature. Every task calls for a different set of templates, and questions

Challenge three- ensuring authentic results – careful planning should be done for succeeding in the usability test. The information collected from the session and the user’s interaction with the product are not enough until it meets the purpose of the test. So, sometimes it might take longer to get to the result and draw any solutions from it.

Challenge four -embracing the pressure to deliver -there is always a rush to push prototypes into demos which can be overwhelming. by setting the right expectation for stakeholders and a realistic view of outcomes this can be mitigated.

Challenge five -dealing with false confidence- conducting usability testing around stakeholders can be hard. Most of the time they position themselves as end users, which causes complexities. Demonstrating that stakeholders are different from the end users and making them note-takers can be one of the ways to fix this.

In conclusion, the usability test is conducted with the targeted users, who complete tasks following the real-life scenario. It uncovers insights and findings that are used for the improvement of the usability of the product and give a smooth user experience It has been carried out by government bodies, utility services, tech companies, and manufacturing companies. It is an important part of the forming process of the product aiming for the maximum satisfaction of the users. It has been an integral part of developing software, product, or any application. Interacting with the participants and users’ actions can give a lot of insight into updating or creating any kind of product.

Reference

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