

Data Analysis Plan

Study Objectives

The aim of the study to the two prototyping tools, MockPlus and Axure RP. The objective of this study is to examine the following:

- Prototyping in one tool is easier than the other.
- Prototyping in one tool is a quick process than the other.

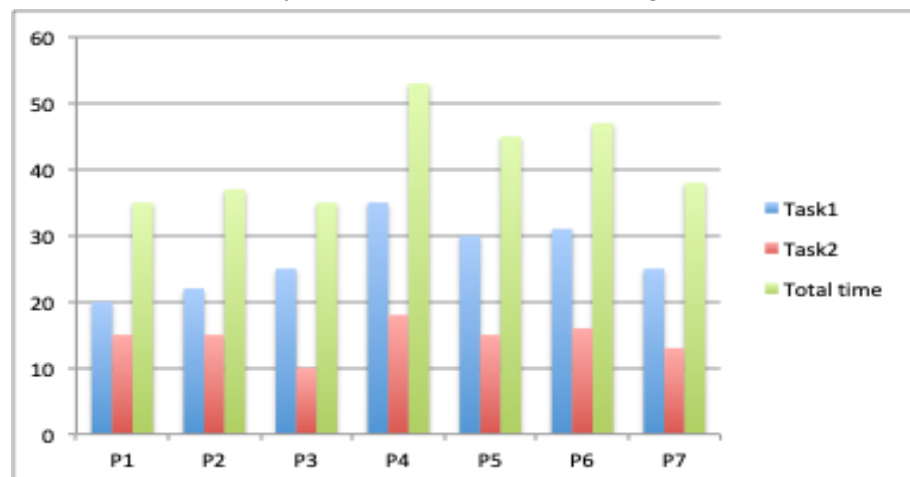
Study Measures

A few key measures that we would include would be the following:

Prior knowledge of prototyping tools.
Time devoted on each of the two tasks.
Questions/Conversations during the process of usability study
Issues faced during the completion of tasks
Response/Reaction/Behavior before and after the tasks.

Analysis

- Quantitative analysis (To provide the cause and effect relationship)
 - With the data points for the study measures, the following steps will be carried out:
 - Use basic Excel Analysis to summarize the findings.



- Convert the excel into the CSV format and use Statistical Analysis as follows:
 - Find the average/mean of for the total time taken by a user to complete two tasks. This would provide a better picture to the question, 'If 15 minutes is the average time to complete a task, how much would each individual devote and what would be the performance?'
 - Plot the graph to depict the summary.

- Generate a report of the analysis through the plot and post/pre survey questionnaire.
- Qualitative analysis (To provide description of the process)
 - Transcribe the data from screen recordings to quantitative data by providing the following a numerical value:
 - Number of time the search box is used.
 - onClick events to understand the navigation technique.
- Content Coding
 - Summarize the data to a word, phrase or a general idea.
 - Use the concept of Vivo Coding to understand and pick the expressions throughout the process of user study.
 - Carefully understanding and processing the adjectives used by the user to understand the emotions and why do they choose to do what they do.
 - Using the concept of open coding to translate the words within a given text to specific concepts. For example, in the statement, “I decided to rate my experience with Azure as irritating because to find what I need is not easy”, words like ‘not at all interesting’ would equal frustration, ‘not easy’ as difficult and ‘to find’ as navigation issues.
- Providing key findings learnt throughout the study like, “I was highly frustrated while prototyping in Mockplus but I would recommend this tool over Axure because the frustration was worth it. I completed the task in MockPlus but even with laid back attitude I found Axure difficult.”