# DECIDE Framework

**Determine the goals of evaluation**

A Post-Doctoral fellow is a person who conducts research after they have completed their PhD, with the aim of deepening their knowledge in a specified. The University of Pretoria supports such research opportunities in order to the increase research output of the University. Post-Doctoral fellows who conduct their research at the University of Pretoria do so under the supervision of a staff member of the University and their research may be privately or internally funded. This is a growing field in Universities around South Africa. A lack in the software solutions for the application management of Post-Doctoral fellows has been identified by the SoftServe group.

The purpose of the evaluation is to check areas of usability that are successfully comprehended by the user, and at the same time also discover those areas that are not consistent or intuitive for the user, all in efforts to better the system. The specific goal of the evaluation is to see if the users can intuitively navigate through the application to perform common tasks by understanding their role in the system. The evaluation will also consider the time it took to perform the tasks and will help discover better solutions for parts of the evaluation where the user struggled to use the application. The evaluation is important to the success of the system, as it is imperative that users be able to understand the options available to them and be able to efficiently navigate the system for their benefit.

## Explore the specific questions to be answered

Are users intuitively able to navigate through the application?

Are users able to perform tasks faster after using the application again?

Is the process of creating an application intuitive enough?

How do the users feel about the forms filling process?

General opinions on User Interface Elements?

## Choose the evaluation paradigm and techniques to answer questions

The primary evaluation technique that was used for the evaluation was Usability Testing. The reason for choosing this technique is because the evaluations needed to take place in a controlled setting where the evaluators are able keep track of various behaviours of the users after performing predetermined tasks on the application.

The data gathering techniques used was *taking notes*, *video recording* and *monitoring key strokes*. These techniques were used to produce both quantitative and qualitative data but primarily quantitative data that can easily be quantified and summarized into meaningful averages that can be further analysed at a later stage.

## Identify the practical issues that must be addressed

1. Users will have to include current Post Doctoral students, DRIS members, the client and other computer literate members.
2. Users will have to concurrently be able to complete their tasks on the application with other users in the laboratory.
3. The users may be disturbed by external noise from nearby construction, students passing by etc., but should not affect the outcomes of the evaluation because the application was designed with simplicity and does not require a lot of focus.
4. The user only has an hour to complete all their tasks otherwise their results will have to be nullified.
5. Different users will have different tasks and as a result there could be distractions in the lab
6. The users may be disturbed by external noise from nearby construction, students passing by etc… This may affect the outcomes of the evaluation because although the application was designed with simplicity and it does require a lot of focus.
7. Making the application accessible over the UP network.

## Decide how to deal with the ethical issues

Ethical issues, which we may encounter, would be dealing with confidentiality of information we receive from the users. We will address this issue by presenting a consent form for the use to sign – that guards their rights and our special privilege to their information. Our duty after that is to make sure their personal information is not compromised or released. Another issue, which we may encounter, would be dealing with the actual testing. The participants will be told in advance that if any part of the testing is not comfortable, they may choose to quit the testing.

## Evaluate, analyse, interpret and present the data

We will evaluate the data looking for patterns in the user’s behaviour for certain tasks and take all users into consideration that gave us consent and completed all the tasks in time. We will analyse the data by using both quantitative and qualitative frameworks and techniques to get meaningful data that can help us in improving the application’s user experience and expectations. We will interpret the data to a human understandable format that allows an easier understanding evaluation taking place. We will then present the data in order to help detect where to improve or tweak the application to improve a user’s experience of using the application.