This paper deals with the design process of a Web based GIS application. As an example we use the Seututieto -project which has been active since 1997 and is now in the final production phase. The goal in this project is to develop an Internet –based application for town planners, both among land use and different activities like health care, social support, traffic planning and environmental planning.

When new technology is applied for the first time, normally the process starts with a minor design phase and the development work starts with quickly designed prototype development. The advantages of quick prototyping are clear but there are also some disadvantages. The development is normally made in interaction with the end users who give their feedback. Our experience is that the end users are very critical and seem to reject or accept the system on the basis of their first impression. It is very important that the prototype does not give completely wrong idea of the becoming system.

It seems to be important that the prototype has good visual quality, so the user interface including the maps used, meets the user requirements. If the maps used look too simple or non-professional the complete system is not accepted. Also the functionalities of the prototype must be relevant for the users. If the prototype is too simple showing crude maps and introducing non-relevant functionality the users are disappointed and they normally do not understand that the prototype is only prototyping the technical solution. So if pure technical prototyping is necessary it should not be shown for the users. The prototype for the users must be carefully designed and substantially relevant.

This papers deals with the design process of an Internet based GIS application – including the important prototyping phase as well as the important users role in the process. As an example we show the design process of the Seututieto –project in which several prototypes and pilots have been designed and developed and good results and feed back from the users side has been received. The process seems to be close to product development so it is the right time to report the design process and evaluate the results. The goal of this paper is to give a model of a design process with description of methods and tools which have been used.