

A1: Decision Support Systems

The DSS are interactive computer systems, the aim of which is to help decision makers in the use of data and models to solve unstructured problems.

The DSS emerged in 1970s to solve complex situations in which individuals have to choose between several possible alternatives and follow the optimal or a satisfactory one. For this decision making, the experience, common sense or intuitions of experts are not enough since often multiple conflicting criteria usually exist including, uncertainty, several decision makers and various stages. The endless versatility of real-world human decision problems has triggered necessary efforts in multiple areas in order to build a sequence of coherent schemes (patterns), increasingly broader to approach decision making problems correctly. This module will focus on exposing the foundations and applications of the main lines of current development of Decision Processes, studying different tools and software that have emerged in recent years for the modelling and evaluation of decision making problems in uncertain environments.