

APPLICATION OF DECISION TREE ANALYSIS FOR POLICY
DECISION MAKING IN ACADEMIC DEPARTMENTS

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Major decision making situations are encountered when academic departments wish to expand their activities such as the introduction of new academic programmes, research studies and extension services. In many instances, all desired activities cannot be implemented at the same time due to financial constraints and priority rules. In determining priority rules the changing needs of the society at large should be considered and hence often these decisions are made in a climate of uncertainty.

Principles of decision theory have been successfully applied in many business situations involving uncertainty. In this paper, we have analysed a typical decision making problem in an academic department from the point of view of a business situation, employing the decision tree concept.

In an analysis of this nature, the payoffs for mutually exclusive paths through the tree is usually measured in monetary terms. However, since some decision alternatives considered are apparently qualitative in nature, such as the development of human resources, subjective judgement was used to quantify those parameters. The optimal solution was arrived at by maximizing the expected monetary benefits.

Usually decisions arrived at are not implemented immediately and it is possible that when the proposals are implemented the conditions under which they were proposed have themselves changed. Since the decision making process developed here is based on a time dependent analysis process, this approach provides more rational decision making under conditions of uncertainty.