Multi-Criteria University Decision Support System: An Operations Research Prototype Case Study

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Abstract—A decision support system (DSS) using a multi-criteria methodology is developed to assist decision makers in the Teachers College of the University of Nebraska-Lincoln. The DSS is designed to examine potential outcomes of resource allocation/reallocation decisions. This case study reports the process of prototyping undertaken by an analyst creating the DSS. The results of the study reveal how the multi-criteria DSS could be used to support decision making of resource allocations during times of significant changes in departmental academic programs. This study also reveals a number of prototyping implementation strategies useful for operations research modeling applications of DSS prototyping.

Keywords—Goal programming, Decision support systems

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