University of Vienna

Management Center

Rudolf Vetschera

Chair of Organization and Planning

Bruenner Strasse 72 A-1210 Vienna, Austria

Phone: +43 1 291 28 - 701; Fax: +43 1 291 28 - 704

e-mail: Rudolf.Vetschera@univie.ac.at

Homepage (partially in German): http://www.bwl.univie.ac.at/bwl/org/org.html

This unit has been created in September 1996. It is led by Rudolf Vetschera, who has been working in the field of MCDM area for about 15 years and came to Vienna in 1996 from the University of Konstanz, Germany. The main focus of teaching and research is on organization theory, but this area provides plenty of applications for multicriteria approaches.

Specific research projects related to MCDM include:

Multicriteria extensions to agency models:

Principal-agent models are an important tool in organization theory. Most of the models usually used in agency theory assume that the agentŐs behavior can be represented by a scalar utility function, which is often assumed to be known to the principal. In our research, we try to weaken these two assumptions by modeling the agentŐs decision as a general multicriteria problem. Consequently, the principal can no longer predict the agentŐs reaction to incentive systems with certainty, but can make only probabilistic predictions about the agentŐs behavior. As a second step, we are studying the value of information on the agentŐs preferences to the principal.

<u>Related publications</u>: R. Vetschera: Multi-Criteria Agency Theory. Journal of Multi-Criteria Decision Anlaysis 1997 (in print).

Analytical models for business process design:

Current methodology for business process reengineering (BPR) involves analytical and simulation techniques for evaluating existing or proposed processes as well as methods for implementing and managing organizational change. However, there are no analytical models to support the process design process. One reason could be the inherently multicriteria nature of the process design problem. In designing business processes, criteria like costs, duration of the process and quality of process results have to be taken into account. In this project, we try to develop (multicriteria) optimization models for this problem.

<u>Related publications</u>: I. Hofacker, R. Vetschera: Analytical Models for Business Process Design. Working paper, October 1997. (All our working papers can be downloaded from: http://www.bwl.univie.ac.at/bwl/org/WP/WPList.html).

Staff Members:

- Rudolf Vetschera, full professor at the University of Vienna, studied economics and computer science at the University of Vienna and Technical University of Vienna. Research interests: Decision-oriented models of organizations, network organizations, multi-criteria decision making, decision support systems.

- Ingo Hofacker, research assistant, studied economics at the University of Konstanz. Research interests: information systems, fuzzy decision models, genetic algorithms.
- Sabine Köszegi, research assistant, studied business administration at the University of Economics, Vienna. Research interests: Network organizations, influence of culture on multinational organizations.
- Josef Windsperger, research assistant, studied economics at the University of Economics, Vienna. research interests: Transaction cost economics, corporate governance structures, international management.