

MCDA in Scotland

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For quite some time José has been trying to persuade us to write an article on the “MCDA group at Strathclyde” – and I’ve resisted, partly because there are always so many things to do and never enough time to do them, but also because I’ve never really thought of us as a “MCDA group”. Indeed MCDA is one of the wide range of inter-related research areas that are covered by residents in and visitors to the department of Management Science at Strathclyde.

The University of Strathclyde’s mission statement, which dates from its foundation as Anderson’s College in 1796, is “The Place of Useful Learning”. This is something that is strongly reflected in the practical orientation of all the department’s research, including in MCDA, which seeks to combine “excellence with relevance”. Thus, a key underlying theme to our work is how to better support decision making in organizations through the use of MCDA.

Recent research focusing on this orientation is that on Intelligent User Support and the GDSC (Glasgow Decision Support Centre) project. The research on Intelligent User Support, with Julie Hodgkin (now at Stirling University, also in Scotland) led firstly to the development of enhanced decision support tools targeted at “naïve” users (tested extensively on MBA students) and secondly on tools for skilled facilitators. The latter tools were used by myself and Tasso Koulouri in working with a client group as part of the GDSC project. This project, funded by the Glasgow Enterprise Agency, aimed to provide multicriteria decision support to small and medium enterprises in the Glasgow area. Working with a range of organizations during this project provided us with a wealth of experience, in particular in supporting decisions of small charitable and community-based organizations.

A second important theme in our work, reflected in the recent book by Belton and Stewart (2002), is that of integration – both within the broad church of MCDA and of MCDA with other OR/MS and Management methodologies. This approach, which has grown from collaboration with colleagues at Strathclyde and around the world, has also involved many PhD scholars and visiting researchers. In all cases we have sought to explore how MCDA and other methodologies can be used in an integrated way to add value to an organizational intervention.

I hope that the following list will give a sense of the wide range of topics covered and mentions everyone else that has been involved in recent years:

- MCDA and Cognitive/Cause Mapping

Professor Fran Ackermann (Strathclyde), Dr Gilberto Montibeller (Strathclyde),

- MCDA and DEA

Professor Theo Stewart (University of Cape Town), Derek Crowe (Strathclyde)

- MCDA and Discrete Event Simulation (and recently EMO)

Dr Mark Elder (Simul8), Dr Julie Hodgkin (University of Stirling), Dr Gilberto Montibeller

- MCDA and Production Scheduling

Dr Mark Elder

- MCDA and System Dynamics

Sergio Santos (PhD, Strathclyde – University of Algarve), Dr Susan Howick (Strathclyde)

- MCDA and Conflict Analysis

Dr Fabio Losa (Ufficio di Statistica, Switzerland)

- MCDA and the Balanced Scorecard

Nur Anisah Abdullah (PhD Strathclyde- International Islamic University, Malaysia), Mik Wisniewski (Audit Scotland)

- Project Prioritisation

Brett Malyon (PhD Strathclyde), Vicky Mabin (Victoria University of Wellington, New Zealand), Professor Fran Ackermann

- Fuzzy MCDA *Tasso Koulouri (PhD Strathclyde)*

- Links between MAVT and Outranking

Jacques Pictet (Bureau d'aide à la decision, Switzerland)

- Intelligent User Support for MCDA

Julie Hodgkin (University of Stirling)

There are two other Professors at Strathclyde who are interested in MCDA as part of their broader research areas. Tim Bedford, who joined the department from University of Delft in 2000, focuses on Risk and Decision Analysis; and George Wright, at the Graduate Business School, is interested in Strategic Decision Making and Scenario Analysis. If you are interested to follow up on any of the work outlined above, visit the departmental website at www.mansci.strath.ac.uk, where you will find a list of publications and current PhD studies. If you would like to visit us at any time, you would be most welcome – please email us.

And finally, who am I? I've worked in the field of MCDA since 1981 when I started my PhD, a comparative study of methods for multicriteria decision aiding (Cambridge 1986). My own approach to MCDA evolved from this research. It is based primarily on the use of MAVT but is significantly informed by the strengths of other approaches. We place a lot of emphasis on visual interactive modelling (supported by the software VYIYSYA which we first launched in 1988) and on group facilitation. Over the past 20 years we have been fortunate to work with a wide range of organizations, large and small, in the public, private and voluntary sectors. It is these opportunities which both motivate and provide the arena for much research. I am currently honoured to be President of the International Society for MCDM and editor of the Journal for Multicriteria Decision Analysis.