Editorial

Browsing through the papers of the 2006 London conference of the IFIP WG 8.3 (during the preparation of the proceedings) my resistance against certain ways of thinking about DSS slowly crystallised into a specific concept. Running through the many themes presented at the conference, I had noticed a red line: irrespective of the mathematical background used or the software solution built, independently of whether the problem concerned individual or organizational decision making, many of the papers concentrated on a given, specific application domain - each having their own. I got interested in the work of people whom we try to support.

So, when I was offered the opportunity to edit a Special Issue of the Journal of Decision Systems I already had a “mission” in mind. During the conference I attended all the presentations by those authors whose paper I had found promising in this sense. Then I approached these people to suggest they prepare new versions of their papers by shortening the description of technical details, leaving out some of the mathematical background and showing something about the problem area that their solution intended to support, ultimately describing why such support would be achieved. This vision was captured in my Call for Papers addressed to the audience of the 8.3 conference where I asked authors to specifically reconsider their papers and present “useful, every-day DSS applications with... a rich description of the domain area and the problem being addressed”. I wanted real applications: Systems, ideas and architectures what did end up being used by practitioners in the field.

My intention was to show the widest spectrum of Decision Support System applications alongside each other – a series of papers where the reader may encounter similar solutions used for largely differing domains or find similar sub-problems addressed in more than one ways – all this hopefully adding up to a neat patchwork representing the field of DSS applications. Interestingly enough, uninfluenced by my intention some common themes emerged. Most papers put architecture in the centre of the authors’ interest - this seems to be a hot topic in the DSS arena. Irrespective of new Decision Support ideas, several papers addressed issues of emergency, contingency or disaster.

Being involved in procurement activity for disaster relief actions I am way too aware of the complexity of the problem. But this is not the only reason why I selected “Supporting Group Decision Making and Coordination in Urban Disasters Relief Efforts” by S.F. Ochoa, A. Neyem, J.A. Pino, and M. R.S. Borges to be the forerunner. They managed to get the closest to the concept I had envisioned: the paper provides a great presentation of the work of people their system is trying to support and shows us the difficult decision making challenges that follow tragic events.
The new architecture presented in the paper by S. Stanek, H. Sroka, and Z. Twardowski titled “A Decision Support System in Diagnosing the Financial Condition of an Organization” may be used in developing Decision Support Systems which are capable of providing help and information unleashing the decision maker’s creativity. It is a result of extensive research spanning the field of mathematics, Artificial Intelligence and Expert Systems, yet it tries to go beyond quantitative problem solving by offering a hybrid system. The example used to test the prototype gives a detailed overview of not only the system in question but also provides insights into the work of corporate financial analysts.

In their paper titled “Operational Risk Management: How an I-DSS may help” P.A.C. Sousa, J.P. Pimentão, and R.A. Ribeiro introduce us to a special segment of crisis handling. They describe how using an appropriate DSS may prevent the crossing of the fine line between damage and catastrophe.

The paper by A. Chatjoulis and P. Humphreys was not intended to be a cuckoo's egg: it is a real solution built on “traditional” models of decision making and decision support that were used in a new context. “A Problem Solving Process Model for Personal Decision Support (PSPM-DS)” bravely enters the world of personal decision support hovering on the edge of psychological counselling and life-management.

Similarly to the paper by Sousa et al., the one by A. Adla, J-L. Soubie, and P. Zarate also addresses a fine-line situation requiring the cooperation of many people to avoid things getting out of hand. The article “A cooperative intelligent decision support system for boilers combustion management based on a distributed architecture” develops on concepts introduced earlier by Soubie and Zarate and presents an integration of several useful DSS tools and methods.

I have left my other favourite for last. R. Wild and K. Griggs speak fluently of a complex problem situation: managing HR and relocation issues through capturing past experience – not unlike the paper by Adla et al. “A knowledge capture distributed DSS architecture to support planning and policy decision making” provides a great overview of Naval HR workers and concludes with some useful recommendation going beyond decision support and knowledge management alone.

I wanted all papers in this Special Issue to have the same feel about them and be built around the same structure. The result of the authors’ hard work combined with the ruthless efforts of reviewers is presented in this volume. The strengths are due to the writers and their critiques, while the weaknesses are due to my fatigue.

I would like to express my appreciation to all reviewers for their comments and to the authors for dutifully following a chain of “just another small change”.

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