Implementing Systems for Supporting Management Decisions. Concepts, Methods and Experiences

Some thirty years ago a new concept emerged in information technology literature and practice, namely the Decision Support System (DSS). Even though some people have been overenthusiastic about it, while others have claimed that DSS is a "new label", IT vendors used to take advantage of the fashion , and DSS concept has steadily advanced towards new methodological concepts, technical solutions and commercial products. All were meant to support and enhance human judgment in performing tasks which showed little structure. In recent years the change in the way of doing business (globalisation and liberalisation of production and markets, new competition criteria, etc.) together with advances of some IT domains (the development of global networks and the knowledge based systems) have determined new approaches to and favoured DSS. Moreover, the European Commission opened a particular R&D chapter on "Information Management and Decision Support" in the Domain 6 ("High Performance Computing and Networking" of their Information Technology Work Programme (ESPRIT).

Many articles and books on DSS technology have been published after 1980. Most of them reflected the designers' perspective.

In this context, the book aims at giving an up-to-date account of "all aspects of implementations considered either from a theoretical or a practical point of view" and reflecting the perspectives of "corporate designer, of the end users of the implementation, or any combination of these".

The book contains a selection of twenty three papers presented at a Conference jointly organised by IFIP (International Federation for Information Processing) Working Group 2.3 (Decision Support Systems) and the London School of Economics and Political Science , in July 1996.

The papers are written by authors representing organisations in the USA, France, Italy, Germany, Australia, Sweden, UK, Hungary, Poland, Russia, Slovenia and Thailand. They are arranged in the alphabetic order of the main author's name.

Descriptions of practical applications are the most frequent, but not few are the papers dealing with technological and methodological issues either.

Several papers address technologies and tools used in implementing effective decision/ management/executive support systems. One can mention a Window tool for the representation and analysis of all relevant nets to study decision- making within an organisation, the use of Internet to support a distributed decision-making , an analysis of systems evolution from user- driven ones to system driven ones towards active MIS, etc.

More papers address methodology and context issues such as: the relations between end users and systems, and between the systems and the organisation, IT and organisational revolution (with particular emphasis on " hipointegrated" organisations, DSS as a change socio-technical process, computer support for co-design within co-operative processes, communication support versus decision support, etc.

A special remark should be made on two contributions addressing anthropocentric DSS design and implementation , and ethical aspects (fairness, self-love, obligation, humanness, universality of rules) in the DSS design.

The practical applications dealt with in the application -oriented papers or in the papers dedicated to technology & methodology or context aspects are very numerous and diverse: from scheduling nurses in hospitals, health agencies, allocating housing loans, strategic marketing management, banks, urban and regional land planning, planning of airline pilots, transportation and energy in Thailand, to gas pipeline siting in Russia, factory relocation, GSM in Germany, etc.

This book is extremely useful for various categories of readers in the DSS field: researchers, developers and implementors, consultants and even end -users. It can also be of interest as additional reading material for theoretical and practical courses on DSS.

It contains a valuable collection of practical experiences from various sources and perspectives, thus supplementing the existing literature, mostly technology -oriented or inherently biased.

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