

# Operations Research



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from the single user and model-oriented DSS. Sol, the definition and scope of DSS has been migrating over the years. In the 1970s DSS was described as "a computer based system to aid decision making". Late 1970s the DSS movement started focusing on "interactive computer-based systems which help decision-makers utilize data bases and models to solve ill-structured problems". In the 1980s DSS should provide systems "using suitable and available technology to improve effectiveness of managerial and professional activities", and end 1980s DSS faced a new challenge towards the design of intelligent workstations.

In 1987 Texas Instruments completed development of the Gate Assignment Display System for United Airlines. This decision support system is credited with significantly reducing travel delays by aiding the management of ground operations at various airports, beginning with O'Hare International Airport in Chicago and Stapleton Airport in Denver Colorado.

Beginning in about 1990, data warehousing and on-line analytical processing began broadening the realm of DSS. As the turn of the millennium approached, new Web-based analytical applications were introduced. The advent of better and better reporting technologies has seen DSS start to emerge as a critical component of management design. Examples of this can be seen in the intense amount of discussion of DSS in the education environment.

DSS also have a weak connection to the user interface paradigm of hypertext. Both the University of Vermont PROMIS system and the Carnegie Mellon ZOG/KMS system were decision support systems which also were major breakthroughs in user interface research. Furthermore, although hypertext researchers have generally been concerned with information overload, certain researchers, notably Douglas Engelbart, have been focused on decision makers in particular.

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