

Intelligent Decision Support Systems for Industrial Applications

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Abstract - *A Decision Support System (DSS) is an anthropocentric, adaptive, and evolving information system meant to implement some of the functions of a possible "human support system" (or team) that would be otherwise needed to help the decision-maker to overcome his/her limits and constraints he/she might face when approaching decision problem that count. In industrial milieu the DSS is frequently utilised to facilitate solving problems under time pressure when " crisis" situations show up.*

The paper addresses the following issues:

1. Typical decision problems in industrial applications.
2. Limits and constraints of the human decision -maker.
3. Dangers and "ironies" of automation.
4. DSS: definitions and main attributes.
5. Classifications
6. "Division of labour" within intelligent DSS with mixed knowledge (numeric models and AI-based modules)