

INTELLIGENT DECISION SUPPORT SYSTEMS IN MANAGEMENT

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In today's rapidly evolving business landscape, decision-making processes have become increasingly complex, requiring managers to navigate through vast amounts of data and variables to make informed choices. To address these challenges, the integration of intelligent decision support systems (IDSS) into management practices has gained significant attention. IDSS leverage advanced technologies such as artificial intelligence (AI), machine learning (ML), and data analytics to assist managers in decision-making processes.

According to Saba D. et al. [1], IDSS utilize AI algorithms to analyze large datasets, extract meaningful insights, and generate predictive models that aid managers in forecasting trends and outcomes. These systems can process diverse data sources, including internal operational data, market trends, and customer behavior patterns, providing managers with a comprehensive understanding of the business environment. Research by Shelehov I. et al. [2] highlights the role of ML algorithms in enhancing decision-making efficiency and accuracy. ML-based IDSS can adapt and learn from new data inputs, continuously improving their performance over time. By identifying patterns and correlations within data, these systems can assist managers in identifying potential risks, optimizing resource allocation, and developing strategic plans.

IDSS offer interactive interfaces and visualization tools that facilitate user-friendly access to complex data analytics. Through intuitive dashboards and reports, managers can explore different scenarios, conduct sensitivity analyses, and evaluate the potential impact of decisions before implementation. The adoption of intelligent decision support systems represents a paradigm shift in management practices, enabling organizations to make data-driven decisions in real-time. As highlighted by Saba D. et al. [1], successful implementation requires organizational commitment, investment in technology infrastructure, and ongoing training to ensure effective utilization of IDSS capabilities.

By harnessing the power of artificial intelligence, machine learning, and data analytics, IDSS empower managers to make data-driven decisions, anticipate trends, and steer their organizations towards sustainable growth and success in an ever-evolving business landscape.

References:

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