

Business Intelligence Concepts, Tools, and Applications

Week 1: Decision Making and Decision Support

Systems

Lesson 3: Decision Support Systems



Decision Support Systems

Learning Objectives

- Define a decision support system (DSS) and list its main components
- Summarize DSS types and classifications, and explain how DSS have changed over time.

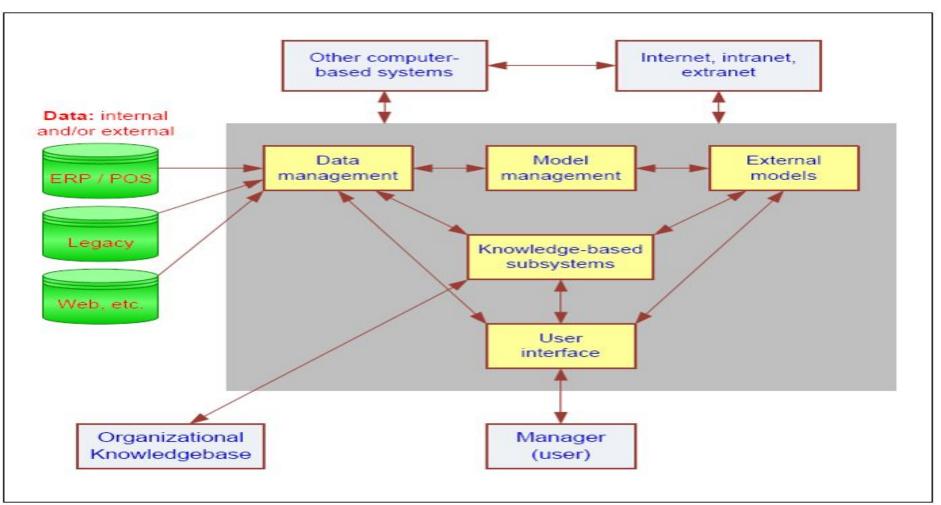


Decision Support Systems (DSS)

- DSS describes any computerized system that supports decision making in an organization.
- DSS is to support managerial decisions in semi-structured and unstructured decision situations that middle-level managers typically face;
 - attempt to combine the use of models or analytical techniques with traditional data access and retrieval functions;
 - focus on features which make them easy to use in an interactive mode;
 - emphasize flexibility and adaptability to accommodate changes in the environment and decision-making approach of the user.



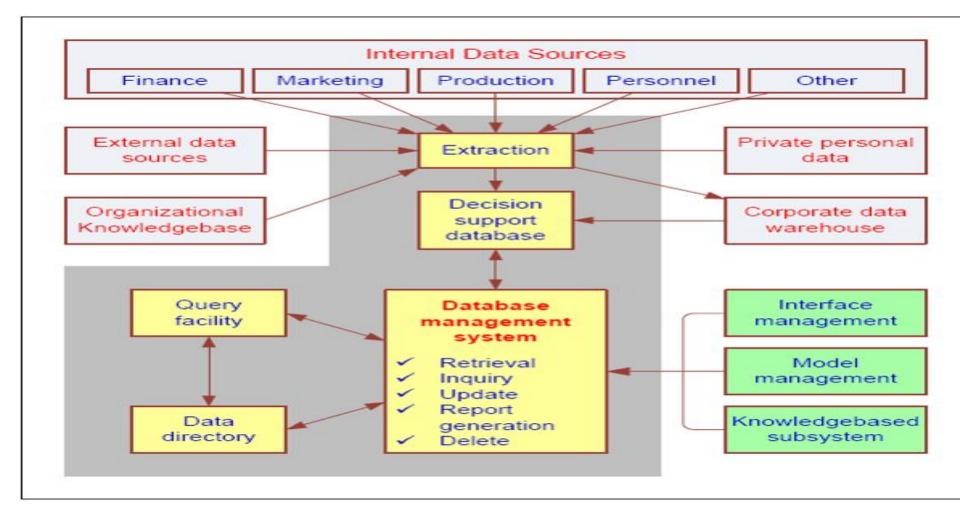
Components of DSS



From SHARDA, RAMESH; DELEN, DURSUN; TURBAN, EFRAIM, BUSINESS INTELLIGENCE AND ANALYTICS: SYSTEMS FOR DECISION SUPPORT, 10 Edition, © 2015. Used by permission of Pearson Education, Inc., New York, N All Rights Reserved.



Data Management Subsystem

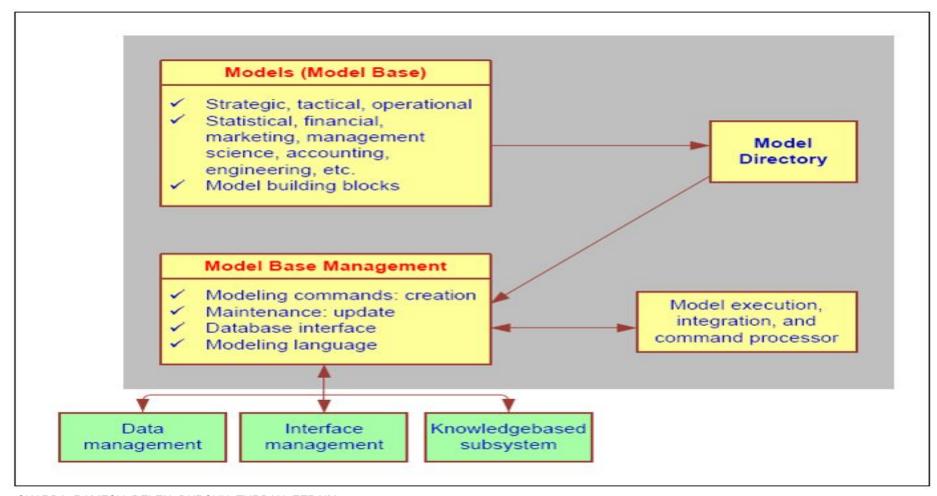


From SHARDA, RAMESH; DELEN, DURSUN; TURBAN, EFRAIM, BUSINESS INTELLIGENCE AND ANALYTICS: SYSTEMS FOR DECISION SUPPORT, 10th Edition, © 2015. Used by permission of Pearson Education, Inc., New York, NY. All Rights Reserved.





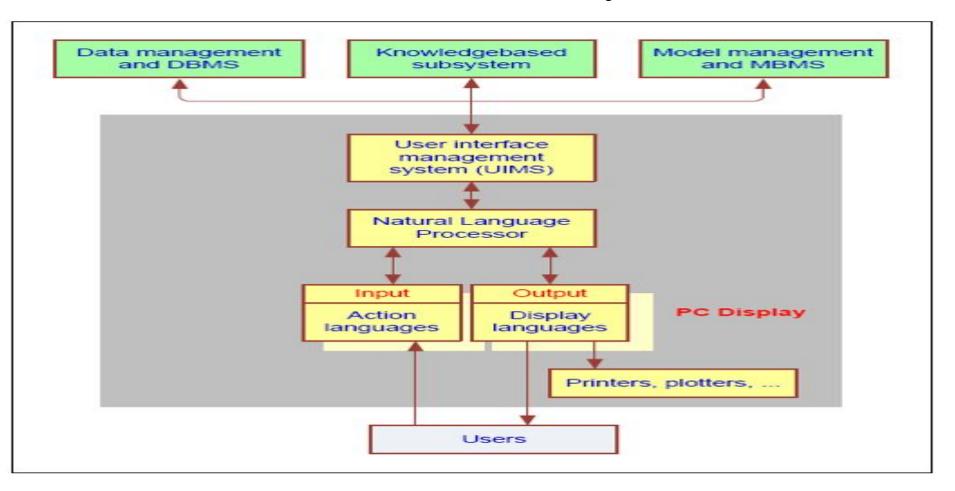
Model Management Subsystem



From SHARDA, RAMESH; DELEN, DURSUN; TURBAN, EFRAIM, BUSINESS INTELLIGENCE AND ANALYTICS: SYSTEMS FOR DECISION SUPPORT, 10th Edition, © 2015. Used by permission of Pearson Education, Inc., New York, NY. All Rights Reserved.



User Interface Subsystem



From SHARDA, RAMESH; DELEN, DURSUN; TURBAN, EFRAIM, BUSINESS INTELLIGENCE AND ANALYTICS: SYSTEMS FOR DECISION SUPPORT, 10th Edition, © 2015. Used by permission of Pearson Education, Inc., New York, NY. All Rights Reserved.



DSS Classifications

- Data-driven
- Document-driven
- Knowledge-driven
- Model-driven
- Communications driven

Source: Dan Power is the founder of DSS Resources (www.DSSResouces.com),





Evolution of DSS Applications

- Executive Information Systems (EIS)
- Group Support Systems (GSS)
- Geographic Information Systems (GIS)
- Expert Systems (ES)
- Knowledge Management Systems (KMS)
- Enterprise Resource Planning Systems (ERP), Customer Relationship Management Systems (CRM), Supply Chain Management Systems (SCM)

From SHARDA, RAMESH; DELEN, DURSUN; TURBAN, EFRAIM, BUSINESS INTELLIGENCE AND ANALYTICS: SYSTEMS FOR DECISION SUPPORT, 10th Edition, © 2015. Used by permission of Pearson Education, Inc., New York, Rights Reserved.

