JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MBA-IV Semester Supplementary Examinations July 2010
DECISION SUPPORTING SYSTEMS

Time: 3hours   Max.Marks:60

Answer any Five questions
All questions carry equal Marks
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1.   What four factors determine the value of information?

2.   How expert DSS aids in decision making?

3.   Write about probabilistic models and fuzzy sets.

4.   Develop MIS for quality control in an industry.

5.a)   Explain simulation modeling.
  b)   What are the applications of simulation?

6.   What is meant by cost benefit analysis? Explain.

7.a)   Define an intelligent agent. Why is it useful?
  b)   List five major benefits of ES.

8.   URBAN TRAFFIC MANAGEMENT

        Traffic management in a city is a completed task involving traffic signals;
work on roads, accidents, parking, cars crossing railroad tracks and pedestrians.
The objective is to enable a reasonable flow of tragic, especially during rush hours
and at accident sites. Many decisions are involved in traffic management, and
many models have been created to support these decisions. GIS have been used to
support such decisions. The situation becomes even more complex when a large
number of conflicting goals are postulated by various groups ranging from
environmentalists to law enforcement agencies. For this reason, it seems logical to
use an intelligent DSS as proposed in the figure given below. The figure shows
the proposed DSS architecture. The main modules include resource optimization,
modeling and simulation, and evaluation, each with its separate data base and
model base. In addition, there are separate knowledge bases. The interaction
between the user and the global database takes place through decision making
process using models whose task to refine the decision context, scenarios,
objectives, main actors, and project under consideration.

        Questions:

        a)   Why is it necessary to use a DSS in this case?
        b)   Why is it necessary to include knowledge bases?
        c)   Why are there different data bases, knowledge bases and model bases?
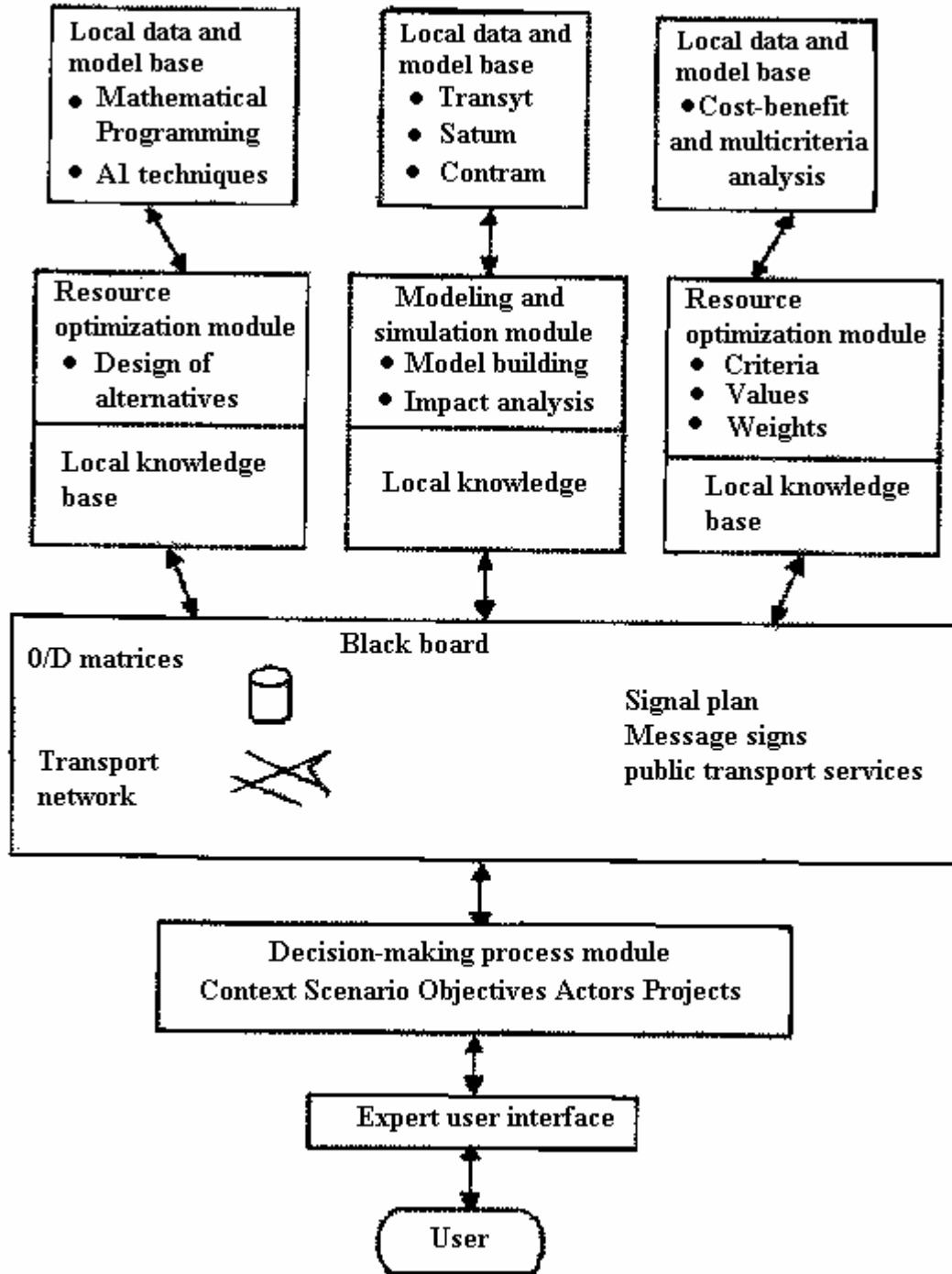   d)   How can GIS be incorporated in to such a system?

Figure: A DSS ARCHITECTURE FOR URBAN TRAFFIC MANAGMENT

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