

Key-note Speech
From a laguna to open waters:
Another view on the next generations of databases

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The Laguna Beach report [1] identifies major trends for the evolution of databases. While interesting issues are analysed and debated in that report, the views expressed are conservative and short-sighted. While [1] emphasizes new application domains such as CASE and CIM, I believe that decision support systems (DSS) will also become important for pushing the limits of database systems. DSS combine requirements for better modeling techniques that they share with CASE and CIM—of which the object-oriented models of [1] are but a special case—to the needs of dynamic views and queries in ways which cannot be limited to simple

rule firing and require the power of a declarative programming language to be available in the context of a database system. Logic-based systems remain the first candidates in this area. The talk will present an example of a DSS, review its functionality, discuss a suitable architecture. Further points to be discussed will involve the availability of workstations and very large memories and its influence on the architecture of a database system.

[1] *Future Directions in DBMS research* - ICS (eds. E. Neuhold & M. Stonebraker)