

What are the advantages of having a multi-dimensional database in data warehousing solution?

Please note that we should distinguish between the model of the data warehouse and the database engine in which the data warehouse can be implemented.

The multidimensional model is more advantageous in a data warehouse environment that calls for subject oriented, summarized and time variant data categorization. This model can then be implemented either in a ROLAP (relational implementation of star schema) or MOLAP (the multidimensional implementation).

In MOLAP implementations, the multidimensional data model is stored in a database server as special data structures (like arrays or cubs) and OLAP operations over these data can be performed in any format.

RDMBS implementation of data warehouses or ROLAP is currently more widely in use. ROLAP provides solid performance and platform flexibility in VLDB database environments.