Future Home of Data

The future home of data is non-volatile storage

1. add precision to home
2. add precision to data
3. consider context
Adding precision to \textit{Home}.

As we are database people we care about

- data format/schema/model

- programs that manage the data
Kinds of data:

- OLTP data
- OLTP exchange
- OLAP analysis:
  extracted/cleaned/preprocessed data
- XTP observation: earth/star observations, geological data, high energy physics, biodata, catalogue data, ...

Majority of future data:

- MROD (mostly read only data)

few updates mostly due to error correction
Data format

Observation:

- special file formats (plural!) for each subject area
- among these formats at least one based on XML
- all data stored in file system
Why move away from file system

Move only, if some value is added by the alternative.

Possibilities:

- recovery ? [MROD]
- multiuser synchronization ? [MROD]
- metadata management ? [MROD, separate system]
- performance ?
- output format flexibility ? (fast generation of formats from one original)
- querying/data analysis ? (highly domain dependent, can we factorize?)
- data/application integration ? (does anyone see useful general purpose tools?)
Context

- Distributed inter/intranet world (H not U)

Conclusion:

- distributed DBMSs remain the loosers
- distribution-supporting (XML-) DBMSs are the winner, if any DBMS is
- coexistence