

I am a believer !

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The Web Services case

- Manipulate large volumes of XML messages, XML logs, XML metadata descriptions, etc
- Need to render this data *persistent*
- Need to *query* and *update* this data
- Need *transactions*
- Need *performance*

Possible solutions

- **Solution 1:** build an external layer in top of an existing RDBMs
 - performance, ouch!
- **Solution 2:** deeply modify an existing database engine in such a way it understands XML
 - why mix two (already *so* complicated!) technologies that have *so* little in common ?
 - seems *much* harder then building from scratch
 - we lost the reliability of the (old) code
 - code maintenance ? A real problem....
- **Solution 3:** **build from scratch !**

“use the relational databases legacy *ideas*, but not the *code*!”

Why build new ?

- Great occasion to re-think the database field !
- New requirements for information management
 - information distributed and replicated on the Web
 - different information consistency models
 - different transactional models
 - different information access patterns
- New software requirements
 - light weight, flexible and modular
 - platform independent (I.e. Java)
 - cheap
 - self adaptive
- Novel hardware architectures
 - main memory databases
 - clusters of cheap servers

~~XML databases ?~~

XML information
management systems !

My conclusion

- Is it possible to build such a system? Yes.
- Would it be useful ? *Extremely!!!*
- It is very hard? Hmmm. Maybe no. We should try !
- Do we need complicate technology to do that ? No
- Are current XML databases a good solution ? No.
- Will XML information management systems replace the good old relational servers ? Not in the next decade.
- Will XML systems work ? Yes! But only the *good* ones.....