Data is Primary

April 2014

"Show me your flowchart and conceal your tables, and I shall continue to be mystified. Show me your tables, and I won't usually need your flowchart; it'll be obvious." (Fred Brooks, The Mythical Man-Month, 1975).

If you don't understand your data, nothing you do will make sense.

In designing a software system, the core piece of design that you need to get right is the data model.

Data lasts longer than programs and has more value. Therefore don't lock your data into proprietary formats that won't survive the software used to create them.

Change purpose and/or context and software becomes obsolete, but the data endures.

If data is primary, what is secondary? Code is secondary. Industry has so often put most of the effort in solving computer problems into design of code and far too little into the durable modeling of information. Information is actually the point of writing most code and in practice is generally valuable long after code becomes obsolete because of evolving computer architectures, operating systems, languages, etc.

Acknowledgements

Thanks to the following people for their contributions to this paper:

- Stephen Cameron
- Roger Costello
- John Cowan
- Michael Kay
- Frank Manola
- Jim Melton
- Steve Newcomb
- Uche Ogbuji
- Tom Passin