

"The Third-Generation/OODBMS Manifesto, Commercial Version"

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In recent years, two database "manifestos" have appeared which attempt to define the characteristics that must be satisfied by certain classes of database systems of the future, specifically "object-oriented" database systems [1] and "third generation" database systems [2]. These sets of characteristics have attained wide circulation in the database field. However, I feel that, as predictors of the characteristics of future database systems, both these manifestos concentrate far too much on *technical* criteria. Such criteria appear to be of decreasing interest in today's DBMS marketplace, and thus cannot serve as reliable guides to the future. What the database field needs for evaluating future DBMS products is a set of criteria that are important in today's "real world" environment. This paper describes such "real world" criteria that appear to have been missed by the cited "manifestos". The style in which these criteria are expressed follows the "Biblical" style used in [1], in order to emphasize the theological profundity of the suggested criteria. Of course, no similarity with any DBMS vendor's product literature or presentations is intended.

1. Thou shalt include in thy product literature:
 - a. the source of thy company's venture capital.
 - b. the word "solution" at least once per paragraph.
 - c. indication of support for "industry standards" (all of them, whether consistent or not, and regardless of industry).
 - d. photos and bios of "top management" (this shows support for "industry-standard" power ties and "dress for success" suits).
2. Thou shalt release thy financial numbers, but *not* thy performance numbers.
3. C++ is "intergalactic objectspeak"¹. Thou shalt support C++, requiring use of thine own

¹ According to [2], SQL is "intergalactic dataspeak". A plausible case can be made for the extraterrestrial origin of both these languages.

proprietary extensions. See "industry standards" above.

4. Thou shalt support "extended SQL" or "object SQL". Neither syntax nor semantics need be compatible with ANSI SQL, or with anyone else's "extended SQL" or "object SQL". See "industry standards" above.

5. Thou shalt support at least 4 different concurrency control mechanisms, the interactions of which shalt be unspecified.

6. Thou shalt change thy company or product name numerous times².

7. Thou shalt call thy product "object-oriented" when it can store 2 megabyte strings of undifferentiated binary mush.

8. Thou shalt call thy product "distributed" when its transaction mechanism supports a "2-phase commit" protocol.³

9. Thou shalt *not* support garbage collection: it might have an adverse effect on thy product literature.

[1] Malcolm P. Atkinson, et. al., "The Object-Oriented Database System Manifesto", in Won Kim, Jean-Marie Nicolas, and Shojiro Nishio, eds., *Proc. First Intl. Conf. on Deductive and Object-Oriented Databases*, Elsevier Science Publishers, Amsterdam, 1989.

[2] The Committee for Advanced DBMS Function, "Third-Generation Data Base System Manifesto", *SIGMOD Record*, Vol. 19, No. 3, September 1990.

² This illustrates the importance of "object identity" as a fundamental OODBMS concept.

³ The first (pre-commit) phase is when the transaction mechanism allows a distributed database to become inconsistent or corrupted due to a communication or node failure. The second (commit) phase is when the CIO is led into a padded room by attendants in white coats.