



Art Smith

M Grows Up

by Art Smith

I think M may finally be growing up. For twenty years we've been a niche player—an ever growing niche, to be sure, but we've had that niche mentality. Vendors competed only with each other, programmers programmed exclusively in M, systems interacted only with other M systems. The rest of the computer industry could evolve in any direction and most of us didn't even notice. Like kids, we thought our little neighborhood was the entire world and believed that our way of doing things was obviously the best just because we liked it.

Things have changed in the last year or two. Vendors are now beginning to compete head to head with the "big boys." Products are interacting with more and different technologies. Programmers are starting to consider M one of their tools—an important one!—but not the end-all and be-all. Interoperability seems to be the watchword of today.

Growing up can be scary. Losing the narrow view of childhood means exposure to new and different ideas and to people who are convinced that their own narrow view is better than ours. I know a lot of M programmers who are frightened by this. There is a lot of "M is dying" talk going around, but I think this is largely just an adolescent insecurity. Since many of us are no longer bragging only to our friends, we have to defend our predilections for the first time, and that is frightening.

So is M dying? Will we be chewed up and spit out by a world that

doesn't have the M religion? I don't believe it. I think there is a lot to like about M, both in what it has now and in where it is going. I think the strengths of M are easily defensible with even the most sophisticated audiences. But we have to work at it.

How many of you can program in languages other than M? Have you worked with relational databases (Oracle, Sybase, Informix, Ingres, or even Access) and do you understand the strengths and weaknesses of the relational approach? Are you learning Java (or JavaScript or any of the others of that family)? Have you designed screens using Visual Basic, Delphi or PowerBuilder? Have you set up a web page? Do you understand the trade-offs between distributed processing, data-level client/server, and query-level client/server technologies? Can you discuss object-oriented design and programming? Do you know what "data mining" is and what characteristics in a database facilitate it?

If you can't answer positively to at least some of these questions, you are going to have a tough time competing in the "real world" outside the pure-M niche. These are the forces in play today, and there will be new ones tomorrow. If M technology is to survive and flourish, we must be able to present our strengths in the light of these new technologies.

Don't let this scare you, though. M stands up very well against all of these items. Many pundits are say-

ing that relational databases have hit their limits, and that multi-dimensional (i.e., hierarchical, like M) databases are needed now. Java and M work well together and share many of the same strengths. User interfaces written in Visual Basic, Delphi and PowerBuilder all routinely work with underlying M databases. M is being used to create intranet and Internet web pages by many sites. M is about the only database system that can simultaneously operate in all three modes of network operation (distributed processing, data-level client/server and query-level client/server). Many M programmers have been doing object oriented design for years, and more are starting to do object-oriented M programming. The ability of M systems to have flexible multi-field cross-references and to comfortably handle sparse data make data-mining a natural.

Don't be afraid to grow up with M. Get out there and learn about today's technologies. While you're at it, learn more about M—many of us don't appreciate its real strengths. It's a big world out there, and it can be ours for the taking. Growing up can be difficult and scary, but it can also be exciting and liberating. *Carpe Diem!* **M**

*Art Smith chairs the MDC and is in charge of computer systems at the University of Missouri's Veterinary Medical Teaching Hospital.
Email: Emergent@sockets.net*
