Jim Gray: His Contribution to Industry

David Vaskevitch
Microsoft
One Microsoft Way
Redmond, WA 98052
(01) 425-706-8044

DavidV@microsoft.com

Abstract

Jim Gray was successful in many aspects of his life. Not only did he have a profound influence on the computer industry, but also on all of the people that he interacted with along the way. It is this balance contribution to society that makes Jim truly unique.

A Man of Ideas, Community and People

Jim Gray's contribution to the computer industry can be summed up in three words: ideas, community, and people. All three of these are huge, most people would be proud to have contributed in any one of these space; Jim contributed hugely in all three.

Of course Jim was one of the fathers of the database industry as we know it today. While databases were invented, per se, in the late 60's and early 70's, those early systems were not usable in most practical terms. Many of the basic concepts we take for granted weren't even defined terms then; Jim was there making it all happen.

Perhaps transactions are the single idea most often associated with Jim and the people he worked with back then. The transaction was a brilliant concept that all at once made the programmers job much easier, made the database far more understandable, made systems run faster, and contributed hugely to reliability both perceived and real. But Jim's commitment to always finding and promoting new ideas went much beyond engineering oriented constructs like transactions.

Every time I talked to Jim, read his papers, heard him present, I was always impressed, even taken aback, at how far into the future he was always capable of looking. He could always see broad new uses for computers before anybody else, and then could help push us to get there sooner and better. One time it was building a Billion Transaction Per Day demo server, another time it was building the world's first "Terra Server", both to serve up maps of the entire world, and also to build a bigger database than anybody had imagined before that point in time. All of which bring me to my second broad point: community.

Jim's deep and broad thinking influenced and even created entire communities. In recent years he worked with astronomers, life science researchers and many others exploring completely new ways to organize the huge reams of data they were creating and finding as they explored the edges of the universe (inside and outside). At other times, Jim pushed for making database available to ordinary people, pushed for making distributed systems become practical and real, and again, more. Each time Jim was always reaching out, encouraging people, getting work to happen across teams and across organizations, energizing,

galvanizing and even creating communities of interest, of friends, of colleagues, of people. Which brings me to the most profound point of all: people.

Everywhere he went Jim had a huge impact on people. He was a good listener, an empathic debater, always open minded, always encouraging. And, people turned to him from everywhere. People throughout the industry were constantly seeking advice from Jim about how to do things, where to do them, how to work with others, and more.

The computer industry is both very large and very small. Companies and organizations compete with each other intensely, and yet, in many ways, everybody knows everybody else. But Jim was the one who could make sure that, wherever people worked, they could always talk with each other. People make the industry and in many cases, Jim really helped make the people throughout the various stages of their careers.

Ideas: Jim had so many of them, and got to follow so many of them through. For sure database as we know them today would not be the same without Jim. And, in many ways the distributed computer infrastructure that drives so much of our society and economy would probably not be the same without the many contributions Jim made. So, the ideas, yes, they are all there, and make an amazing list.

Communities: both inside all the companies Jim worked for – IBM, Tandem, DEC, and Microsoft – Jim left his stamp in terms of stronger teams and communities than would have been possible without him. And, more importantly across those companies and many more, Jim helped create a broad sense of community that actually reached beyond the computer industry in many ways.

People: there are so many people, including myself, who benefited from Jim's golden touch. His wisdom. His personal, career and technical advice. He truly was one of the few people everybody turns to. And, in many ways, Jim's people contribution was at least as profound as the other two.

Finally, although this paper is about Jim's contribution to Industry, I could not conclude without talking at least briefly not just about "people" but about Jim as a person. He was a great friend. I valued the times I could spend with him and was both proud and grateful that that friendship extended to the rest of my family including my children each of whom got to know Jim as the wonderful person that he is. In fact, in a way this sums it up the best. Jim was a prophetic man of ideas and execution. However, what made those prophetic ideas and projects really impactful and successful far beyond any normal norm was his ability to be such a warm and complete human being; a friend to me and a friend to so many others. That really is the essence of Jim Gray in industry and in the world.