THE INDUSTRY

Q&A: Gary Kildall

BY PAUL FREIBERGER Senior Editor

ary Kildall is cofounder and chairman of the board of Digital Research, Inc. (DRI), of Pacific Grove, California, one of the largest personal-computer software companies. The firm is best known for developing the CP/M operating system, which helped establish the personal-computer software industry. During the past two years, it has begun selling a variety of programming languages. More recently, DRI has dropped hints about getting into the application-software business.

What is your view these days on the industry?

Now that IBM has entered the microcomputer market, to survive you either have to turn 90° away from IBM and do your own thing, or you have to do exactly what IBM is doing. The companies that are jumping on the PC bandwagon but aren't doing exact look-alikes are going to have problems.

Portables and battery-powered machines are areas that haven't been covered by the IBM PC at all. Another area we're looking at is developing software for things like the Godbout [CompuPro] machines, which are basically at the minicomputer end of the market.

Why has Digital Research shifted from its traditional practice of working behind the scenes with manufacturers to selling directly to retail stores?

It's not a shift; we've been augmenting what we've been doing. In the retail end, there's more opportunity, but software packages like Logo, for example, will sell better to OEMS [original equipment manufacturers].

Is Logo available?

It has been available for almost a month. We've shipped 4000 copies in four weeks.

Did you develop DR Logo?

I worked on it for a while. In Japan, Sony has an 8-bit version of it. We'll be releasing a generic 8-bit version (I don't know the exact date). DR Logo is written in C, and we've done some work tailoring



Gary Kildall, DRI's chairman of the board

it and have been fairly effective.

What about DR Logo on the new IBM PCjr?

I'm sure we'll have a version that will operate with [the PCjr] in rather short order.

Integrated software and operating environments such as the Lisa and Visi On are in fashion this year. Will DRI have a product in this area?

We have two things. Under Concurrent CP/M, we have a windowing system, which we'll show at COMDEX, that not only windows but allows concurrent windows. The system actually runs programs with application code in separate windows simultaneously. We have PC-DOS running under Concurrent.

Second, in Europe and Japan we've released beta-test copies of VIP (Visual Information Processor). VIP is a standardized interface for applications written in the C language, and for that reason is portable to various machines. The intention there is to provide a machineindependent operating system, as a front end for applications, that allows you to do menu selection in a standardized way. It has not been active in the U.S. yet. In Europe, they've got to do their own applications, in many cases. VIP runs on Z80 processors, on the IBM PC, on 8086 machines, on VAX [a DEC minicomputer], on Lisa. I think it runs on 22 machines.

What kinds of applications will you

have in your windowing system?

We're working with the CP/M library. We currently have about 20 applications that seem to be the most popular in town. Those all work with Concurrent CP/M and will work in windows.

What about the highly rumored project called Monarch?

We sent out, with VIP, a demo program called Monarch. There's more to it than just a demo, though. There's a lot of code there. That's all I can say publicly.

Microsoft has made a major commitment to multiuser operating systems with XENIX. Do you have plans that go beyond MP/M [DRI's multiuser operating system]?

I think we're going to see the evolution of Concurrent CP/M in that direction. It's more advanced than MP/M. The limitation is not the structure of the operating system but the limitations of the hardware.

Is it frustrating in general to feel that you are pushing the hardware beyond its means?

I think the major frustration is that there's a bandwagon effect that we've seen throughout this industry ever since it started. It's not like the large-computer industry, where there's a lot of evaluation of hardware and software technology. In the old days you could come up with a technically superior hardware and software product, and that would be the determining factor. But in the microcomputer industry, the driving force is not so much the technology as how many people have jumped on your bandwagon. In my estimation, it's unfortunate people are forced to ignore technological breakthroughs and put their efforts into marketing and brightly colored packages.

Is your network ready?

At COMDEX, we'll be demonstrating DR Softnet. It's a tremendous improvement over CP/Net. It will be compatible with any of our products. The number of users it can handle is virtually unlimited.

Are you still having fun?

Oh yeah, a lot of fun. I love talking to manufacturers about new technology, about areas that we'll get into.