

# Vancouver firm set for shift to embedded technology

Apple wowed delegates at Comdex Las Vegas in 1984 with its new Macintosh system that would set a revolutionary standard for desktop computers.

Today, the wow factor is more likely to come not from bigger and smarter desktop computers, but from computing devices too small to see.

From smart cards to the microprocessor that runs an industrial saw, so-called embedded systems are part of a fast-growing market.

Vancouver-based Intrinsic Software is among companies poised to take advantage of the shift in emphasis from PCs to embedded computing. Three-year-old Intrinsic is part of Microsoft's partnership pavilion at Fall Comdex '98 and it is demonstrating IX, a suite of tools for developers of Windows CE-based embedded applications.

For Intrinsic CEO Derek Spratt, the timing couldn't be better. He points to a recent report by Forrester Research predicting revenue growth for PCs

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will peak in 1999, then sharply decline in 2000, as evidence of a shift to embedded systems.

"The death of the PC is not a negative term," said Spratt. "Consumer products will become more friendly.

"Whether it's the microwave that lets you watch Oprah, or the car that can chat and give you your e-mail, it's all about getting the PC to your level, instead of the user going to the PC."

According to the Forrester report, after 2000, PC manufacturers will be vying for market

share by cutting prices even more and companies will turn to a new generation of Internet-connected appliances instead of PCs for upgrading.

Despite having PCs on desktops for the better part of 20 years, Spratt said many still feel threatened by technology.

"It starts to be something very powerful when it can become part of fabric of your life," he said.

The first thing most people think of is the desktop, yet Spratt points out there are far more embedded chips than desktop computers.

"We associate computers with PCs," he said. "We don't associate them with the computer chip in your car, or in your fridge."

The Y2K problem is a boost to the embedded business, said Spratt. "This is where you'll find a huge amount of kickstart for embedded systems," he said.

Intrinsic is at the forefront of a trend of the market for embedded software expected to more than double from \$3 bil-



IAN LINDSAY/Vancouver Sun

**TINY FUTURE:** Minute web server is example of where Intrinsic VP Bruce Forde (left) and president Derek Spratt are headed.

lion US in 1997 to \$7 billion in 2001.

A future in which appliances, from wristwatch computers to refrigerators, are all connected to the Internet, is a future of embedded systems. At Comdex, everything from hand-held PCs

to web-enabled autos, demonstrates the networked appliance is the growing trend.

"First there was the mainframe, then the PC, then the Internet and now we are going to the world of embedded systems," Spratt said.