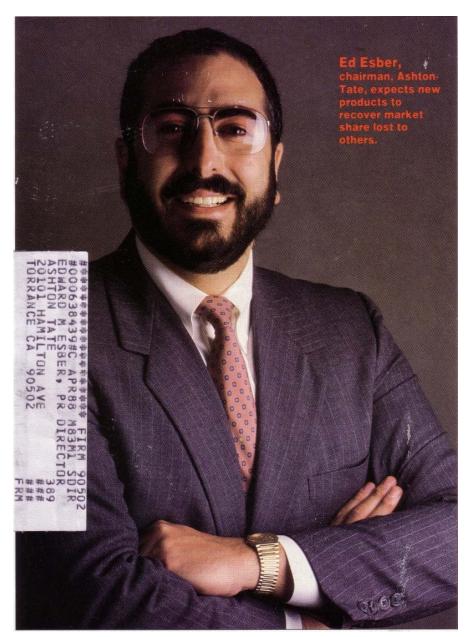
MARKETING COMPUTENS COMMUNICATIONS LECTRONICS AND BUSINESS SYSTEMS



eased, but not eliminated, the doubts.

A New Push For dBAS E

ALTHOUGH THE financial performance of Ashton-Tate has been long strong, many observers sensed that a serious problem existed. Several years had passed since the release of a product. But in the past two months, new products for the Macintosh. alliance with Microsoft and, recently, most arrival—of the dBASE IV have

Once Lethargic, Ashton-Tate Is Racing

The company seemed to stand by as market share for dBASE steadily eroded. Third parties drew little response as they introduced add-ons and clones. But now, with dBASE IV, Ashton-Tate may well regain its momentum.

It had resisted providing a dBASE compiler for fear of cannibalizing its sales.

by Nat Sakowski

TORRANCE, CALIF.—For many months now, Ashton-Tate executives have been walking around like they wished the good old times, when dBASE was clearly king of the hill in the database market, would return.

They didn't have a lot to smile about in terms of product excitement. Sure, the financial figures were great. But analysts kept asking embarrassing questions about the firm's long-term future.

For one thing, there had been no update to the company's flagship products for two years—and competitors were coming out with improvements and innovations every three months

But Ashton-Tate is coming back strong. dBASE IV is out, packed with hundreds of new features; a version of dBASE has been developed for the Macintosh along with a spreadsheet program, called Full Impact, and a word-processing program, FullWrite Professional; and—the move that has surprised analysts most of all—Ashton-Tate has

formed an alliance with Microsoft to develop and market a complex database server to run on local area networks, called SQL Server.

But let's backtrack a little to set the stage for the announcements. At a meeting of the New York IBM PC Club three months ago, Roy Folk, Ashton-Tate's VP of Product Development, was deluged with a barrage of complaints from dBASE III software developers. They were outraged that there were many features now available on competing products that were missing from dBASE III. When was Ashton-Tate going to be doing something about that, and when?

Said Folk: "I hear you. dBASE IV is in the works. I can't tell you an exact date. We don't pre-announce products."

The dBASE language has become so popular and commands such a large share of the database market that it has attracted numerous competitors. Folk estimates that there are now more than 6,000 software developers writing in the dBASE language, when you count in value-added resellers, department programmers and software publishers.

Vendors of dBASE II work-alike products and compilers have started to make advances into the database market that Ashton-Tate pioneered. Two areas these vendors have concentrated on is beating dBASE II performance in terms of speed and offering the benefits of a compiler.

Once code is compiled, an application can run faster and becomes a stand-alone package. dBASE III Plus runs code as an interpreter, meaning that a package of dBASE has to be present for each single machine.

Ashton-Tate had resisted providing a compiler for dBASE for fear of cannibalizing its sales; it licenses and makes royalties from every copy that a software developer sells.

Adam Greene, Lexington, Mass., is a well-known author and lecturer on dBASE products. Says Green: "Ashton-Tate has gone from owning 100% per cent of the market to 70%. They're counting on dBASE IV to be a blockbuster hit and really damage the sales of the clones."

The three biggest competitors offering rival compiler products are Fox Software, Perrysburg, Ohio, with a product called FoxBASE +; Wordtech Systems, Orinda, Calif., maker of the Quicksilver compiler and the dBXL interperter; and Nantucket Inc., Culver City, Calif., developer of Clipper.

In addition to speed and independent code, most of these manufacturers compete through lower prices. For instance, while dBASE III's suggested retail price is \$695, Wordtech's dBXL costs \$169, and Fox Software's FoxBASE + is \$395. Those are single-user prices; the price differences are magnified when implemented on local area networks (LAN's).

Ashton-Tate's product costs \$995 for the LAN pack, needed for every three users; certain competitors charge an equal or higher amount but put no limit on the number of users; Quicksilver sells for \$599 plus \$99 for additional modules.

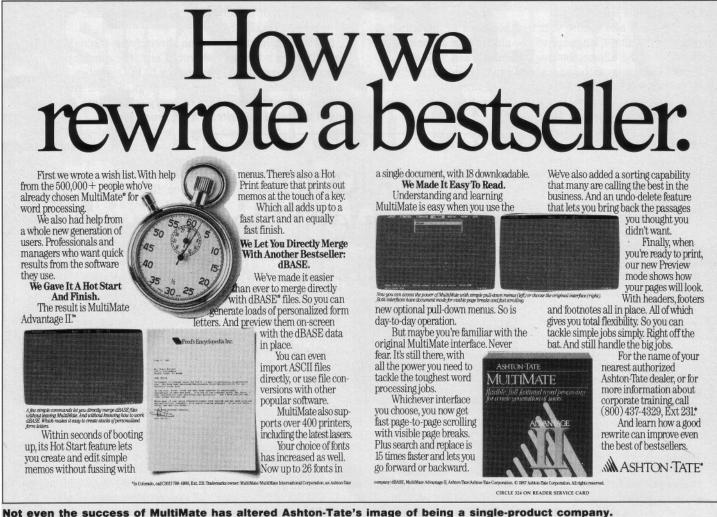
There are hundreds of add-on products that have been spawned by dBASE's success. Typically, this aftermarket attracts veteran users of dBASE because the products assume a knowledge of dBASE procedures and syntax.

Says Folk: "Naturally, they're taking market share away from us that we'd like to retain, just like IBM would like to retain all pieces of the PC market. For our part, we

intend to keep improving the product so that we offer superior alternatives so that we're the most attractive product out there."

Ashton-Tate has mounted a dramatic counter-attack with dBASE IV. It includes a compiler, an application generator, a relational report writer and a library of programming and financial programs—all features that database developers have been turning to clone makers to find.

dBASE IV also promises higher performance speeds, Structured Query Language commands integrated within dBASE, a macro language, and a report writer that can take data from multiple files and coordinate them by following a menu interface. Many utilities offered by third-party vendors will be included. The program will have the ability



to read and write Lotus-1-2-3 files. There is a library of financial, statistical and trigonometric functions. The program contains 400,000 lines of code, compared with 100,000 in dBASE III.

Ed Esber, chairman and CEO, says he's naturally happy with the continuing success of dBASE, but wants to project an image as a company with a multiple product line.

"We started out as a one-product company, developing an identity as a dBASE company," he says. "That has certainly been profitable, and we have a loyal following of 2 million users and many thousands of developers who work with the product. The challenge now is to become a company of products instead of a product company.

"This is a time of transition for us. People still look at us as the company that markets dBASE. Our thrust in marketing will be to promote Ashton-Tate as a company with products like dBASE and Framework and MultiMate and so on. We want to be known as providing solution environments—whether that's for database management, for word processing, for desktop publishing, for spreadsheets, for graphics.

"And all these products will have to work in conjunction with highly-complex operating systems like OS/2, new standards like SQL and SAA. And the products will have to work smoothly on local area networks and communicate with mainframes. We want to provide solutions for business needs as they relate to the entire corporate environment. To get the job done, that will mean we will make new marketing alliances, develop more product in-house, and buy companies with already-developed products, when that's appropriate."

The Microsoft Agreement. Ashton-Tate has signed a deal with Microsoft to market an advanced database management system that will run under OS/2 on local area networks. The deal links Ashton-Tate's marketing clout—the company claims a total of 2 million end users—with the technical prowess of Microsoft. Microsoft will also be marketing the product to the hundreds OEM's it deals with.

Actually, it's a three-way deal. The database engine was developed by Sybase, Berkeley, Calif. The technology has been proven already on UNIX workstations for DEC VAXes and Sun Microsystems workstations.

SQL is expected to become a standard for PC's because IBM is expected to get heavily behind it. Now that Microsoft and Ashton-Tate have also joined forces behind it, Esber expects the standard to seep more quickly into the PC area.

"This is mini-computer processing power that we're talking about, combined with the friendlier user-interface that is characteristic of PC software packages," Esber says. "It's going to be an important combination for us. We expect it to become an important open architectural standard that Ashton-Tate and many other developers will write frontend applications for."

Under the agreement, Ashton-Tate will license SQL Server from Microsoft for redistribution through all its retail channels. The product distributed by Ashton-Tate will be called the Ashton-Tate/Microsoft SQL Server. Customers will be able to buy SQL Server by itself or in combination with a future version of Ashton-Tate's dBASE product.

"Ashton-Tate will combine the power and performance of SQL Server with the many end-user benefits of dBASE," Esber says. "We will also ensure that the thousands of applications written in the dBASE language will be able to take advantage of SQL Server. The alliance between Microsoft and Ashton-Tate provides customers with unparalleled capabilities; the ability to use SQL, dBASE and other PC languages against the same data at the same time from any DOS or OS/2 workstation in the local area network environment."

SQL Server provides a foundation for a wide range or productivity applications. Microsoft and Ashton-Tate expect that in addition to dBASE, many leading PC-based applications and languages will use SQL Server as a multi-user database engine. SQL Server will provide the basis for transaction-oriented systems, like accounting, document

libraries, inventory management systems and other applications that have previously been implemented on large-scale systems.

Analysts generally saw the Ashton-Tate alliance as a positive move for both firms. Microsoft gets the benefit of Ashton-Tate's marketing clout in gaining acceptance of its version of a client-server as compared with IBM. Ashton-Tate gets the benefit of an already-existing proven and sophisticated database technology.

There may be dangers in the deal for Ashton-Tate too. One potential drawback is that Ashton-Tate has been forced to endorse a database technology it has not developed itself and whose evolution and acceptance Ashton-Tate may not be able to control as well as it has controlled the evolution of dBASE, say analysts.

Currently, Ashton-Tate is one of the top three PC software companies, sharing honors with Microsoft Corp. and Lotus Development Corp. In 1984, sales went over \$42 million; profits over \$5 million. Revenues for the nine months ending October 31, 1987, jumped to \$191.8 million, compared with \$147.9 mil-lion during the same period last year; profits rose to \$30.3 mil-lion, compared with \$19.5 million for the previous year.

By any standard, Ashton-Tate is a big, sophisticated operation. There are over 1,100 employees. There are five development centers—Torrance, Glendale, and Sunnyvale, Calif.; East Hartford and Westport, Conn.

Ashton-Tate's top managers have heavy-duty personal-computer backgrounds. Ed Esber took the helm as chairman and CEO in May 1984, after stints with VisiCorp, Texas Instruments and IBM. Luther Nussbaum, president, first came on board in October 1986, assuming the post of VP Operations, after being a Senior VP Marketing at Businessland.

"The Businessland experience was extremely valuable in helping me learn about just what the end user wanted," says Nussbaum. "I appreciate feedback about customer demands, and I initiate actions to get those demands satisfied. We work with two sets of

customers—our distributors and end users. Both need to be kept happy."

In 1985, Ashton-Tate began diversifying through acquisitions. In July, it bought Forefront Corp., the company that developed Framework and Framework II. In December, it bought MultiMate International Corp., which gave it an instant best seller in the word-processing category—MultiMate Advantage and MultiMate Professional Word Processor 3.3.

Ashton-Tate also has its eyes on the desktop publishing and graphics market. A first step in that direction was buying Decision Resources, the company that designed the MASTER-GRAPHICS series of business graphics products. In-house, Ashton-Tate developed and brought to market





RapidFile's split table/form layout lets you see more of your data.

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especially names and addresses,
mailing labels, and inventory records—you need a program that can
go the distance fast. That's why you
need RapidFile." The versatile, easyto-use filer that gives you up to
twice the on-disk capacity. And up
to twice the speed. It even gives
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management, reporting, and form
letter writing. Which sure beats
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RapidFile comes with simple pull-down menus or a Lotus* 1-2-3*like interface. A visual report writer makes it easy to do pre-printed forms, checks, or mailing labels. And its form letter function lets you create memos or mailmerge without programming. RapidFile even shares data with dBASE*, Framework* 1-2-3,

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RapidFile and a desktop publishing package called Byline.

Folk says A-T will gradually work a common interface into all products so that they have the same look and feel.

Says Folk: "While many of our products now have a pull-down menu structure similar to Framework's—RapidFile has it now, dBASE has it in the system mode, and MultiMate has—there are more common elements that can be pulled together into an interface that will be easier for end users to learn. We want them to be almost instantly comfortable in making the transition from one Ashton-Tate product to another. So that if they're using our word-processing program, they will be able to go to our desktop publishing or database program without experiencing a great deal of difficulty.

Ashton-Tate will be aiming its products at the two main developing markets within the IBM PC-compatibles arena. It will be marketing products for DOS, the older operating standard, as well as for machines operating under the new OS/2.

"In the long term, IBM's introduction of a more powerful operating system, OS/2, will be good for users, because it will bring users who need machines which can handle more complicated tasks, and that in turn will be good for software developers," says Folk.

He estimates that there are currently 15 million PC's in the marketplace and that there may well be a target audience of 54 million business users who require computers.

"Our marketing efforts are geared down the road for this market, the people who need more powerful hardware for more sophisticated applications," Folk says. "And once that market takes off it will keeping gaining momentum for a long time.

"It's a market that will be open to sales of more powerful hardware and will be looking for increasingly resourceful soft-ware developers to meet the challenge of the increased power of that hardware, combined with a more powerful operating system, OS/2." \square

Marketing Computers

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