

0-387-146

# ASHTON-TATE (A)

It was November 1984 at Ashton-Tate, a microsoftware publisher located just outside of Los Angeles, California. One of thousands of garage shops to open during the "PC boom" of the early 1980s, the company had grown at a dizzying pace to become a multinational corporation with almost \$43 million in revenues and net income of over \$5 million (fiscal year ending January 31, 1984). In the fall of 1984, however, all was not well at Ashton-Tate's warehouse headquarters: earnings for the six months ending July 1984 had plunged 567 despite a 68% sales gain; efforts to diversify product offerings had met with a lukewarm reception from a marketplace that was showing signs of a slowdown; and employees were struggling to cope with the unexpected death of the company's founder (George Tate) and the departure of its driving force (David Cole). Appointed to the recently vacated position of chief executive officer, Edward Esber, Jr. was judged an unlikely savior of another pioneer company about to fade from the scene.

#### Industry Background

Computer Revolution

Modern computer systems, which were commercially introduced in the 1950s, included mechanical and electronic components (hardware) and sets of programmed instructions that directed machine workings (software). In the 1980s, computer systems were divided into three product classes:

(1) mainframes, which could support over 128 users and were used by large corporations and institutions for central data storage and processing,

(2) minicomputers, which performed similar functions for small businesses or corporate departments with 17-128 users, and (3) microcomputers, which could be employed as "intelligent" remote terminals linked to central computers or programmed to perform a variety of tasks for individual users. Over the years, popular

This case was prepared by Associate for Case Development Shirley M. Spence, under the supervision of Professor Paul R. Lawrence, as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

Copyright©1987 by the President and Fellows of Harvard College

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the permission of Harvard Business School. Distributed by the Publishing Division, Harvard Business School, Boston, MA 02163. (617) 495-6117. Printed in the U.S.A.

acceptance of computers as a necessary tool of modern life had spurred rapid expansion in the size, scope and importance of the computer industry. With the exception of computer giant IBM, most computer-related firms were niche players in what was broadly defined as an information processing industry valued at \$300 billion in 1985 worldwide revenues and expected to grow 15% annually to a trillion dollars by the end of the decade.<sup>1</sup>

## Personal Computing

Personal computer was a term coined for small, inexpensive, single-user machines based on the microprocessor, a single silicon chip containing all the electrical circuitry needed to execute a software program. (See <u>Exhibit 1</u> for a description of personal computer system components.) The personal computer's rapid transition from high-tech toy to productivity tool was driven by the growing availability of useful software for increasingly affordable and powerful machines. The ten-year history of personal computing could be divided into four stages:<sup>2</sup>

Developmental Stage (1975-1977)--In January of 1975, 1. Popular Electronics ran a cover story on a \$395 Altair kit sold by mail order to hobbyists willing to take on the dual challenge of assembling the microcomputer and writing programs for it in binary code. The programming burden soon was eased by: (1) the creation of a program called CP/M by Gary Kildall (Digital Research), which quickly became the standard operating system for 8-bit computers, and (2) the development of the first high-level programming language by Bill Gates (Microsoft), which facilitated the writing of programs for specific user applications.<sup>3</sup> These early successes unleashed a flurry of entrepreneurial activity. By 1977, the personal computer industry had expanded to include over 50 brands of machines, a variety of application software from computer enthusiasts who had created a game or automated some repetitious task on their home computers, and a number of stores, magazines and clubs devoted entirely to personal computing.

<sup>2.</sup> <u>Early Adopter Stage (1977-1981)</u>--Recognizing the shortcomings of kits, hardware manufacturers (Apple, Commodore, Tandy) soon appeared with ready-to-use packages that included a preassembled computer plus peripherals plus some software. With Tandy's decision to use its Radio Shack retail network as a distribution vehicle, personal computer products and services became more widely available. Microcomputers began to appear on office desks to use three new business applications: word processing, database management, and spreadsheets. The VisiCalc program created by Harvard Business School's Dan Bricklin (Software Arts/VisiCorp), which turned the Apple II computer into a familiar and useful financial worksheet, was

<sup>1</sup>IBM saw the information processing industry as the convergence of computers, communications (e.g., transfer of information via telephones and electronic mail), and content (i.e., software, databases, directories, user languages).

<sup>2</sup>Adapted from <u>Computing Today: Microcomputer Concepts and Applications</u>, Sullivan, Lewis and Cook (Houghton Mifflin, 1985).

<sup>&</sup>lt;sup>3</sup>Instructions written in English-like high-level programming languages were translated automatically into machine code by special software.

credited with making many people take personal computers seriously for the first time.

Corporate Stage (1981-1984)--The 1981 introduction of "the 3. by IBM, a long-time supplier of mainframes to Fortune 500 PC" corporations, opened up a large and untapped market for desktop computers and business software. The PC also ushered in the era of 16bit machines and provided leadership for a disorganized industry. Its MS-DOS operating system (Microsoft) became a de facto standard, and a wave of "clones" able to use the growing library of application programs written for the IBM PC began to appear. IBM quickly seized market leadership from Apple, a position maintained via rapid product improvements, aggressive pricing and unabashed marketing. Apple's nonimitation strategy yielded the Lisa (1983) and the Macintosh (1984), which incorporated 32-bit technology and appealed to business users via an easy-to-use mouse device, on-screen "windows" that provided a desktop environment where several tasks could be performed simultaneously, and high quality graphics. While these innovations failed to generate much support for Apple from software developers, they did inspire the creation of new graphics and user interface products for the IBM PC. Consumers went on a three-year buying spree, and the industry responded  $w_4$  ith a proliferation of products and a broadened distribution network.

4. <u>Integrated Systems Stage (1984-</u>\_)--By 1984, the question of how to tie together often incompatible hardware and software into an integrated system had become a key concern for computer users and a major focus of product development activity. The era of integrated software was heralded late in 1982 with a multifunction product called Lotus 1-2-3 (spreadsheet/ graphics plus some list-handling capability), which offered the advantages of a single set of user commands and easy data transfer between applications. Next came "environmental" software designed to permit programs from different publishers to work together. Efforts also were underway to develop communication hardware and software that would allow personal computers to share data (i.e., networking) and improve the ability of mainframes, minicomputers and microcomputers to exchange information.

<sup>4</sup>Roughly half of all U.S. purchases were made at various types of retail outlets (e.g., computer stores, discount mass merchandisers, toy stores), which obtained stock either through wholesale distributors or directly from manufacturers. Two other channels were: (1) mail order houses, which offered below retail prices via magazine advertisements, and (2) value-added resellers, which assembled a hardware system and often provided customized software plus training for specialized markets (e.g., law firms, insurance sales offices).

The personal computing industry was enjoying another boom year in 1984, although analysts expected more moderate growth over the next few years due to temporary saturation of some submarkets.<sup>5</sup> Market value of worldwide microcomputer shipments was estimated at \$17 billion in 1984, representing a 72% increase on a doubling of volume. Despite that growth, penetration of U.S. offices and households was still just 15% at year-end. Unit growth of 30% was forecast for 1985, with shipment value increases of only 13% due to falling prices. Microsoftware sales were estimated at \$3 billion worldwide in 1984, and were expected to grow to \$4 billion the following year. Software piracy, however, was an ongoing industry problem; unauthorized and illegal packages accounted for half of all business software in use and represented over \$1.3 billion in lost revenues between 1981 and 1984.

## Microsoftware

In 1984, personal computer users had a choice of over 20,000 software products. Business application programs, which ranged in price from \$20 to \$700 and accounted for roughly one-half of total microsoftware sales, typically were divided into two categories: professional and productivity software. Professional programs included industry-specific "vertical" packages (e.g., patient file management system for dentists) as well as more general "horizontal" packages (e.g., accounting, general ledger, inventory management). Productivity software included the "Big Five" (word processing, spreadsheets, database management, graphics, communications) plus a number of multifunction and decision support products. (See <u>Exhibit 2</u> for segment details.)

software publishers, rapid advances in hardware For technology offered exciting new product opportunities but also posed two significant challenges: (1) increasingly sophisticated software called for lengthy development projects involving teams of software engineers notorious for their strong egos and aversion to timetables, rapid product obsolescing required that programs be and (2) continually upgraded or risk being supplanted. Software companies also faced a consumer backlash as computers moved beyond the saturated ranks of "techies" to unsophisticated users, who were less forgiving about "bugs," hard-to-use software, poor manuals and inadequate customer service. Finally, product proliferation had intensified competition for shelf space and salespeople's attention among retailers, who were increasingly reluctant to take on new and untried products.

<sup>5</sup>There were four user markets for personal computers: (1) business/ professional, where the rush for high-end systems appeared to be abating somewhat, (2) home, where demand for cheaper, less powerful systems had stalled due to a lack of useful applications, (3) scientific/engineering, where penetration was low, and (4) education, which was small but considered important, partly for brand loyalty reasons.

<sup>6</sup>Visicorp, which saw sales of its best-selling VisiCalc program plummet from 750,000 units in 1979 to nearly nil in 1984, was an oft-cited illustration of the importance of offering next generation software and the danger of overreliance on a single product. The escalating cost and complexity of developing and marketing new products was spurring the microsoftware industry's rapid evolution from a cottage industry of computer aficionados to increased domination by large companies. Despite signs of an industry shakeout (i.e., bankruptcies, buyouts, layoffs), there remained over 2,000 companies selling microsoftware in 1984. The top three independent publishers all had built their success on a single hit product: (1) Lotus Development, where Lotus 1-2-3 had spawned a \$157 million business, (2) Microsoft, which had grown to \$140 million on the strength of MS-DOS, and (3) Ashton-Tate, where dBASE II was the foundation for its \$82 million business. In addition, IBM's \$150 million in revenues from the sale of licensed products made it the industry's second largest player, and signaled hardware vendors' growing interest in the software business.

## Company History

Ashton-Tate was one of the entrepreneurial success stories of the Computer Revolution. (See <u>Exhibit 3</u> for financial history.) In 1980, George Tate and Hal Lashlee pooled \$7,500 in personal savings to launch one of the industry's first distribution houses. Stock ownership of the new company, which was incorporated as Software Plus Inc. (SPI), was divided equally between the two founders. Lashlee (age 40), who then was working as a controller for a mortgage bank, assumed the position of SPI vice president and treasurer. Tate (age 37) left his computer sales job to take his place as the first of three company presidents: George Tate (1980-1982), David Cole (1982-1984), and Edward Esber, Jr. (1984 to date).

# Tate Era

George Tate was a bearded down-home Southerner, born in Tennessee and raised in South Carolina. More interested in his after-school job at a television repair shop than academics, he dropped out of the twelfth grade and joined the U.S. Air Force. George obtained a hardship discharge and returned home to help with the family furniture business when his uncle died, but soon was off to Atlanta where he became a convert to scientology. He next decided to move to Los Angeles, where he was working as a television repairman when the historic Altair kit issue of Popular Electronics appeared. George ordered a kit, managed to get it up and running and was, he recalled, "stunned. After that, there w's nothing in my life but computers. That's what I lived and breathed." First a freelance computer repairman known as the Computer Doctor and then a sales manager for a computer peripherals manufacturer, George also was a founding member of the computer club where he met future SPI business partner Hal Lashlee.

<sup>2</sup>The Computer Entrepreneurs: Who's Making It Big and How in America's Upstart Industry, Levering, Katz, Moskowitz (New American Library, 1984). SPI's first venture was a mail order operation called Discount Software, which was launched in January of 1980 from Tate's garage. In the nascent microsoftware industry, SPI's offer of quick delivery, volume discounts, a toll-free telephone line, and strong customer support was innovative and well received. By the end of 1980, the business had expanded to a two-bedroom apartment and had added a wholesale distributorship known as Softeam, Inc. The most significant event of the year, however, would prove to be a customer request for an unfamiliar product called Vulcan, which led Tate and Lashlee to Wayne Ratliff and the product that would make all of them multimillionaires.

Wayne Ratliff was a full-time engineer at NASA's Jet Propulsion Laboratory in Pasadena, California. In his spare time, he took a program he had devised on his home computer to help plot football betting strategy, made it capable of assembling, sorting, and organizing enormous amounts of data, and embedded into it an Englishlike programming language that enabled it to be endlessly customized to user needs. His efforts to sell his program, which he christened Vulcan in honor of Star Trek's Mr. Spock, via an advertisement in the back of <u>Byte</u> magazine drew a poor response. Impressed with the program's capabilities and versatility, Tate and Lashlee decided to plunge into the publishing business. Their promise to turn Ratliff's sales of 50 copies per year into 500 convinced him to sign a contract granting them exclusive marketing rights in exchange for royalty payments.

For help in merchandising the new database management product, Tate and Lashlee turned to Hal Pawluck, a Los Angeles advertising man known for his "boisterous, Barnesque instinct for promotion." Pawluck renamed the program dBASE II (because it had a technical ring to it and implied an advancement over the nonexistent dBASE I), selected the name Ashton-Tate for its publisher (because it sounded better than Lashlee-Tate or Tate-Lashlee), and created a controversial print advertisement that bore the headline "dBASE II versus the Bilge Pump and went on to say: "We all know that bilge pumps suck, and by now we have found out--the hard way--that a lot of software seems to work that way too" (because, Lashlee explained, "the noise level in the computer business was pretty high; you had to grab their attention"). Pawluck also came up with the idea of packaging the \$700 program with a demonstration disk that permitted customers to try out the product and return it for refund if not satisfied. The orders poured in.

By early 1982, SPI's apartment headquarters were overflowing with 17 employees. With Tate concentrating on selling and Lashlee busy with financial matters, day-to-day operations fell mostly to an early hire named Ron Dennis:

It was pre-IBM days, so we had dBASE II on over 50 disk formats and also were selling everyone else's software. Operations basically were receiving, assembling and shipping product plus processing mail and telephone orders plus customer service. Inventing your own solution was the order of the day. To port programs to different machines, we created a room with 50 personal computers wired together so we could download from a master disk. Order processing was on an entirely paper system,

and we were growing so fast that it was impossible to make forecasts. Because we had no external funding, cash flow was really important and budgeting essentially was: "Don't spend money." It helps to be in a business where you can make something for \$30 and sell it for \$500, but controlling costs was still a challenge. We tried to keep inventory down and stretch our suppliers, and we borrowed from employees. In hiring, I'd say: "We offer \$4.00 an hour and all you can learn. It's a gamble. If we succeed, we may become a big company with profit sharing and a fancy building." I hired a lot of scientologists because I knew a lot of them from my ministry in the church. They tended to be young, interested in technology, and had a similar work ethic and outlook which helped. George did the culture. He'd have "family feeds" and held meetings every Friday where he'd give a pep talk on how well the business was going, how proud he was, how money was tight but he'd rob a bank to meet payroll. There were lots of parties, too. We didn't really have a management structure but would assemble committees to solve problems.

For the fiscal year ending January 31, 1982, SPI showed revenues of almost \$3.7 million with an operating loss of \$313 thousand. Tate and Lashlee decided the time had come to find a manager with the expertise and mindset to engineer company growth to \$100 million. Their choice was 30-year-old David Cole.

## Cole Era

David Cole described himself as a self-educated man with a strong curiosity fed by books and the people around him. In Hawaii, where he had grown up, Cole was a political activist. His search for tools for social change eventually took him to Washington, D.C., where he attended Antioch Law School while working on construction to support his wife and three children. Disillusioned with the legal system, Cole left Antioch in 1976 to become a field representative for a publishing company. His specialization in computer science manuscripts introduced him to Silicon Valley, leading to an invitation to join a poker group of computer entrepreneurs and his 1981 recruitment for the position of marketing vice president at a start-up company called Sorcim. While at Sorcim, Cole approached SPI with an offer to purchase dBASE II. The discussion yielded no deal but did prompt an all-day visit to Cole's office by Hal Lashlee, who simply sat in a corner and watched him work. The following day, Cole received a telephone call from George Tate inviting him to head SPI. The offer, which coincided with Cole's firing by a new Sorcim president, drew this response: "I told them I wasn't interested in money, that I wanted stock options and three months to make up my mind."

# Assessing the Situation

Cole began working at SPI on a consulting basis in January 1982, recording his observations in a private journal that eventually grew to include a series of notebooks. He explained his decision to accept the company presidency and his ingoing agenda as follows:

The company had a reputation for being well-intentioned but

sloppy. The business had started as a hobby, and the operating model was a lifeboat. Things were a confused mess. They couldn't get orders out, had no idea whether they were making money, and didn't know if they wanted to be a distributor or a publisher or what. I also discovered that almost everyone was a scientologist, and that Ron Dennis was the guy with the power to say: "We do or don't need Cole."

I took the job because I loved the product and was thinking of ways to sell it. Dennis and I sat down and agreed that he would be my mentor in dealing with the community and I, in turn, would sponsor his learning of the industry. My priorities were: (1) find a way to get orders out the door and monitor the business, (2) get control of decision making, and (3) move as fast as possible to find new markets for a winning product. When and if that was ironed out, we needed to add products to make ourselves less vulnerable. The fuel needed was an understanding of our markets, organizational sovereignty over the product, money, and recruits.

## Year One

Cole was named president and third board member of SPI in February of 1982, and became an owner a few months later via the purchase of 770,000 shares of stock under a new incentive plan. After some "bumping into each other," Cole assumed full operating control of the Ashton-Tate publishing business, where Tate remained a daily presence concerned with "doing all I can to create a good atmosphere for the people who work here while Lashlee withdrew to run SPI's distribution arm. Employees found Cole to be a charismatic, energetic visionary who loved taking gambles and running a one-man show. Although he encouraged the company's work hard/play hard culture, Cole also brought some welcome order. He began the gradual process of tightening operations with an order entry system designed on a restaurant napkin and the purchase of a VisiCalc program for sales forecasting, and later hired an accountant to set up a financial system. Cole also created a management structure for Ashton-Tate's day-to-day affairs by selecting four employees to head various functional groups while retaining central decision-making authority for himself. He explained his management style as follows:

I felt responsible for setting the vision and was always in a resource allocation mode, watching for threats and growth areas. I was quick to act because fast decision-making is critical for making strategic windows in a dynamic industry like ours. I announced rather than sought approval for decisions, although I expected people to react and would get rid of "yes men." I'm not interested in babysitting, and with my managers would take the approach: "You know what you're doing. Only call me if you need me."

Cole's mission was "to shift the balance of power from those who understand how computers work to those who need what computers can do." His two-pronged marketing strategy reflected his view of dBASE II as clay waiting to be shaped to users' needs: (1) focus on "power users," who would use the dBASE programming language to create customized software for a variety of emerging markets, and (2) build an apparatus for volume sales, where efforts focused first on building a strong, multiple channel domestic distribution network and then on penetrating the largely ignored overseas market for microsoftware. By the end of 1982, a domestic field sales force was in place, several merchandising programs for marketing intermediaries had been launched, and free telephone support for end-users had been expanded. International expansion plans, which were premised on Cole's belief that software translation and marketing should be done locally, began with an exploratory trip to Europe in November 1982. A few months later, the company's first foreign subsidiary was opened in the United Kingdom.

In the product area, contract renegotiations with Wayne Ratliff yielded reduced royalties and designation of 60% of payments made by the company for research and experimentation. The result was quick release of an IBM PC version of dBASE II (September 1982), which solidified the product's position as an industry standard, plus the introduction of RunTime (February 1983), a package that allowed independent software developers to protect and market stand-alone application programs based on dBASE (price: \$100 per package or royalty based on suggested retail price of program created using RunTime). Less successful, however, were two licensed products introduced at a retail price of \$700 in October 1982 and discontinued less than a year later: (1) Financial Planner, a financial modeling program designed for accountants with some computer programming experience, and (2) Bottom Line Strategist, a set of easy-to-use financial templates.

The results of Cole's efforts were a return to profitability and an almost fivefold increase in company revenues for the fiscal year ending January 31, 1983. Amassing the human and financial resources to sustain that explosive growth was an ongoing challenge. A wave of new employees prompted headquarters relocation to a one-story Culver City warehouse dubbed "the rat maze" due to the eye-level office partitions that sprang up as needed. Cole also hired a human resources professional to put together the company's first comprehensive benefits package. For debt financing, Cole's presentation to a New York bank earned SPI a \$6 million line of credit. By early 1983, however, he was convinced of the need for a public stock offering.

# Project Crunch

Cole's six-month effort to ready the company for its initial public offering was known internally as Project Crunch. In April 1983, Cole assumed the title of chief financial officer and began preparing reorganization plans, a task he described as "one of the dirtiest, sloppiest things I've ever done from a legal and accounting standpoint." In May, SPI's mail order and wholesale distribution businesses were sold, and its name formally changed to Ashton-Tate. Next, Cole turned his attention to anticipated investor concerns about Ashton-Tate's technical vulnerability and lack of management depth.

In August 1983, Cole took two important steps towards gaining control over Ashton-Tate's core technology by: (1) acquiring all product rights to dBASE II and RunTime in an \$8 million deal that included a three-year employment contract with Wayne Ratliff, and (2) hiring an experienced manager named Harvey Jeane to build an in-house development organization and supervise database product enhancements and extensions. Eager to diversify into a second application category, Cole effectively doubled his bets on a new multifunction product by simultaneously funding two outside development teams (Forefront Corporation and Queue Associates) in May 1983. Immediate new product needs were met via the licensing and summertime release of a \$295 file management system called Friday!

Efforts to strengthen management at Ashton-Tate included the addition of an outside director and the appointment of Charles Babbit as chief operating officer. Babbit, who previously was general manager of a data services company, directly supervised three new vice presidents (new technology, product development, product marketing) and reported to chief executive officer/chief financial officer David Cole. In total, the Ashton-Tate organization numbered 228 by the November 1983 stock issue, when a healthy stock price of \$14 per share yielded \$14 million for the company and enviable gains for its three principal owners (e.g., Tate collected \$8 million and still owned 34% of the business), whose collective ownership dropped from 97% to 76%.

### Investing for Growth

Ashton-Tate entered its fifth year of operations in a strong position. Financial results for the fiscal year ending January 31, 1984 were impressive; revenues more than doubled to \$43 million and net income jumped from \$1.1 million to \$5.3 million. For Cole, the next challenge was "to find a way to grow using IPO proceeds," which he pursued via new product activity and continued international expansion. His multiple sourcing strategy, which looked to both internal efforts and external relationships for new products, enabled Ashton-Tate to successfully defend its leadership position in database management systems and also enter a new business productivity market.

In May 1984, Ashton-Tate announced dBASE III, a next-generation product designed to exploit the capabilities of 16-bit microcomputers. Shipments began two months later. dBASE III retained all the popular features of dBASE II but was more powerful and easier to use. To Cole's relief, his positioning of dBASE III and dBASE II as the products of choice for 16-bit and 8-bit machines respectively was well-received. The new dBASE III program was retail priced at \$695 while dBASE II prices were slashed to \$200 during the launch and subsequently raised to \$495.<sup>8</sup> Cole described the internal development effort that yielded dBASE III as follows:

<sup>&</sup>lt;sup>8</sup>Ashton-Tate also had an upgrade policy that, in this case, offered dBASE III to registered dBASE II users at a special reduced price. To facilitate upgrading, dBASE III included a conversion utility for file exchange.

Harvey Jeane hired the right people and created a life support system for them at our new development center in Glendale (California). He had a lot more power than he would have had in a technically expert company. He'd come in with budgets and checklists, and I'd say: "I only want three things. Forget the other stuff. Just get strategic products done." dBASE III was Wayne Ratliff's thing. Wayne was a star and wanted to build his own thing, so I built insulation around him and tried to keep contaminants out. As the saying goes: "If you get a genius pissed, he'll stop eating tuna fish at 3 a.m." I tied Wayne in to the organization at critical points, and made the key trade-off decisions. If he and Harvey had problems, we could solve them in an hour. I also got pulled in between development and marketing, when things reached that point.

In July 1984, Ashton-Tate launched Framework, an integrated product licensed from the Forefront Corporation. Framework was the result of a "sponsored development" effort that began with an R&D contract (May 1983) followed by purchase of a 15% equity interest in Forefront with an option to buy outstanding stock in three years (August 1983). Forefront, which consisted of a team of software engineers based in Sunnyvale (California), worked closely with Ashton-Tate in the launching of Framework and was obliged to use a portion of royalties earned for evolutionary work on the product. Retail priced at \$695, Framework offered the five basic business functions plus an outline generator for organizing ideas, on-screen windows (dubbed frames) for multitasking, a built-in programming language called FRED, and a dBASE II file converter. Despite an aggressive television advertising campaign and widespread acclaim from the editorial community, initial sales of Framework were below expectations and lagged those of Lotus' competitive Symphony product.

Other noteworthy product initiatives included the extension of Ashton-Tate's database family via two externally developed products: (1) dBASE Multiuser, a networking version of dBASE II priced at \$1,000 for a four-user package, and (2) dBASE/Answer, a micro-mainframe software package priced at \$45,000 for a configuration of one mainframe plus 50 microcomputers. Foreign language translation of new and existing products paralleled Ashton-Tate's international expansion via a new Spanish subsidiary and third-party distributor arrangements in Mexico, Italy and France. In addition, Glendale programmers ported products designed for the IBM PC to a number of leading 8-bit and 16-bit models, while the Ashton-Tate publishing group formed in 1983 as a vehicle for disseminating user information lengthened its list of book titles to eleven (e.g., <u>Everyman's Database Primer, Reference Guide for the IBM</u> Personal Computer).

Ashton-Tate's rapid business expansion was accompanied by the swelling of its employee ranks to over 500 by the fall of 1984. Although Cole chose to terminate and not replace his COO, he did recruit a number of seasoned executives for other senior management positions. Cole, who maintained that identifying, recruiting and retaining excellent employees was the single biggest challenge to fast growth, described his approach to organizational development at Ashton-Tate as follows:

From the beginning, the rule was: "If you can't keep up, leave." We had to continually upgrade, and I would always trade off the individual for the good of the group. The number one thing I brought was the ability to pick the right person for the job, and the courage not to do something until I had the right person. My criteria in hiring people were excellence in their area, track record, versatility, integrity and common sense. I knew we would build a culture as we hired. Although scientology gradually disappeared, I tried to keep the best parts of its culture as we grew, especially its emphasis on open communication. In adding shape to the organization, the ability to read and respond quickly to marketplace changes was the most important thing. That means staying relatively flat, because the cycle of innovation will lengthen as you add layers. Also, when you see a segment opportunity, you must break it off and create a new division.

There was significant organizational turmoil at Ashton-Tate over the summer and fall of 1984. First came David Cole's announcement to the board of his decision to leave the company for a new venture on the East Coast. An outside search for a new CEO was initiated immediately. In August, Ashton-Tate was stunned by George Tate's death by heart attack in his office. Cole stepped up to chairman, the CEO search was continued, and Esber's promotion from marketing vice president to president/COO was announced. In September, company employees were further jolted by a 10% staff reduction that was officially explained as a streamlining effort and internally known as Black Friday. Although most of the 55 people fired were hourly workers in clerical and warehouse departments, company observers noted some defections from management ranks as well. Cole resigned in October with this perspective on his tenure:

I came to Ashton-Tate in the middle of an emerging industry that was going full speed. I loved it. It was a kick in the pants to take several hundred people and help achieve goals, to turn on customers and help them do things. My biggest regret is the ungraceful transition of power. The leader failed to provide a leader.

## Leadership Transition

In November of 1984, the CEO position vacated by Cole was filled by Edward (Ed) Esber, Jr. Born and raised in Ohio, Esber graduated from the Case Institute of Technology in 1974 with a degree in computer engineering and was hired by IBM, where he worked first on minicomputers and then with the company's fledgling personal computer group. In May 1976, he was awarded an MSEE degree by Syracuse University.

Esber applied to the Harvard Business School at the urgings of a friend and, when accepted, was granted his request for a one-year deferment. He remained a consultant to IBM during his first year at HBS, but spent his interim summer with an accounting firm and upon graduation went to work for Texas Instruments (TI). In November 1979, he left TI to join VisiCorp as vice president of sales and marketing. From his first-hand view of VisiCorp's rise and fall, Esber drew the conclusion that there was no such thing as a permanent advantage in the software business and that a false sense of security could prove fatal: "Just about the time you begin to believe you're Superman, the world's supply of kryptonite increases."

Esber left VisiCorp in 1983, and opened a small consulting firm in Dallas, Texas. In March 1984, he was contracted by longtime friend David Cole to work on dBASE III and Framework launch plans. Two months later, Esber accepted Cole's offer of the position of executive vice president of sales and marketing at Ashton-Tate, with the understanding that he would be named company president by year-end. Esber explained that decision as follows:

Once you've been in the computer business, it's hard not to play in the sandbox. There's excitement, danger, risk and huge growth. I also like the technology. Midway through 1984, it seemed like the stars were lining up for Ashton-Tate. David had laid the groundwork in an expanded product line and a lot of talent was being drawn in. So, it seemed like all the raw material was there and the only question was whether current management could allow it to happen. I saw a big opportunity to go in and make a contribution.

At Ashton-Tate, the reaction to Cole's departure was relief from management and surprise from the rank and file. Jill Weissman-Tate, who joined the company as sales manager in 1982 and was named a director upon George Tate's death and her inheritance of his stock, described the leadership change as one of three "flex points" in Ashton-Tate's history:

There have been three periods of major change, or flex points, at Ashton-Tate: (1) when the "corporate mentality" started and the company went public, (2) when George died, and (3) when David left and Ed became CEO. The first time the company was aware of things like numbers, profits, quarters and budgets was in 1983. Things suddenly were very different from the early days when a hard-working high school dropout could move ahead. There was not time for training, and people quickly found themselves over their head and fired. Towards the end of 1983, we got this new animal called a VP from the outside and our first COO. Quarterly results became the buzzword. People who were uncomfortable left while others figured they'd wait it out.

When George died, people felt they had lost their spiritual leader. He wasn't an operating part of the company, but it was that everyone followed his mission and the vision he inspired. He was always wandering around, giving encouragement and helping with problems. David became chairman and, for the first time, came under attack, mostly from the professional management he had brought in. David was very people-oriented and sensitive on a personal level, but as a boss was intimidating, impatient and always had final say on decisions. There was a real style clash with the HBS types, who also were critical that the company wasn't doing better financially. Wall Street was starting to get unnerved, and Black Friday furthered the perception that he wasn't the right leader. The biggest problem when David left was that not everyone was convinced that Ed could do the job. Senior managers were divided, and there was lots of bickering between David factions and Ed factions. Ed thought he should be CEO, but the Board continued its search until our outside director said: "Too much founderitis. Stop singing 'The Way We Were' and give the guy a chance." So, we named Ed CEO, and gave senior managers a good stock option plan in an effort to make them realize that they were in charge of this place and had an opportunity to own a piece.

### November 1984

### Company Update

In November 1984, Ashton-Tate's product line included two families of microsoftware products as well as books and periodicals on a variety of computer-related subjects. Most of the almost half a million units of software products shipped since the company's inception were sold to marketing intermediaries for ultimate use by a wide variety of small businesses in the U.S. (90% of fiscal 1984 revenues) and abroad (10%). In the U.S., software was channeled primarily through distributors and dealers and also via leading hardware manufacturers and valued-added resellers. Foreign software sales were made through a network of company-owned subsidiaries and third party distributors. Ashton-Tate books, which usually were written by independent authors, were distributed through McGraw-Hill.

Cole had divided Ashton-Tate's 434-person organization into three operating divisions (software, international, new business development) plus a central services group. In addition, the president/CEO position was linked to the office of the chief scientist (Wayne Ratliff) and the office of the chairman (Ron Dennis, Jill Weissman-Tate). A partial organization chart is shown in <u>Exhibit 4</u>, while <u>Exhibit 5</u> gives background information on the management team inherited by Esber.

As company president, Esber directly supervised the head of corporate services (Norman Block) and the three divisional managers. The new business development group, which was led by Lawrence Benincasa, was a publishing business offshoot created early in 1984 to provide low-risk entry into new market areas (e.g., home and educational products, book/disk packages, software add-ons). The international division was formed in September 1984 in recognition of the growing importance of Ashton-Tate's foreign markets. Company director Ronald Posner was acting as divisional general manager, which involved overseeing subsidiaries and "master distributors" responsible for the foreign language translation and production of software and documentation plus field sales and service activities. As acting general manager of the core software business, Esber maintained a direct reporting relationship with vice presidents in charge of five functional areas:

1. <u>Operations</u>, which primarily involved software products manufacturing (i.e., duplication of diskettes and documentation, assembly of purchased components, final packaging). Most manufacturing was performed by outside sources to Ashton-Tate specifications, with products returned to company facilities in Torrance, California for final inspection and shipment.

2. <u>Finance</u>, where a management information system based on networked microcomputers had been installed but was breaking down due to explosive sales growth. The result was poor tracking of accounts receivables and inventory. Insiders noted there were few formal control systems; forecasting consisted of "sales pulling a figure out of the air" and managers were not held accountable to program budgets.

3. Domestic Sales, which included five regional offices staffed by field sales and support personnel who provided product training, technical assistance and merchandising support to dealers and distributors. In addition, Ashton-Tate's strategic sales group cultivated long-term relationships with leading microcomputer manufacturers in order both to secure advance information on new hardware designs and to broaden distribution via software "bundling" with hardware sales.

4. Marketing, where activities aimed at a number of audiences were coordinated by four staff groups: (1) advertising, which heightened brand awareness among consumers and the trade via print and television campaigns, (2) sales promotion, which staged trade show exhibitions, prepared training and merchandising materials for sales force use, and coordinated special promotions and co-op advertising arrangements with distributors, (3) third-party programs, which included the marketing of RunTime and the publication of Applications Junction, a catalog listing over 1,700 vertical application packages created using RunTime, and (4) public relations, which issued press releases and handled media contacts. In his role as marketing vice president, Esber had seen a need for a product management system to ensure that products weren't "lost" as they moved through Ashton-Tate's functional organization. David Hull, a product manager recruited from Carnation, explained:

I was brought in by Esber to build a product management organization. There wasn't time to develop people so we had to bring in newcomers. We recruited experienced product managers from a number of industries, and also were adding products via acquisitions. Trying to make the transition from a functional to a matrix organization caused lots of conflict over roles and responsibilities. The major issue was P&L but another problem was that people in the hierarchy would get involved in lots of decisions. The dilemma is giving product managers a sense of ownership without the ability to lead. The key is to make sure the cultural aspects and the processes are in place to let that happen.

5. <u>Product Development</u>, which encompassed product planning and research, software development, software testing, documentation, quality assurance and customer support. Ashton-Tate had made a rapid transition from a "sales machine" to a development-driven company under the guidance of Harvey Jeane, who offered this description of his organization-building efforts:

When I arrived, Ashton-Tate had no internal development capabilities. My mandate was to build an internal organization and coordinate external activities, with the goal of predictable software delivery. I hired a bunch of talented programmers, who pretty soon were working on several major projects plus an unbelievable number of ports and translations. It was anarchy at first so I put in some systems. There was no budgeting system at Ashton-Tate but I brought one and used it, though money was never a problem. Our software delivery process actually evolved out of a need for better quality assurance; in our rush to get to market faster, we were letting bugs slip through. The danger, though, is that procedures can kill creativity and lead to predictable software. Software development has an engineering side and an aesthetic side, and the secret is the ability to mix well. The best programmers are very creative and independent and don't give a damn about things like quarterly numbers and stock prices, so my job is impedance matching: making the development organization look like a cog to the corporation and making the machine disappear for programmers.

added capabilities to Glendale: As we grew, we customer "hot lines," product managers documentation, to supervise launches. Over time, though, I felt it important to be more market-driven and told Cole I'd take an active role in suppressing development--which had people with \$50,000 salaries plus control of the operating budget -- to give marketing a chance to grow. The problem was that we didn't know how to do market research and planning but they didn't either. So, we started to bring in experienced product managers and tripled marketing salaries. We still have to address the fact, though, that we have a lousy reputation for documentation and hold time for telephone support can be as long as an hour and a half.

Over the summer and fall of 1984, insiders and outsiders alike were registering doubts about Ashton-Tate's future. Pointing to Framework's below expectation sales, some analysts had written off Ashton-Tate as another one-product company that couldn't come up with an encore. The press portrayed the company as a hip pocket enterprise with no particular concept to operate by, and questioned whether it could cope with its growing spectrum of products. Virtually everyone agreed that Ashton-Tate needed to create a more stable, well-organized operation and that Esber was an unlikely candidate for the task.

# Esber's Outlook

Ed Esber stepped into his new role as company CEO with some well-formed ideas about the future of the microsoftware industry and the implications for Ashton-Tate. His assessment of the situation in the fall of 1984 was as follows:

There are some marketplace changes taking place that will have a profound effect on how we do business. First, we're seeing the industry go from hundreds of companies to an oligopoly of three--Lotus, Microsoft, Ashton-Tate--which will shift the focus from knocking off the leader to maintaining position. Second, explosive growth rates are beginning to slow, which means you have to work against managers' tendencies to expect 200-300% growth yearly and a doubling of their empires. Gone are the days when you'd exceed every sales forecast, the money would pour in, and you couldn't spend fast enough to be unprofitable. You now have to look at costs, and follow the technology curve just at the proper pace so you stay at the forefront but not so far ahead that you never get to the cash cow stage of the product life cycle. Third, there's a growing trend from selling to individuals to selling to corporations, which tend to be conservative and want the hand-holding that IBM offers. The implications for us are that company image becomes critical and product leadership is less important than surrounding products with the services, support and training that corporations want. Also, customer input is increasingly important for new product success. People talk about technology versus marketing companies; I say you need both but marketing must lead at this stage.

When I looked at Ashton-Tate, I realized it was running on momentum and was in danger of falling into "the small business Bermuda Triangle." To grow, you have to have a company feeling bigger than it is. Ashton-Tate didn't have the mindset or the infrastructure needed to grow plus it had no mission, no longterm idea of where it wanted to go. We need procedures that will make people's jobs easier and facilitate communication. We also need planning systems that are built around an annual plan rather than isolated events like product launches, and are driven by strategy. Most people in this business would roll on the floor laughing at the idea of a five-year plan; I say you must try to anticipate things and plan ahead when you're facing long development cycles in a complex market. Finally, we need a culture that focuses on teamwork and innovation. My management philosophy is very different from my predecessor's. I see the organization as an inverted triangle where people do the work and my job is to help, and believe that in the long run you need participatory management if you're going to grow.

As he prepared for his first board meeting as CEO, Esber focused on his major challenge: guiding Ashton-Tate's transition from an entrepreneurial venture to a professionally managed company positioned for long-term growth. In a way, he reflected, the company's terrible reputation made the job easier because there was nowhere to go but up. The first step would be to develop an action plan for accomplishing his three priorities: (1) change culture, (2) put in control and planning systems, and (3) develop strategic roadmap.

#### Exhibit 1

#### ASHTON-TATE (A)

#### Personal Computer System

Computers were designed to perform four basic functions: accept information (input), manipulate information (processing), retain information over time (storage), and present the results of processing (output). In the mid-1980s, computer professionals recommended a step-by-step approach to the task of assembling hardware and software components into a personal computer system suited to the needs of its user.

#### Hardware Components

Hardware components included the central computer, which was housed in a small plastic case, plus peripheral equipment. The central computer consisted of three types of silicon chips delicately wired together and mounted on plastic boards: (1) the microprocessor, which executed information-processing instructions, (2) internal memory, where programs and data were stored while in use, and (3) input/output interface, which permitted the central computer to communicate with peripherals. Peripheral equipment included a variety of input and output devices, external memory and communication tools. Users communicated with the personal computer through input devices: (1) typewriter-like keyboards, which were standard features of IBM PC and "clone" systems, (2) pointing devices, such as a handheld "mouse" or touch screen, (3) speech recognition units, which were still under development and would permit users to talk to the computer. Output devices typically included a monitor (i.e., video display screen) for quick viewing, and a printer for a permanent record of information. External memory devices included tape/disk drives for recording and reading information on magnetic media (e.g., "floppy disks"). Communications hardware, which permitted data exchange between two or more computers, included modems (for telephone line tie-in) and network transceivers (for linkage with local area networks).

#### Software Components

Microsoftware was divided into two broad categories: (1) systems software, which included all programs designed to control machine operations or to help write new programs, and (2) application software, which tailored the computer to specific user tasks. Operating system software, which usually was included in the purchase price of a new personal computer, acted as an interface between the user, the computer hardware and the application program. Application software could be custom-designed to user task requirements, or selected from a vast array of "off-the-shelf" packages (i.e., diskette plus user manual). Commercially sold software titles typically bore a version number (e.g., 1.0 or 1.1 or 2.0) that signaled revisions made by the publisher to add new features or correct old "bugs." Each computer program had its own set of commands, which had to be learned before the software could be used effectively.

# System Assembly<sup>a</sup>

Experts recommended a five-step process for assembling a personal computer system: (1) list ways the system will be used, (2) learn about programs for those application areas, (3) select software, noting minimum hardware resources required,<sup>b</sup> (4) select hardware, and (5) consider compatibility and expansion issues. The compatibility issue involved ensuring that hardware components could work together, and that application software was compatible with operating system software, data files and hardware capabilities. Planning for expansion required attention to the computer's capacity for accepting add-ons (e.g., a memory expansion board), product upgrading policies, and networking possibilities.

<sup>a</sup>This section was drawn from <u>Computing Today:Microcomputer Concepts and Applications</u>, Sullivan, Lewis and Cook (Houghton Mifflin, 1985).

<sup>b</sup>The range of software a computer could use was limited by its processing power and memory capacity. Since information in the computer was expressed in a machine language that combined binary digits (or bits) into groups of eight (called bytes) to represent characters, hardware performance capabilities were expressed in those terms. For example, machines using an 8-bit microprocessor could handle eight bits of data simultaneously and support up to 6400 bytes of memory, while an advanced 32-bit microcomputer could process information four times faster and store up to one million characters in its internal memory.

Product Category	WORD PROCESSING	SPREADSHEFTS	DATABASE MANAGEMENT	GRAPHICS	COMMUNICATIONS	MULTIFUNCTION
Product Description	Program for entering, editing, formating and printing textual documents	Program for entering, moving, labeling and displaying numbers. Also stored numer- ical formulas, for instant "What if" recalculations of financial data.	Permitted user to create, manipulate and edit data files in order to extract specific information and present it in desired format.	Displayed infor- mation in form of bar, pie, line or scatter diagram.	Permitted trans- fer of data instructions between computers.	Combined a number appications in in a single program.
User Penetration <sup>a</sup>	75%	50%	50%	25%	13%	20%
Current Best Sellers <sup>b</sup> (Manufacturer)	PFS:Write (Software Vublishing) MultiMate (Multimate) Wordstar (Micropro)	FlashCalc (Visicorp) SuperCalc 3 (Sorcim/IUS) PFS:Plan (Software Publishing	FFS:File (Software Publishing dBASEIII (Ashton-Tate) Filevision (Telos Software Products)	Chart (Microsoft) Mac the Knife (Miles Computing) PFS:Graph (Software Publishing)		Lotus 1-2-3 (Lotus Development) Symphony (Lotus Development) Framework (Ashton-Tate)
Comments	Highly fragmented market, with market, with growing IBM presence anti- cipated. Products in- creasingly graphics- and output-oriented.		Segmented into sophisticated products (Ashton-Tate) and simpler, less expensive programs (Soft- ware Publishing).			Slower than expected growth attributed to fact that products were more complex and harder to use than stand-alone appilcations.

Exhibit 2 ASHTON-TATE (A)

# Business Productivity Software for Microcomputers

<sup>a</sup>Indicates percentage of personal computer users who reported owning the application product. (Source: Software Access survey).

<sup>b</sup>Prepared by Softsel Computer Products, Inc. (world's largest microsoftware distributor) for publication in <u>Business Computer Systems</u>, (January 1985).

# Exhibit 3 ASHTON-TATE (A) <u>Ashton-Tate Financial Review</u><sup>a</sup>

# 1. Income Statement Data (\$ in thousands, except per share data)

		Period from Inception (8/26/80)			
	1985	1984	1983	1982	to 1/31/81
Net Revenues	\$82,281	\$42,994	\$18,100	\$3,651	\$ 465
Operating costs and expenses:					
Product costs Royalties Selling general and	\$15,771 2,127	\$ 5,534 1,985	\$ 6,472 1,795	\$1,518 1,132	\$ 311 2
administrative Advertising and	35,401	16,905	5,038	991	63
promotion Research and development Total operating costs	12,240 <u>4,971</u>	4,994 <u>3,437</u>	1,563 1,349	323	41
and expenses Operating income (loss)	<u>\$70,510</u> \$11,771	<u>\$32,855</u> \$10,139	\$16,217 \$ 1,883	$\frac{53,964}{(313)}$	<u>\$417</u> \$48
net income (expense),	656	(235)	42	1	-
Income (loss) before provision (credit) for income taxes and extra- ordinary item	\$12,427	\$ 9,904	\$ 1,925	\$ (312)	\$ 48
Provision (credit) for income taxes	5,964	4,634	854	(137)	8
Income (loss) before extraordinary item Extraordinary item	\$ 6,463 1,000	\$ 5,270	\$ 1,071	\$ (175)	\$ 40
Net income (loss)	\$ 7,463	\$ 5,270	\$ 1,071	<u>\$ (175</u> )	\$ 40
Income (loss) per share before extraordinary					
item Net income (loss) per	\$0.70	\$0.68	\$0.15	(\$0.03)	\$0.01
share Weighted average shares	\$0.80	\$0.68	\$0.15	(\$0.03)	\$0.01
outstanding	9,290	7,791	7,000	7,000	7,000

# 2. <u>Balance Sheet Data</u> (\$ in thousands)

January 31,	1985	1984	1983	1982	1981
Working capital (deficit) Total assets	\$22,025	\$14,927 31,410	\$ 352 5-853	\$ (319) 1,165	\$ 11 116
Long-term capital lease and other obligations	143	941	-	-,	-
Shareholders' equity (deficit)	29,950	22,261	975	(96)	52

<sup>a</sup>Actual results for 1981-1984; forecast for 1985.

<sup>b</sup>Proceeds from life insurance policy covering George Tate.

Source: Annual Report.



۰

Notes:

÷

2.

executive committee.

Source: Ashton-Tate.

# Exhibit 5 ASHTON-TATE (A) Ashton-Tate Management Profiles (November 1984)

EDWARD ESBER, JR.--President, CEO, age 33, bachelor's degree in computer engineering, Case Institute of Technology (1974); MSEE from Syracuse University (1976); MBA from Harvard (1978). Joined Ashton-Tate in May 1984 as vice president of marketing and sales, was named company president in August 1984, and appointed CEO three months later. Also served on company's board of directors and was member of the board's executive committee. Previous work experience included engineering position at IBM, and marketing posts at Texas Instruments and Visicorp.

NORMAN BLOCK--Finance and Administration, age 43, bachelor's degree in management and accounting, Fairleigh-Dickinson (1962); MBA from New York University. (1964). Joined Ashton-Tate as vice president of finance and administration in December 1983, and named EVP in August 1984. Work history included independent financial consulting as well as corporate finance positions with Entex Industries, General Consumer Electronics, Mattel and Dominion Textile.

RONALD POSNER--International, age 43, bachelor's degree, Rensselaer Polytechnical Institute (1964); MBA from Harvard (1967). Began serving on Ashton-Tate's board of directors in April 1984, and became acting VP and GM of international operations in September 1984. Before joining Ashton-Tate, was founder, chairman and CEO of National Training Systems (developer and marketer of microcomputer training programs). Also had held marketing and sales positions at Tratec, Xerox Data Systems and the Coca-Cola Company.

LAWRENCE BENINCASA--New Business Development, age 40, bachelor's degree from the Maritime Academy (1964). Joined Ashton-Tate in December 1983 following ten years as vice president of Reston Publishing Company (Prentice-Hall subsidiary that published computer-related books and software).

BARRY BERKE--Operations, age 38, engineering degree from Ohio State University (1970); MBA from University of Santa Clara (1980). Left position as director of operations at Visicorp to join Ashton-Tate in June 1984. Previously was materials manager at ROLM Corp. (telecommunications).

FRANK MURNANE-Finance, age 40, bachelor's degree (1965) and MBA (1971) from University of California, Berkley. Recruited from Entex Industries (consumer electronics, games, toys) in March 1984. Background included two years as self-employed consultant and almost ten years of corporate financial management experience.

<u>CARL GRITZMAKER--Domestic Sales</u>, age 40, chemical engineering degree from University of New Mexico (1967); business administration degree from University of Albuquerque (1968). Joined Ashton-Tate in March 1984, leaving position as corporate account sales manager for Lotus Development. Also had six years of management experience with various telecommunications companies.

HARVEY JEANE-Product Development, age 39, bachelor's degree in electrical engineering, University of Texas (1967). Recruited from National Aeronautic and Space Administration's Jet Propulsion Laboratory, where held a number of managerial positions over 13-year tenure. Also had worked at RCA.

Source: Ashton-Tate.