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BOOKSHELF

Book Review: 'Open,' by Rod Canion

Computers in the early 1980s were quite idiosyncratic. The Commodore PET required different instructions from the Osborne 1.

By MARC LEVINSON

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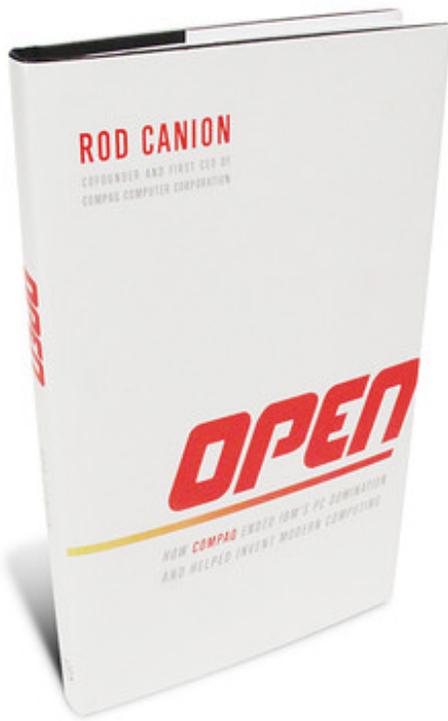
In 1981, as a reporter for Time, I interviewed a man named J.B. Fuqua. He was a conglomerator (lawn mowers, bricks, photofinishing), and he spent much of his time poring over the financial statements of firms he might buy or sell. What made him newsworthy was that he had spent an entire week in class learning to use a computer.

Fuqua was an early adopter, as executives didn't normally use computers in 1981. There were social reasons for this: Companies employed clerks to compile numbers on work sheets and junior staffers to analyze them, and there was something vaguely shameful about an executive learning to manipulate figures on a spreadsheet. Another factor was that computers back then were hard to use and quite idiosyncratic. The Commodore PET required different instructions from the Osborne 1. Users of the new IBM PC, such as Fuqua, needed to memorize the function of the F7 key and know what to do when faced with an unfriendly boot menu. One couldn't simply turn the machine on and start working.

Back then, the computer business was the Wild West. Everybody from A (AST Research) to Z (Zenith) had a computer to offer, each different from the rest. The incorporation of Gateway Technology on Feb. 16, 1982, didn't make much of an impression. Yet within four years, the company, renamed Compaq, was in the Fortune 500 and its brand a household name.

Rod Canion was Compaq's co-founder and first president, and his book, "Open," offers a reminder of how far computing has come in three decades. At the dawn of the personal-computing age, it was unclear why anyone other than a hobbyist would want a computer. Mr. Canion's book covers the crucial early years of this revolution from the perspective of one of its main drivers, chronicling his company's unheralded birth, its search for a marketable product, and its success in challenging IBM's domination of the nascent personal-computer business.

"Open" isn't a work of great literary merit. Mr. Canion's prose has all the charm of a computer manual—"It's difficult to grasp the hopelessness of the situation we faced" is about as emotional as it gets—and the book is laced with quotations from speeches and corporate press releases. The author dishes no dirt, and no one except IBM Corp., Compaq's chief competitor, comes off looking badly. Although Mr. Canion says the job of turning a startup into a billion-dollar company was exhausting, drama, passion and conflict



Open

By Rod Canion

(BenBella, 214 pages, \$24.95)

are all but absent from his book.

What makes "Open" interesting is Mr. Canion's discussion of the key events in the development of the personal-computing industry. By today's standards, the equipment of 1981 was shockingly primitive. IBM, he reminds us, had a built-in advantage because software companies were quick to introduce programs that would run on IBM machines. Competitors introduced PC look-alikes but with modifications so as not to infringe on IBM's patents. As a result, buyers of non-IBM computers couldn't simply use prepackaged software written for the IBM PC. Software companies would introduce programs for other computers with much delay, or not at all.

The key insight of Compaq's founders was that, if they could design a computer that could run software written for the IBM PC, they would have an edge over all IBM's other competitors. On a place mat from the House of Pies restaurant in Houston, using a pencil borrowed from the waitress, Mr. Canion, himself an engineer, co-founder Jim Harris and industrial designer Ted Papajohn sketched out the design of a portable computer, then set out to reverse-engineer the PC without infringing on Big Blue's patents.

Portable was a euphemism, for Compaq's first machine weighed in at 28 pounds. In mid-1982, Compaq's factory

began building 200 units a month. The assembly process seems to have been rather rudimentary. Mr. Canion recalls bringing a prototype of that first computer to the offices of this newspaper in September 1982: "I set the prototype on the table, plugged it in, and turned on the power switch. Nothing happened. Trying hard to remain calm, I turned off the power switch, opened the computer's cover, and reseated the plug-in boards. When I turned it on again, it started normally and worked fine. I explained that the taxi ride into the city had loosened the boards."

Soon a considerable industry was producing computers sold as "IBM-compatible." IBM was forced to spend years battling these "clones." The denouement, as Mr. Canion describes it, came in 1989, after IBM introduced a proprietary design for the circuits and slots that allow a computer to connect with peripheral devices. The design would have forced clone manufacturers to license IBM's technology, giving the company a stranglehold over its competitors. Fighting the conventional wisdom that it was up to IBM to set the standards for the PC industry, Mr. Canion led a revolt, getting 80 companies to agree on a different design that IBM would not control. "There would be no more serious challenges to the reign of the open industry standard throughout the remainder of the PC era," Mr. Canion writes with evident pride.

Compaq's successful struggle helped put an inexpensive computer on every desktop, blocking IBM's attempt to control personal computing the way it dominated mainframes. Yet Mr. Canion himself failed to recognize that the open standard would reshape the personal-computer industry; once many companies

were using identical technology for key components, consumers had no incentive to pay more for a Compaq than for a Toshiba or a Dell. Profits plummeted, and he was unceremoniously booted out of Compaq in 1991. But you'll have to read about that story elsewhere. Mr. Canion, true to his training as an engineer, is far more comfortable talking about technology than about the turbulent life of a corporate executive.

Mr. Levinson's most recent book is "The Great A&P and the Struggle for Small Business in America."

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