Making it in hobby software

Tom Pittman

Can you make money selling software to the computer hobbyist? Good question. Two years ago the only software explicitly available to the hobbyist was the Basic interpreter sold by MITS for the Altair 8800. It was widely recognized as an excellent program, but it sold for between $100 and $300, depending on how much hardware you bought. Furthermore, when Altair Basic first came out, MITS reportedly antagonized a number of users by requiring non-disclosure license agreements from their customers. Neither the prices nor the agreements are out of line for comparable products in the commercial computer industry, but these customers are not businesses making profit on the use of their computers. They are in this for fun, and the price comes out of their entertainment budget.

The inevitable happened. A black market developed in pirated copies of Altair Basic. Since the reproduction costs of software are negligible, the price for black market software was the asking. The computer clubs became distribution centers, often with the explicit policy of "Take one, bring back two."

At the same time, the hobbyists were beginning to discover how useless a computer is without software, and letters began appearing in the hobby media decrying this dearth. This was especially the problem with the newer 6800-based computers, because the only software available was a few pirated copies of the Motorola co-resident assembler and text editor. The substance of the letters was that if the price was not excessive they would be willing to pay for it.

Not long after, People's Computer Company ran a series of articles entitled "Build Your Own Basic" structured around Bob Albrecht's language for children, Tiny Basic. I suppose the articles were intended to fill the software vacuum by getting the hobbyists themselves to write the code, given overall direction and program structure. Very quickly several versions of Tiny Basic showed up for 8080-based systems, and a new publication arose to carry on the momentum.

I watched all of this with more than passing interest, having for the last five years been a microprocessor consultant, selling custom software to industrial users. Seeing the Altair Basic fiasco, I had pointedly stayed out of the hobby software business. This attitude was reinforced by the bitter open letter from Bill Gates, the developer of Altair Basic.

But consulting is an up-and-down business, and in the spring of 1976 I was in the down phase. Since a major part of the work (the definition and program structure) for Tiny Basic was done, and since I am experienced in writing interpreters, I saw this as a possible way to pay the next month's rent. I chose the 6800 as having the hardest software vacuum yet still with software tools. And I found a company willing to pay the development for non-exclusive distribution rights.

I mention these factors because they all had a bearing on the success of my venture. The initial reaction to Tiny Basic 6800 was slower than I expected, but the response was overwhelmingly favorable. Though I priced the program at $5, several people sent $10 or more, insisting that $5 was too cheap. Many of the orders came with signed non-proliferation agreements, though I had asked for none. These phenomena have subsided, but I still get requests for more software. People continue to wonder if I can make any money at $5 each.

I think of the marketplace as something like that for a book on, say, taking photographs. If the book is priced at $100, the publisher will sell one in each city—to the public library, where it will be placed near the Xerox machine. If the price is more like $5 or $10, then the market is much larger and the temptation to make bootleg copies is much smaller. Paperback novels sell for less than $2, but they sell in the hundreds of thousands. Software is similar. There are probably more bootleg copies of Altair Basic around than there are legitimate ones. At $50, Scelbi is marginal (I personally have seen paid and pirated copies in equal numbers). At $5, the time and cost in copying are significant: 26 pages at 10¢ each (unless the company copyier is used) plus about 20¢ worth of paper tape and less than half an hour of labor (free if you are into it as a hobby).

The other problem to be considered is the size of the market. I took Tiny Basic to the Personal Computing Fair in Atlantic City last August and lost money, though hardware exhibitors considered the fair a success. The reason is that software is saleable only to those who already have a computer. In fact, many of those who pay $50 or more for the hardware are unwilling to spend $5 for something they think they might get free.

I'd say the economics of the situation are something like this: unless hobby software can be priced low enough and its usefulness made broad enough to ensure a large market, it may have to serve merely as a loss leader for a more obviously profttable product like hardware. In the first case the software must be usable substantially unchanged in any of a large number of computers, a circumstance which the manufacturers diligently work to prevent.
to prevent, and there must be little or no competition. In the second case it must obviously enhance the salability of the hardware, because the manufacturer must pay for it up front as an overhead expense.

Royalty offers abound, but so far I see no takers. I am not surprised. Software is expensive to develop, and with the present size and fragmentation of the marketplace a 15% royalty simply does not provide an attractive return on investment. Perhaps when there are 100,000 computers out there that can accept the same form of software, we can afford to separate the developer and distributor, but that time is still several years away.

The question is, is low-cost software profitable in today's marketplace? At this writing I'm still not sure. With a minimal-effort package like Tiny Basic, a $2 per unit gross profit is now only a beginning to cover the investment — and only because I keep the overhead down (my wife does the packaging and mailing). I recently announced a second version of Tiny Basic for the 6502, but I seriously doubt whether it will ever pay for itself. One reason is that two manufacturers have announced full Basic interpreters; this cuts heavily into my sales, even though neither is yet available, and the development of one hasn't even started. Similarly, the announcement of full Basic for the 6800 by three different companies is eroding my sales in that market.

People continue to ask me when I will come out with full Basic. The answer is probably never — I couldn't make any money on it. They ask what else am I working on. The answer is nothing right now — Tiny Basic sales are not enough to support me during the development, and I am back to writing custom software to pay the bills. I haven't abandoned the hobbyists; over the long term they may represent a profitable market. But for now it is a capital-intensive venture and I've got to go easy.

Since I got started, I have seen two other software companies come up with low-cost software. It will be interesting to see how they fare.

References

5. One of the more prominent booths at the fair had a large sign announcing "FREE SOFTWARE" as a come-on for selling magazine subscriptions.

Digital Signal Processing. Nine lectures, September 29 through November 19, El Camino College, Torrance, California, sponsored by IEEE. Fees: IEEE members, $40; non-members, $60.

John Deivillian, Educational Programs, South Bay Harbor Section IEEE, Suite 410, 999 N. Sepulveda Blvd., El Segundo, CA 90245.


Director, Continuing Engineering Education, George Washington University, Washington, D.C. 20052; (202) 676-6106.

PCS offers five-day customer training programs once a month on three subjects: Introduction to Microcomputers, SuperPac 180 Workshop, and PCS Advanced Software. Fee for each course, $400; discounts available for those who enroll in more than one course.

Offered at Process Computer Systems, Inc., 750 N. Maple Road, Saline, MI.

Structured Programming, July 11-22, Principles of Data Base Management Systems, July 11-12; Operating Systems, July 18-29; Compiler Construction, August 1-12; Computer Graphics, August 1-12. Fee for each course, $525.

Courses taught under technical coordination of Dr. William McKeeman, Professor of Information Sciences, University of California Extension, Santa Cruz, CA 95064.


American Institute of Industrial Engineers, Dept. GPR, AIIE Seminars, P.O. Box 3727, Santa Monica, CA 90403; (213) 450-0500.

Correlation and Coherence Analysis for Acoustics and Vibration Problems, August 29 - September 2, $475.

Continuing Education in Engineering and Mathematics, Short Courses, 6266 Boelter Hall, UCLA Extension, Los Angeles, CA 90024; (213) 825-1047.

Fiber Optic Communication Systems, July 11-15; Detection of Infrared Radiation, August 1-5. Fee for each course, $395. University of California Extension, Santa Barbara, CA 93106.

Data Communications Advanced Concepts and Systems, June 27-28, Orlando; July 7-8, San Francisco, July 21-22, New York. Fees: $425 for Datapro subscribers, $475 to non-subscribers; team discounts are offered.

Datapro Research Corporation, 1805 Underwood Blvd., Delran, NJ 08075.