

interactive computing

PRESS REVIEW

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Service to Offer At-Home T/S for \$2.75/Hour

By Jake Kirchner

CW Washington Bureau

McLEAN, Va. — Digital Broadcasting Corp. (DBC) next month will begin offering what it said is the first low-cost time-sharing network for home use.

The service, called Compucom, will be provided by the Washington, D.C.-area company for \$2.75 per hour. DBC Chairman William von Meister said his company expects to have 10,000 customers locally by the end of the year and reach a financial break-even point within six months after start-up.

The low rate for computer time is possible, von Meister said, because the service will make use of existing computer systems and be available only from 5 p.m. to 9 a.m. and on weekends and holidays.

The idea behind Compucom, he explained, is to answer the question, "What do you do with your computer network after 6 o'clock at night when business doesn't use it anymore?"

"Sell it to home users" was the answer arrived at by DBC, a privately held company spun off one year ago from TDX Systems,

"That's the problem we've licked . . . how somebody in Seattle can use a computer in Washington, D.C., for \$2.75 an hour" when long-distance phone calls cost \$15 to \$20 an hour.'

Inc. of Vienna, Va. DBC's primary business service, Infocast, transmits data over the radio frequencies of 56 FM stations around the country.

What makes Compucom practical, von Meister said, is that the \$2.75 per hour charge includes the cost of the telephone call to access the firm's computers, located here and in Silver Spring, Md. "That's the problem we've licked," he said, "how somebody in Seattle can use a computer in Washington, D.C., for \$2.75 an hour" when long-distance phone calls cost \$15 to \$20 an hour.

DBC solved that problem by "some very interesting network configurations." Not only does the firm have an extensive network of its own, but it has contracted with large companies to use their excess private telephone lines during nonbusiness hours.

The system DBC has put together has ports in 200 U.S. cities, so every Compucom user will be able to access the system through a local, toll-free phone call. The system is being tested in the Washington, D.C., area now. It will be gradually extended to those 200 cities as DBC's marketing and management capabilities are developed, according to von Meister.

Access to 2,000 Programs

Using an existing home computer or terminal or a terminal available from DBC, a user can access at 600 word/min approximately 2,000 programs offering complete business packages, computer games and news and information services. The system already offers stock market quotations, professional sports information, classified advertising and movie guides, and additional programs are being developed.

DBC is currently negotiating with individuals to produce periodic "columns" on different consumer subjects — such as "Gourmet Recipe of the Week" — to fill the "homes in on programs that were typically written for the commercial market," von Meister

said. The 2,000 currently available programs are indexed in a "very, very simple tree" which contains 24 "master libraries," each having 10 to 200 subheadings (programs).

Compucom is based on an undisclosed number of Prime Computer, Inc. Model 500, Honeywell, Inc. 1648 and Tandem Computers, Inc. minicomputers. The system presently offers about 4,000 ports, which von Meister reckons as capable of serving 50,000 customers. The system can be expanded almost infinitely, he said, by adding more computer power.

Terminals Available

DBC is also offering a range of equipment for the user of the system. The Source 1, an alphanumeric keypad manufactured by Hazeltine Corp., is available from DBC for \$595. On a lease-purchase plan, the Source 1, which comes with an acoustic coupler and a hook-up for the user's television, costs \$90 down and about \$13/mo on a five-year basis.

Another terminal, the Source 2, described by von Meister as a "full-blown CRT of high commercial quality," costs \$950. DBC will also provide a selection of two printers manufactured by Centronics Data Computer Corp. and Anadex, Inc. The printers will operate at 30 char./sec.

If a customer has his own terminal or home

'When a user opens his account with Compucom, he provides his Visa, Master Charge or American Express card number. At the end of each month DBC will compute the user's bill and enter it on a master billing tape, which will be taken to a bank; the billing will be processed through the credit card companies.'

computer, he can access Compucom for a \$100 installation charge which does not include an acoustic coupler. Couplers can be purchased from DBC, von Meister added.

User access to the system is established through a unique identification number and a password supplied by the firm. The user is billed for computer time in one-minute in-

crements. When a user opens his account with Compucom, he provides his Visa, Master Charge or American Express card number. At the end of each month DBC will compute the user's bill and enter it on a master billing tape, which will be taken to a bank; the billing will be processed through the credit card companies.

By not having to handle the billing directly, von Meister said, DBC can operate with a low overhead. Estimating an average 20 hours per month per user, he projected revenues of about \$275,000/mo once the system has 10,000 users.

Such projections are not at all unrealistic in the face of the demand for Compucom that has developed since the service was first publicized last month, according to von Meister. "We're being bugged to death" by people wanting to sign up, he said. "The problem is we don't have enough equipment yet.

"The problem is that the logistics of the marketing of something of this size are substantial. So we're going to go city by city, and Washington is the first market, which is natural because we're headquartered here," von Meister pointed out.

"Compucom will then be offered in one other city, perhaps Detroit, before being made available in New York City, which von Meister described as "the next logical place to go."

The service is now being used on an "experimental" basis in Washington, where "we've got about 50 people who are fiddling with it and helping us debug" the manuals and literature, he added.

Besides the low cost of the service, one of its big attractions is that it is completely interactive, according to von Meister. It offers an "electronic mail box" through

which users can leave messages for each other.

In addition, a program called Chat offers "direct interaction." After calling up Chat on his terminal, a user can punch in the code number of another user and communicate directly.

In this regard, Compucom is much more advanced and attractive than the videotext and teletext systems being tested in Europe, von Meister claimed. "You're not just looking up information" as with those systems.

In addition, von Meister contended Compucom will be superior to any commercially available personal computer. "We have Cobol, Basic, Fortran, PL/I, RPG, Teach and several other languages, and they are much easier to use than micro assembly language and micro levels of the higher level compilers such as Fortran and Basic," he said.

User Learns Cost Isn't Everything

By Ann Dooley
CW Staff

DUNDEE, Ill. — For a microcomputer user here, trying to buy micro equipment as cheaply as possible was the most expensive decision he ever made.

Kenneth Sibrava, president of Syner-systems, bought equipment from a wholesaler instead of the manufacturer and received more than he bargained for in malfunctioning equipment, misleading promises and costly time delays.

A year ago Sibrava and his associate, Dennis Pikarski, decided to form a consulting firm and service bureau to provide accounting and business functions to doctors, lawyers and other small or medium-size businesses in this Chicago suburb. Sibrava planned to use a series of microcomputers linked together to maintain a low overhead.

Although Sibrava and Pikarski had some DP background, they had difficulty selecting the microcomputer equipment needed to set up their business. "The micro industry is like a jungle," Sibrava said.

After looking at equipment from a number of companies, including Texas Instruments, Inc., Intel Corp. and Imsai Manufacturing Corp., as well as talking to both manufacturers and dealers, Sibrava decided to use Cromemco, Inc. equipment. "It came down to a price comparison. The Cromemco equipment does as much as most others and costs a lot less," Sibrava said.

Right Choice, Wrong Source

The choice itself was the right one, according to Sibrava: "I'm still amazed I got equipment that does what it does for the price. The mistake we made, however, was trying to get by even cheaper."

At the time, the company needed a certain amount of equipment but had only a limited amount of money. "We decided to go strictly by price and to purchase most of the equipment from a Syracuse, N.Y. wholesaler," he said, but declined to name

the wholesaler because he is considering suing the organization.

Sibrava agreed to buy two Cromemco computers — a Z-2-fully assembled factory unit and a Z-2D kit. The fully assembled unit malfunctioned as soon as it arrived; it was later found to have been assembled in the wholesaler's shop and not in the factory at all, according to Sibrava.

The kit's seals had been broken, working parts had been replaced with defective ones and the wholesaler had sold memory that wasn't even compatible with the equipment, he charged.

It took more than two months to get all the parts and then everything malfunctioned at least once, including all the memory boards, controller boards, disk drives and CPUs, Sibrava said.

Manufacturer to the Rescue

Since the wholesaler was completely uncooperative and refused to do anything

about the equipment, "in desperation I called Cromemco, not knowing what to expect since it really wasn't the manufacturer's problem," Sibrava recalled.

Cromemco's people in Mountain View, Calif., were hesitant at first, but after Sibrava talked to Cromemco's customer support engineer, Allen O'Neill, help began arriving. Cromemco replaced the defective parts, many at no cost.

"The people there kept telling me they couldn't believe the poor job that had been done just in assembling the Z-2," Sibrava said.

Once most of the parts had been replaced, O'Neill spent several days working with the system and looking for bugs.

"If it hadn't been for the factory, I would have jumped off

a bridge," Sibrava admitted.

Behind Schedule

So many things had gone wrong at the beginning that it took a lot of extra testing and debugging to get the system going. As a result, Sibrava and Pikarski have fallen far behind schedule.

"There are customers waiting for the service, but even now that the system is up and running I'm hesitant to open for business because I want to be sure nothing more will go wrong," Sibrava said.

The complete system consists of seven micros hooked together. Each is assigned an individual task. One micro supports one software function and then turns the data over to the next micro for further processing. The system can handle quite a bit of data at a lower cost, he noted.

On looking back at his money-saving idea, Sibrava said, "I've learned a lot from this whole thing — the hard way."

One lesson he learned is that cost isn't everything; although there was a \$5,000 difference between buying from the wholesaler and buying from the factory, the time and aggravation added up to a lot more, he said.

"I've also learned to check for references. We had done a little checking on the wholesaler, but he refused to give us any references, saying it wasn't worth his time to fool around with them. From now on we'll know better," Sibrava said.

Another RCS Vendor Plans To Introduce Minicomputer

By Don Leavitt

CW Staff

GREAT NECK, N.Y. — The trend continues. Another remote computing service (RCS) vendor has announced plans to sell or lease an IBM 370-compatible minicomputer, complete with software and support, for a cost "well below alternatives."

To handle this side of its business, Time Sharing Resources, Inc. (TSR) has organized a subsidiary called Mega Systems Associates. The hardware Mega will offer is the same 370/138-class machine developed by Two Pi Co. and already available from National CSS, Inc. as its System 3200.

Installed at a user site, Mega's system is "the first sensible alternative to the high costs of outside APL time-sharing," a vendor spokesman asserted, adding "it provides at least 5:1 price/performance breakthrough, with no conversion delays or costs."

The difference between the Mega system and those offered by other RCS vendors will be in the software and services provided users, Mega said. TSR is an APL-oriented RCS vendor and the Mega system will be delivered complete with all the system software and application programs in the TSR public library.

The spokesman claimed TSR's APL system is the most comprehensive in the industry, adding, "it is fully compatible" with major APL time-sharing vendors such as Scientific Time Sharing Corp. (STSC). An official at STSC noted, however, that TSR's APL does not include STSC's Automatic Control of Execution (ACE) functions [CW, Aug. 28].

As part of its product, Mega said it is prepared to convert any user program to run in APL on the Two Pi hardware at no cost to the user. Although that support is generally expected to be used in connection with programs already in APL, the vendor claimed the support — still free — will be provided no matter what the source language of the original program.

Along with the APL compiler and its support system, the TSR software in-

cludes a keyed file system and program products for financial, econometric and data base management applications, the spokesman said. The directory published by the Association of Time-Sharing Users lists items such as a portfolio analysis and evaluation program, support for Box-Jenkins time series analysis, and a text and letter writing system.

The various data bases that can be accessed through TSR's communications facilities presumably will not be part of the package offering, since they would effectively be impossible to maintain and update as they must to be remain useful.

Sixth to Enter Arena

TSR's entry — through Mega — brings to a full half dozen the number of RCS vendors now in or almost in the hardware arena. In addition to National CSS, others include Keydata Corp., General Electric's Information Services Division, Automatic Data Processing, Inc. (ADP) and STSC.

Most of the equipment being offered by those vendors is in the IBM 370 138 and 148 classes, although GE moved in a different direction with hardware comparable to IBM's 8100 minicomputer.

Mega expects to deliver its first system in June. When STSC announced its APL-oriented Quad 100 minicomputer, [CW, Dec. 4], it said deliveries would start in the first quarter of 1979, but a spokesman last week admitted his firm has yet to select a hardware supplier.

Mega is offering its hardware/software/support package under a six-month lease plan for \$15,000/mo. It can also be purchased for \$100,000 or leased, under a facilities management-type plan in which Mega would operate the system (at a Mega site), for \$20,000/mo.

Under any of these plans, the system should be an attractive offering to the "heavy" time-sharing user who currently spends \$100,000 or more each month for RCS support from an outside vendor, Mega said from 777 Northern Blvd., Great Neck, N.Y. 11022.