



PRESS REVIEW

The following articles are reprinted solely as items of interest for the independent evaluation by members of ATSU. The opinions, statements of fact, or conclusions expressed herein are not those of the Association.

IBM Introduces Small Computer Starting at \$9,875

Firm Cuts Prices on Some Copiers and Typewriters, Creates New French Unit

By a WALL STREET JOURNAL Staff Reporter

ATLANTA—A small business computer selling for as little as \$10,000 was introduced by International Business Machines Corp.

Most small business computers cost more than \$20,000 and until yesterday, the price of IBM's least expensive such computer was \$33,560.

The new machine, the Model 5110, is aimed at one of the most rapidly growing markets in the computing industry: companies with annual revenue of about \$1 million who lately have been snapping up so-called personal computers for use in small offices, warehouses and factories.

The 5110 also seems to be an effort to redirect one of IBM's less successful recent products, the Model 5100.

In separate announcements, IBM also cut prices on some electric-memory typewriters and copiers, added to its line of electronic typing systems and said it has created a new French subsidiary.

Models of the 5110 computer system will cost from \$9,875 to \$32,925, depending on memory size and other features. Main memory in the machines ranges from 16,000 to 64,000 characters and the largest system can store an additional 4.8 million characters of information on diskettes, which are memory media that look like 45-rpm records.

First deliveries of the 5110 are scheduled for next month.

5100 Sales Modest

The 5110 computer is an improved version of the 5100 that IBM introduced in September 1975 as a desk-top aid to scientists and engineers. Sales of the 5100 have been

modest, industry people said, because many potential customers regard it as too costly for scientific work and too difficult to adapt to commercial tasks.

By changing the packaging of the electronic circuits inside the computer and the way in which they are wired together, IBM has made the 5110 from three to 30 times faster than the 5100, depending on the work it is doing. Diskette memory also was added; auxiliary memory in the 5100 consisted of a tape cartridge.

Prior to the 5110, IBM's lowest-priced computer aimed at the small business market was the System 32.

IBM said it will continue to sell the Model 5100, but that some of the machines sold as new will actually be refurbished ones.

Price Reductions

In the area of office machines, the purchase prices of four of IBM's 10 models of memory typewriters were cut from 10% to 25%. For example, the price of the Mag Card Selectric typewriter was reduced to \$5,400 from \$7,200, and the price of the Mag Card II was lowered to \$11,150 from \$12,390.

The purchase price of IBM's Copier II copying machine was dropped to \$13,500 from \$15,000.

The company also said it changed the method for computing the credits it gives rental customers toward the purchase of copying machines.

The price changes took effect yesterday and apply to nongovernmental customers; the company said it made similar reductions in its governmental pricing.

Adding to its Office System 6 family of electronic typing systems, IBM introduced the Models 6/442 and 6/452 information processors. The machines employ impact printers; other members of the System 6 family use nonimpact printing.

The 6/442 rents for \$575 a month and sells for \$17,250. The 6/452 rents for \$685 a month and sells for \$21,100.

In Paris, IBM's European subsidiary, IBM Europe S.A., said it created a subsidiary in France called IBM Southern Area Development aimed at providing management advice and services for certain of its activities in Africa and the Middle East.

The subsidiary will be headed by Michel Faucon, general manager for central services of IBM Europe.

Remote Services Industry Sees Continued High Growth

NEW YORK — Still cruising through what some observers see as a period of youthful expansion, the remote computing services industry is looking ahead to continued growth rates higher than those of the EDP industry as a whole.

User acceptance of specialized software, consolidation of smaller firms into larger ones, and the growing sophistication of network offerings are enabling the services industry to mature and specialize its products to compete with small computers and mainframes.

Growing pains are surfacing, however. The demand for experienced sales and technical staff is putting a premium on qualified heads, a factor which is limiting growth at certain firms, industry sources claim.

Enhancing Software

New products, often geared towards specific applications, are being developed, but some firms are enhancing existing software for extra performance and applicability, sources point out.

Acquisitions, too, are helping larger firms enhance their product offerings, whether in a new market area or in a new geographical area. Geographic expansion is underway both domestically and abroad, sources indicate.

According to a study undertaken for the Association of Data Processing Service Organizations (Adapso) by International Data Corp., Waltham, Mass., data processing services revenues for 1976 were some \$3.6 billion with a growth of 16 per cent.

Average growth rate for the next 5 years, the study claims, will be 17 per cent annually.

A spot survey of major time-sharing firms showed general agreement with the Adapso/IDC figures and, in every case, a positive outlook for the months to come.

National CSS of Norwalk, Conn., for instance, saw an "uptrend in revenue growth" for the year just finished, according to Robert Weissman, president. The fourth quarter of 1977 saw a growth of some 18 per cent, he said.

"We've seen a reduction in account attrition — fewer accounts are leaving the firm," Mr. Weissman said when asked to explain the firm's growth and that of the industry as a whole.

Good Year

The year 1978, he said, will be "a good year" for National CSS, although no major product introductions are planned. New mainframes — either IBM 303X or Amdahl V/7s — are scheduled for in-

stallation in the June to October period, he added.

Asked about the consolidation trend in the services industry, Mr. Weissman said the firm is "actively looking" for firms to take over.

"We've set our aspirations higher than before," he commented. However, the industry-wide trend has slowed somewhat, he added.

Only 29 service firms, he noted, have annual revenues greater than \$9 million, but some 2,500 other firms also consider themselves in the services business. "The consolidation trend will continue because this is a highly fragmented industry."

Plans for 1978 include the expansion of sales offices into at least two more cities and the enhancement of the Nomad data base system which last year accounted for some \$10 million in revenues, Mr. Weissman said.

General Electric's Mark 3 time-sharing services had an "extremely fine year in 1977" and GE has projected strong growth for the coming 12 months, according to Robert Hench, general manager of the marketing department.

Several new products — a data management package and a Fortran 77 compiler — were introduced last year and are expected to contribute to increased revenues, Mr. Hench said.

Nothing Negative

Looking ahead to the near future, Mr. Hench said: "The pipeline looks strong; there are no serious negative indications on the horizon, at least as far as the industry itself is concerned."

Control Data Corp., one of the most dominant forces in the data services industry, expects its revenues in that area to increase some 21 per cent to nearly \$300 million this year, according to a spokesman.

Particular areas of strength, the spokesman noted, include structural engineering, Call/370 services from The Service Bureau operation, and several

industry-oriented services. Although the firm declined to elaborate on marketing plans for these areas, it was indicated that both new products and enhancements to existing ones will be offered.

And 1978, CDC said, will be "another excellent year," with revenues expected to increase faster than the industry as a whole.

Boeing Computer Services, according to Ron Koval, vice-president of sales, expects growth for 1978 to be in the range of 25 per cent to 30 per cent, similar to that of last year.

Existing products will be enhanced, Mr. Koval said, but no major expansions — either geographic or marketing — are planned. The firm's executive information system (EIS), he noted, will continue to produce "good" revenues as it has since its introduction in mid-1977.

Several large-scale IBM 3033 processors are on order for installation at a McLean, Va., data center which will open late this year, the Boeing executive said.

Asked to comment on trends currently affecting the industry, Mr. Koval said that an integration of small computers and large communications networks will be necessary in the future.

"We have to shake out the role of the minicomputer as a front-end device for distributed processing and as a turn-key

stand-alone system," he explained. Boeing, he noted, is considering the problem from both angles.

Tymeshare, Cupertino, Calif., expects 1978 to be a good year, "roughly comparable in terms of growth to 1977," according to Ronald W. Branniff, group vice-president for the Computer Services group.

The firm expects to do over \$100 million in business, a first for Tymeshare, in 1978, Mr. Branniff said.

Tymeshare is still consolidating its 1977 acquisition of the Western States Banking Association credit card processing operations, Mr. Branniff said, noting that that deal was the largest acquisition the firm has undertaken so far.

Currently, the firm has a "healthy base of customers and we're hiring a lot," the executive said.

Rapidata, Fairfield, N.J., had a

with Rates

Boe- "reasonably good year" in 1977, a
the spokesman said, noting that 1976 "was
not a good year."

Revenues for the last 9 months of the
current fiscal year were up 16 per cent
compared with the 6 per cent gain ex-
perienced for all of 1976, the spokesman
said.

Bowne Timesharing, a firm here that
specializes in word processing services,
saw 1977 as "an interesting year, a tough
year," according to William Mahony,
vice-president of sales. He attributed
the toughness to increased competition
from stand-alone word processing
systems which were marketed by firms
such as IBM and Wang.

Despite the resulting "confusion in
users minds" — a factor which slowed
the selling cycle down — Bowne grew
some 44 per cent in revenues in the past
year and expects to grow by some 30 per
cent in 1978, Mr. Mahony said.

Reprinted with permission, *COMPUTERWORLD*, January 2, 1978,
©Computerworld, Newton, MA 02160

Users Told Not to Underestimate Cost of Installing Small Machines

By a CW Staff Writer
ANAHEIM, Calif. — When
it comes to costs, putting in a
minicomputer is just like put-
ting in a mainframe: "You
have to do your homework,"
John M. Weir, president of
Accounting Datamation, Inc.
told a session at a recent con-
ference here.

Installation costs are impor-
tant because they often exceed
hardware costs, he cautioned
about 200 attendees at a ses-
sion on the criteria used in
selecting and evaluating a
minicomputer.

The installation includes the
planning and system design
phase, the programming of
the system to meet the objec-
tives outlined in the planning
phase, implementation of the
system and both hardware and
software maintenance.

One of the most important
cost-cutting hints an or-
ganization installing a system
can follow is to make a plan
and stick with it, Weir said.
Following a plan requires the

involvement of the people in
the firm where work habits
are to change because of the
system, such changes should
be anticipated, he said.

The most important change
that will take place when the
mini is installed will be the in-
creased efficiency of manage-
ment, he added.

'Pay as You Go'

In order to follow a plan, the
organization should be aware
of the areas that need to be
automated. Some applications
may be of marginal value to
the business, he told the
group.

The best way to make sure a
system is cost-justified is to
adopt a "pay-as-you-go" pro-
gram of savings, he said.

Management should be
heavily involved in the study
of which system to choose and
the implementation plan, he
noted. All the design work
should not be left to others; if
management is to make the
final decisions, there is "no

substitute for you in manage-
ment of the business to get in-
volved."

System design should be un-
dertaken by the people who
know why an application
should be performed a certain
way. Final responsibility for
how an application is run
should lie with its user, who
should sign off on a descrip-
tion of what work is wanted,
he recommended.

Programming of the system
can be done by an in-house
programmer, software consul-
tant or by the vendor who sold
the system. If the user chooses
to go to a person outside his
organization to write the pro-
grams, he should look for
someone who is familiar with
his business.

The user should go visit an
installation, Weir advised.
Even if that particular installa-
tion is not doing exactly what
the user wants to do, "you'll
come out of the place with
good ideas," Weir said.

SERVICES GROWTH OUTPACES TOTAL DP SPENDING

The \$5 billion computer services industry accounts for 16% of total dp spending in the U.S. Its revenues were almost four times the value of terminal and data entry equipment shipments in 1976, almost three times the revenues of all minicomputer makers, and about the same as the total of general purpose mainframe shipments in the U.S.

A study of the services industry by International Data Corp. shows a compounded growth rate of 17% over the next five years, compared with some 15% to 16% for total dp expenditures. Nancy Scull of IDC, speaking at the ADAPSO conference, said the service vendors are feeling less threatened by the proliferation among first-time users of minicomputer-based systems, and instead are putting them to use in the services business.

In the longer term, the vendors can see using minis to develop products. The research firm also notes a continuation of the trend toward increasing specialization by service companies.

Processing firms dominant

Of the \$5.3 billion in revenues last year, processing service companies drew down a dominant 68%, or \$3.6 billion. Next in line were staff-support services firms (that offer custom/contract software and systems development services) with 13%, followed by software package vendors with 10%, and facilities management companies with 9%. In growth, however, the packaged software business led the way, up 34% over the previous year and expected to continue at a 27% compounded rate over the next five years (see table).

As might be expected, international

revenues of processing companies were much lower than of software companies. Among the latter, foreign sales accounted for an average 17% among large software companies, 15% for medium-sized firms, and 11% for the small. But among processing firms, it was only 6% for the large and medium, and a mere 1% for the small. Scull pointed out, however, that this does not include revenues derived by any joint ventures abroad.

In general, she said, the companies' strategies look like this:

Processing companies are interested in enhancing their current products and adding packages for the same industries they now serve. Medium and small firms are interested in geographic expansion, both domestic and international, and have some interest in minicomputers—but she reported that overall there's little interest in minis.

Large companies are interested in

mergers and acquisitions. Medium-sized companies anticipate getting into packaged software, while the large firms are moving into DBMS packages. There's also a strong interest in turnkey systems.

Systems software packages

Software companies are also enhancing their current products. Large and medium companies, in particular, see growth through geographic expansion, while medium and small firms are looking for growth through specialization, mergers, and minicomputers. In the matter of new products, all seemed interested in the systems software packages market, the medium-sized firms planning to do more in DBMS packages. All seem interested in minicomputer packages and in applications for manufacturing, banking, and insurance. *

THE SERVICES MARKET IN THE U.S.

(\$ billion)	(Source: Input)		
	1976	1982	Average Annual Growth
Remote Computing	\$1.8	\$5.7	21%
Batch Processing	1.6	2.4	7
Facilities Management	.8	2.1	17
Total Processing Services	4.2	10.2	16
Professional Services*	1.1	2.2	13
Software Products	.6	1.9	21
Total Market	5.9	14.3	16%

*Custom software and dp consulting