WANG Printout

Distributed data processing: the Wang approach

Editor's Note: This is the first in a series of articles on Wang's approach to distributed data processing, excerpted from the booklet, "Wang on distributed data processing," by Carl Masi and Alan MacDonald.

The data processing needs of corporate management for a broad-focus financial picture, and the specific operating needs of departmental management can only be served by a flexible approach to data processing.

A new approach to data processing is therefore being discussed in corporate board rooms, EDP centers and operating departments alike. The new concept: Distributed Data Processing.

During the past few years, intelligent terminals have been employed for distributed data entry. But distributed data entry is only the first step toward true distributed processing, and intelligent terminals simply do not have the computing power to handle complex operating level applications.

On the other side of the scale, powerful and sophisticated minicomputers with communications capabilities are proposed to overcome the limitations of

What? Another Move?
Wang relocates corporate offices

FORBES cites Wang

FORBES magazine, a prestigious national business/financial publication, featured a page and a half article on Wang Laboratories and Dr. An Wang in its October 15th issue.

According to FORBES, "Wang's way of operating seems to work. Everywhere it turns, his company faces bigger, more muscular competitors . . . The only way for Wang to survive is by its technical wits -- keeping one product-step ahead of its far bigger foes."

For a reprint of the article, circle FORBES on the Reader Response Coupon.

Expanding production needs prompt purchase in Lowell

Packing boxes, moving vans, empty offices and dislocated telephones were a way of life at Wang Laboratories during the month of October.

Why? Because the company further expanded its building area to over 625,000 square feet with the purchase of a 270,000 square-foot complex in Lowell, Mass., and relocated all its office employees to the new facility.

Located at the junction of Route 3 and Interstate 495 outside Boston, the facility consists of three buildings; Wang is currently occupying two of the three, with the third under lease.

One building houses the Research and Development, Software Services, Programming and Technical Writing departments.

The second building in the complex was designed in 1959 by famed architect Minoru Yamasaki as a semi-conductor plant, and was later used as a vocational school. Its conversion to Wang's corporate headquarters, housing the Marketing, Sales, Finance, Personnel and Customer Engineering Technical Operations is a supurb example of recycling a structure.

The design of the new corporate headquarters takes advantage of the open, uncluttered nature of the building's interior. Rather than building walls and partitions,

Wang enjoys record fiscal 1976; trend continues in first 1977 quarter

In this issue of PRINTOUT, there is one recurring theme. Expansion. Expansion of our System 2200 line. Expansion of our penetration of the word processing market with a new line of equipment that has set a new standard in the industry. Expansion of our manufacturing and office space with the purchase of an additional 270,000 square-foot facility that is now our new corporate headquarters in Lowell, Mass.

And, most importantly, this expansion focuses where it counts -- on the bottom line of the Company's sales and profits.

Dr. An Wang, president and chairman of the board of Wang Laboratories, reported early in August that for the fiscal year ended June 30, 1976, revenues totalled $96,856,000, up 28% from the previous fiscal year. Net income was $6,172,000 ($1.21 per share), up 90%.

According to Dr. Wang, "Record revenues and earning for fiscal 1976 reflected primarily the success of the expanded applications of the Company's small computer products."

Dr. Wang also noted that on June 21, 1976, the Company introduced a new line of equipment targeted primarily at the word processing market, and that "of all the small computer applications, word processing will show the fastest growth rate for the next few year; with the new family of CRT-based systems, the Company will be in an excellent position to pick up a greater share of this market."

And the trend continues.

Revenues for the first quarter of fiscal 1977, ended September 30, 1976, were $24.4 million, an increase of 35% from previous first quarter. Net earnings were $1 million, up 48% from last year.

Comparing the four fiscal quarters ended September 30, 1976, the Company's revenues were up 32%, from $78 million to $103 million; net earnings increased from $3 to $6.5 million, a 112% increase.

Dr. Wang concluded, "We continue our optimistic outlook for the remainder of 1976, and believe fiscal 1977 will be another good year for the company."

For a copy of Wang's 1976 annual report and latest quarterlies, circle EXPANSION on the Reader Response Coupon.

R&D keeps up the pace!!
More products, products, products

After introducing nine new products at the Press Conference in March of this year, one would think that it would be a hard act for Wang Laboratories to follow. But Wang's active R&D department, true to its prolific nature, hasn't been sitting on its laurels. Add nine more products since March, bringing the total this year to 18. They are:

The Wang Word Processor 10, 20 and 30, an entire family of CRT, diskette-based word processors, which are low in price, upward compatible and easy-to-learn (see story, page 3).

The System 2200VP, a new CPU for Wang's System 2200 series of small computers (see story on page 3).

The Model 2251, a Wang designed and manufactured 110-cps, 40-column matrix printer, weighing only eight pounds, and costing only $1,100*. For more information, circle 2251 on Reader Response Coupon.

The Model 2231W-2, again, a Wang designed and manufactured 132-column, 120 cps matrix printer, priced at $3,800*. For more information, circle 2231W-2.

The Model 2260B, a new line of fixed/removable disk drives, with 2.5, 5, 10 and dual 10 megabyte capacities, priced from $9,000 to $23,000*. For more information circle 2260B.

The WCS/30A, B and C, a new line of hard-disk based small computers, ranging in price from $25,700 to $29,700*, which give first-time computer users a selection of complete hard disk systems, all starting under $30,000. For more information, circle WCS/30A, B, C.

The Model 2254 IEEE-488 Interface, a controller card for the System 2200 series which assures compatibility between a System 2200 CPU and other devices using the IEEE 488-1975 standard. For more information, circle 2254.
*U.S. Domestic Prices only

Over 150 users attend 4th annual SWAP Symposium

Talks on the use of computers in the Soviet Union, a data base management system for the 2200, and a "talking computer" were some of the highlights of the Fourth Annual SWAP Symposium, held October 27 through 29 at the Sheraton Rolling Green Inn in Andover, MA.

A total of 40 papers were presented in six sessions, covering business/finance, medical, education, on-line, engineering, statistics and general applications. In addition, three special 2200 training classes for the attendees were held the two days preceeding the Symposium.

This year's Symposium was, by far, the largest yet. It was truly an international event, attracting about 150 users from Canada, Mexico, Indonesia, Turkey, Latvia, the USSR, and thirty-two of the United States, including Hawaii.

The Symposium was culminated with a cocktail hour and banquet Friday night, which featured keynote speaker Harold Russell, Chairman of the President's Committee for Employment of the Handicapped.

The best measure of success of the Symposium was the response to questionnaires given to each attendee in the registration package. The returned questionnaires indicate that over 96% plan to attend the next symposium. Won't you plan to join them?

For more information on Wang's user society, circle SWAP on the Reader Response Coupon.

New 2200 CPU offers better BASIC, larger memory

At the recent WESCON exhibit in Los Angeles, Wang introduced a new, high-performance CPU for the System 2200 line, offering faster throughput, larger user memory and enhanced BASIC language capabilities.

According to Ned Chang, Wang's Senior Vice President of Marketing, "the new 2200VP central processing unit will extend the reach of Wang's System 2200 computer line into heavy disk-based applications for commercial users requiring enhanced file manipulation techniques, as well as to users needing larger, faster user memory to process intensive scientific and number-crunching applications."

Wang's 2200VP provides up to 64K bytes of memory capacity with full memory parity. Memory is available in 16K blocks, starting with 16K.

A further enriched version of Wang's BASIC language, called BASIC-2, makes writing, documenting and debugging programs easier and less time-consuming with the 2200VP.

The 2200VP is a new microprocessor, coupled with new 500-nanosecond RAM which is used for both the user memory and the BASIC-2 instruction set. In previous 2200 CPU's, the instruction set was hardwired in ROM. As a result, the 2200VP cycle time is 600 nanoseconds for most instructions, compared to 1.6 microseconds on current 2200 CPU's.

"In accordance with our objective of expanding the scope of our product line without impacting our current user base, the 2200VP offers nearly 100 percent software and peripheral compatibility with our existing System 2200 line of small computers," Everett Sheppard, Wang's 2200VP Product Manager explained.

The 2200VP central processing unit, including 16K memory and nine I/O slots, is priced at $13,000,* with maintenance at $75* per month.

For more information, circle 2200VP on Reader Response Coupon.
*Domestic U.S. prices only.

Modular, nearly self-teaching

Wang's new word processors provide benchmark for wp industry

Few people at Wang even noticed the apple blossoms blooming in the orchard across I-495 this spring, for the company was in the midst of preparing for an extremely significant product introduction -- its new CRT, diskette-based word processing line.

But the long hours of hard work by virtually all departments in the company -- from R&D to marketing, service and sales, were rewarded when Wang unveiled its new family of word processing equipment -- Word Processor 10, 20 and 30 -- at a press conference on June 21 at the Hilton Hotel in New York City.

The press conference directly preceded the opening of the Syntopican IV word processing trade show. According to Wang's Senior Vice President Ned Chang, "We scheduled our press conference at the start of Syntopican because we think our new products represent a benchmark, against which to compare all other offerings."

Word Processor 10 is a single system for standalone and small cluster usage. A System 10 consists of a Work Station with a tv-type screen and full operator prompts; a Printer Station that types at 480 words per minute; and a Storage Station that holds 80 pages of copy per diskette.

Word Processor 20, designed for small cluster work groups, uses a dual diskette Storage Station that holds 200 pages of copy. The System 20 can support up to three Work Stations and Printer Stations.

Word Processor 30, which fills the needs of the word processing center environment, has a 4,000-page hard disk with a single diskette for archiving, and can support up to 14 Work Stations and Printer Stations, in any combination.

All three systems are upward compatible and expandable, and feature operation so easy to learn it is nearly self teaching.

After the press conference and show were over, many of the attending customers shared Wang's enthusiasm for the

new word processing family. The new word processors received rave reviews from the industry press. Here are some:

ELECTRONIC NEWS, June 28 -- "Wang Laboratories led a number of companies in introducing CRT-based text editing systems last week, hoping to cut into IBM's domination of the word processing market."

WORD PROCESSING REPORT, July 1 and August 1 -- "The new market trend in WP typing equipment is the hybrid stand-alone/shared-logic system . . . This seems like a very good idea with a lot of merit. Of the manufacturers which are heading in this direction, Wang seems to have taken the lead . . . Wang had the most impressive product introduction of the Syntopican period.

"Wang Word Processor 10, 20 and 30 are 'diskette-based systems which offer modularity, expansion, performance and pricing advantages never before available from a WP manufacturer.' This is no idle boast, and probably has more validity than we are accustomed to most such boasts having."

For more information on Wang Word Processing, circle WPS on Reader Response Coupon.

At National City Bank

Word processing improves turnaround and services in four departments of major Cleveland bank

by Donald S. Wilkof
National City Bank

CLEVELAND, OH -- In 1973 the volume of referral work from local attorneys in the Legal Department of National City Bank was expanding at a rate where the department's two typists could not handle the workload. After the Operations Improvement Department determined an additional typist was necessary, we began to look into the possible use of word processing equipment.

Our study showed that the Legal Department's typing applications were ideally suited for word processing. The two typists were responsible for producing finished trust agreements and wills, with the wills averaging between five and six pages, and the trusts between 10 and 12 pages. Each typist could average only one or two trusts per day. In addition, both typists spent at least one hour proofreading each trust, with one reading the typed trust while the other compared it to the original handwritten text. Similarly, typing a will averaged two hours, with both typists proofreading the finished document for another half hour.

We also found that many of the paragraphs used in both the trusts and wills could be standardized. After purchasing a System 1220 we recorded the standardized will paragraphs and two sets of standardized trust paragraphs -- one for revocable and the other for irrevocable -- on library cassette tapes.

Using Wang word processing's document assembly feature, we have reduced the time it takes to type a trust to about two hours, and a will now takes from 30 to 45 minutes.

Since 1973, the volume of trusts has continued to increase, which, without word processing, would have necessitated hiring a fourth typist. With the Wang System 1220, one typist can handle the entire workload.

One for Trust

We also purchased a second Wang System 1220 for the Trust Department. The department produces numerous letters to our trust customers, covering a variety of investment and administrative matters. We have recorded 23 different letters on library tapes, along with stop codes for inside addresses and variable information. The one Wang operator can produce 400 letters per week; again, with word processing, the one operator handles a workload which would require four typists using conventional electric typewriters.

After using the two Wang word processors for six months, National City added a third machine and another unique application to its word processing workload. The Consumer Credit Department felt it was possible to build new loan business by conducting a letter campaign two or three times a year to approximately 13,000 prospective customers.

Letter Experiment

Being familiar with the capabilities of the word processors, we experimented with the automatic letter writing capabilities of the Wang System 1200.

The time to record the prospective customer names and addresses on the word processor's cassettes posed the only problem. Since the addresses already were stored in the bank's System 370, we contacted Wang Computer Services, and found Wang's software service division could convert the names from the bank's IBM 9-track computer tapes to the word processor's cassette tapes.

To assure complete automation, we designed continuous form letterhead stationery, which allows utilization of the word processor's automatic end page controls, and eliminates tiresome and repetitious manual paper insertion. In an eight hour day, the one word processor

For your reading pleasure....

Wang Laboratories has recently produced a number of new brochures, listed below by part number and title. To request literature, write: General Services, Wang Laboratories, Inc., One Industrial Avenue, Lowell, MA 01851, and indicate the part number of the brochure you are requesting.

700-3903 Auto/Mate II brochure describes a computer system for auto dealers which can process all paperwork, including F&I and contract preparation.

700-3905 Online brochure describes Wang's Online Interface Controllers, for use with Wang 2200 computers, that are compatible with a variety of instrumentation devices.

700-3906 Forms Management brochure describes how a Wang system can design, fill, and process forms, and manage and control total information flow.

700-3908 INFOSYSTEMS reprint describes how Menasha Corp. improved response time, and cost and quoting accuracy, with a Wang computer and a cost estimating system.

700-3909 Distributed Data Processing booklet details Wang's approach to distributed data processing networks.

700-3911 SPARK brochure describes Wang's full-purpose compact computer for automotive parts jobbers which provides sales analysis and profit reports by part and manufacturer, in addition to complete inventory control.

700-3916 THE OFFICE article reprint features the effective use of the combination of a Wang computer and a Wang word processing system at The Pillsbury Co. in Minnesota.

700-3917 MPS brochure describes Wang's Management Planning System, a complete financial planning and statistical forecasting package.

700-3920 Networks brochure describes the features of Wang's small computer systems and workstations, self-contained "convenience" processors with an array of peripherals.

700-3921 Statistics brochure describes how statisticians and researchers can achieve creative control of their data with Wang equipment.

Distributed data processing: the Wang approach

(Continued from page 1)

intelligent terminals. They certainly have the power to perform real data processing tasks at distributed sites, but they also carry the penalty of requiring the same professional staffing as an EDP center.

If distributed processing is "distributing computer capabilities without distributing expensive computer personnel," the intelligent terminals undershoot the mark on computer capability, while the sophisticated minis overshoot the mark on expensive professional personnel.

The essence of "Distributed Data Processing" is the delegation of data processing to a point as close to the operational requirement as is cost efficient.

Experience shows that the cost efficiency of distributed processing is based on a balance of two factors:

1. maximizing processing capability at the operating level allowing local management to perform a maximum of applications,
2. minimizing operating costs at the local level both in terms of hardware and personnel.

The existing personnel at operating levels must be able to use their computing equipment without professional EDP staffing, such professionals being both too scarce and too expensive to place at each site.

Thus, from a corporate point of view, personnel cost becomes the key to management decisions on local processing, and we add, therefore, to our definition of distributed data processing, "distributing computer capabilities without distributing expensive computer experts."

Next issue: Workable Solutions for Operating Managers.

How About That!

In October, Wang manufactured its 10,000th series 2200 CPU since the product was introduced three years ago. An interesting fact: it took six years to reach the 10,000th series 700 Programmable Calculator.

Multilevel benefits of distributed processing

A well-planned distributed processing network provides efficiency at every level, and should be viewed and judged at every level.

For corporate management, distributed processing provides an optimum balance of increased operating efficiency at the local level and overall management control. It is an efficient and economical mechanism which gives operating managers the tools they need to perform. At the same time it insures control of and adherence to overall corporate goals.

For field operating management, distributed processing provides better control over day-to-day operations. Timely management information on a demand-report basis allows fast and informed response to unique requirements or problems. Most important, it allows local control over elements that affect P&L and for which operating management is responsible.

For the data processing manager, distributed processing is an effective and flexible tool with which a wide variety of applications can be quickly and easily integrated into the corporate data processing system. Distributed processing allows DP management to meet the requests of both top management and the many operating managers without disruption of the corporate data processing system, and without fragmentation of EDP staff.

Wang's turnkey computer packages provide solutions for first time users

$PARK, a full-purpose computerized parts inventory control system featuring full sales analysis capabilities and providing jobbers and warehouse distributors complete inventory and sales control, was recently added to Wang's line of turnkey hardware/software 2200 systems.

Designed exclusively for the automotive aftermarket industry by Wang's team of automotive experts, $PARK is the result of Wang's five-year experience in the automotive market with over 4,000 Wang systems in daily operation in dealerships throughout North America.

In all, $PARK gives the wholesaler eight separate reports on the operational and financial condition of his business from a daily operating report to sales analysis by part/line/store in any combination. Additionally, back-office applications are available on the same system.

For more information, circle SPARK on the Reader Response Coupon.

Savings and loan executives now can control mortgage operations through instant information on the key elements of the mortgage process, and also automatically can prepare mortgage calculations and paper work.

How? With the Wang Mortgage Management System, a turnkey 2200 system that can be operated by anyone in a savings and loan institution, with very little training.

Designed for small-to-medium-sized savings and loan operations, Wang's Mortgage Management System offers instant analysis of all mortgages being processed, and eliminates the need to rely on timesharing services to supply mortgage processing capabilities.

The management control module, unique with the Wang system, allows the user to easily access important mortgage management information, such as the number of mortgages pending at a particular price; the total number of mortgages pending and their closing dates; and loan officers for each loan.

The second module of Wang's Mortgage Management System is a complete mortgage processing package that computes all mortgage calculations and automatically prints out all related forms, including required federal and state reports.

For more information, circle MMS on Reader Response Card.

On-board computer subs for crew in trans-Atlantic race

NEWPORT, R.I. -- A Wang System 2200 kept permanent watch for veteran French skipper Alain Colas aboard the world's largest racing yacht during the recently-completed 1976 Observer Single-Handed Trans-Atlantic Race (OSTAR).

Colas, who won the quadrennial race in 1972, placed second this year. He encountered severe storms during the race from Plymouth, England, to Newport, and lost time in Newfoundland when sails on the 236-foot Club Mediterranee -- larger by more than 100 feet than any other boat in the race -- had to be replaced.

Although Colas' ship is as large as many freighters, and would normally require a crew of six, Colas said he "most likely" could have managed a single-handed trans-Atlantic crossing without the aid of a computer.

"But I would not have been able to sail as safely, or as efficiently," he added, explaining that the on-board computer saved him both time and considerable effort during the crossing.

Software for the System 2200, developed by Compagnie Internationale Service L'Informatique (C.I.S.I.), Paris, was stored on a standard-sized cassette tape.

Twenty-four hours each day during

Alain Colas, Captain of the Club Mediterranee

Colas' single-handed, trans-Atlantic crossing, the Wang computer gathered data on the ship's progress from 14 different instruments. Colas was able to "program" maximum and minimal limits on any of those instrument readings, and the computer sounded an alarm whenever any of those limits was exceeded.

Similarly, the shipboard computer system allowed Colas to set limits on the Club Mediterranee's course; it monitored any seepage of hydrogen, or propane from tanks in the ship's galley; it sounded an alarm whenever Colas came within the range of another ship's radar, and, by warning of any overcharge from the wind vane -- one of the ship's three power sources -- would alert Colas if his batteries were running low.

"When I was sailing from Newfoundland to Newport, for instance, I did not want to sail into the Gulf Stream, which was against me. I wanted to keep in the colder waters of the Labrador current, and so I set the computer to raise an alarm whenever I would sail into waters above ten and a half degrees C," Colas said. "That way I stayed within the strongest part, the coldest part of the Labrador current.

"Knowing the humidity helps a lot to forecast when fog will be settling," he continued. "As a matter of fact, on several occasions I was told 'bip, bip, bip, bip,' that fog was setting in while I was asleep. When fog sets in, you'd better not be asleep. You have to get up and put on your fog lights and sound the fog siren, listen for shipping sirens and keep a good lookout."

Other system software developed for Colas by C.I.S.I. included a program for calculating sextant sights -- each of which he said would normally have taken him at least ten minutes -- and a program which allowed him to take the earth's curvature into effect in charting his course.

Colas said he had not previously sailed with a computer on board, and, in fact, had had no previous computer experience. He said he became familiar with the workings of the Wang computer within only a few hours.
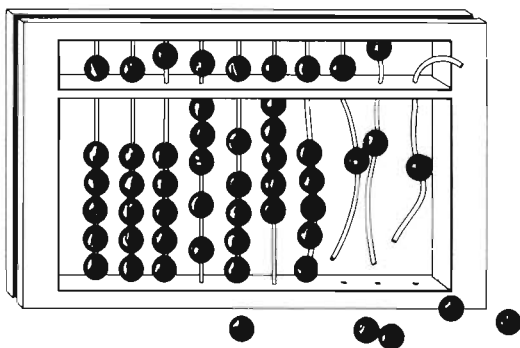
Wang relocates corporate offices

Wang used the Action Office Furniture System by Herman Miller, Inc., of Zeeland, Mich.

Over 500 employees relocated from Tewksbury to the new facility, which Wang purchased for $1.75 million, with renovations costing another $750,000. Wang's expanding production lines will fill the area vacated in Tewksbury.

In his welcome letter to the employees and friends of Wang who attended the Open House for the Lowell facility, held October 30, company president Dr. An Wang summed up the move: "Totally renovating the facility and relocating over 500 people in less than four months is a monumental achievement -- one that could not possibly have been accomplished without the cooperation, dedication and hard work of everyone involved in the project. The fact that the entire move went smoothly, and on schedule, reflects the teamwork and "can do" attitude that has made our company successful."

Wang's new address is: One Industrial Avenue, Lowell, Mass., 01851.

Wang continues direct ad campaign

Early this year Wang launched its first direct comparison advertising campaign, pitting our small computer and word processing systems against its major competition.

This fall, Wang introduced the first ad in its new "We're Hungrier" campaign, which is a continuation of its strong, direct advertising, aimed at achieving maximum awareness of the company as a credible, major supplier of small computer and word processing systems.

The strategy behind the campaign is simple, but powerful -- to link Wang with the company whose name is synonymous with computers and word processing, while creating and communicating our own exclusive identity.

Different versions of the new ad campaign will appear in major business publication such as Time, Business Week and The Wall Street Journal; in computer and office produce publications; and in various vertical trade publications.

We're hungrier than IBM.
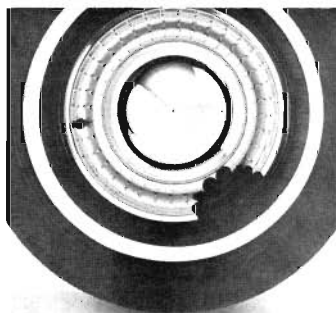
If we can't make your F&I sell like factory air in August, we'll eat your hub cap.

Word processing in Cleveland bank

turns out 300 individually typed, personal letters, totally unattended except for changing the typewriter's ribbon and inserting a new cassette.

Another Makes Four

At the end of 1974 we added a fourth Wang System 1200 to the Credit Department. That department, which analyzes and reviews the status of our corporate business accounts, was developing a new procedure for producing selected financial data for these accounts. With word processing equipment we store data on 500 of our accounts on the System 1200 tape cassettes.

Annual updates are rapidly completed using the system's transfer capabilities -- all the unchanged data from the previous year is transferred from the library cassette to a new tape; obsolete information is automatically deleted, and the operator types in only new information. After playback, the new cassette becomes the current library tape. We determined that the department would have required two additional typists without the use of the word processor.

Tampa public accountant improves client services with Wang computer and CASH write-up software

TAMPA, Fla. -- An in-house computer system has enabled a public accountant here to reduce by more than 60 per cent the time he used to spend on client write-up work.

"My business has grown very rapidly since I started five years ago," said Lionel Martinez. "Two years ago I realized I had reached the point at which I would have to either hire extra help, or try data processing."

He estimated he would have needed a staff of three or four trained book-keepers, full time, to handle the volume of work he now does with part time help, using a Wang/Cash computer system.

Prior to purchasing the Wang/Cash system, Martinez used a service bureau. He said he was unhappy with that arrangement, but felt he could afford neither to hire the help he required, nor to purchase a computer which would meet his needs.

Martinez explained that he had been posting journal entries for his clients on an add-punch machine, and sending the resulting punched tapes to the service bureau for processing. He said the use of that machine represented a 50 per cent improvement over manual client write-ups, but added, "I wasn't happy, because I could not enter any alphabetic information. All I could post was the account

number, client number and debits and credits. I couldn't keep track of payees, as well. I wanted a more complete system.

"Also," Martinez added, "I was unhappy using a service bureau because I did not like the idea of anyone else processing my clients' write-up work. That information is very confidential, and I did not want anyone able to gain access to my clients' records."

Martinez said he first learned of the Wang/Cash system through Pablo Silverio, head of Basic Business Systems, Inc. Pablo designed and developed the Wang/Cash system.

"What I had really been looking for was a computer system able to match my own, manual client write-up system," said Martinez. "I had never operated a computer before I received the Wang/Cash system, but the people who designed the Wang/Cash system did a fantastic job for my needs.

"When I was using the service bureau, I would spend an average of nearly three hours on write-up work for each client. I would ensure that the work was in balance, then mail it to the service bureau and wait three or four days for it to be returned. Too often, what I sent out balanced would come back to me unbalanced. I would always check the

printouts in detail, and it would take me hours to see just where the computer messed up.

"Now, the write-up work takes only half an hour to complete and it doesn't have to leave my office. I don't have to worry about someone else gaining access to my clients' information. That in-house control of my client write-up work is more important to me than any other advantage the system represents."

Martinez said there are other advantages to the Wang/Cash system, however. He explained that before buying the system, he had had no time to call on prospective new accounts. "Also, I'm finding now, that the system allows me to gain more revenue from my existing accounts, since I can provide them with more service.

"Control of my work is the most important feature of the system," said Martinez, "then, speed and accuracy. As for cost, I don't think any other system is competitive -- there is certainly no other system at close to the price which offers public accountants so complete and versatile a package."

Reader Response Coupon

Wang Laboratories, Inc.
One Industrial Avenue
Lowell, MA. 01851

PLEASE FORWARD INFORMATION ON THE FOLLOWING:

SPARK	SWAP
MMS	2251
WPS	2231W-2
2200VP	2260B
FORBES	WCS/30 A,B,C
EXPANSION	2254
MAINTENANCE	

Name _____

Title _____ Tel. _____

Company _____

Address _____

City _____

State _____ Zip _____