

WANG

Printout

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Distributed data processing: the Wang approach

Editor's Note: This is the third and final part in the series on Wang's approach to distributed data processing excerpted from the booklet "Wang on Distributed Data Processing," by Carl Masi and Alan MacDonald. For a copy of the booklet, circle DDP on Reader Response Coupon.

Tools for the Data Processing Manager

The corporate Data Processing Manager or Director of Information Services is in a demanding position. His challenge is to provide cost-effective services both to top management and to a wide array of managers at the operating level. His resources are by no means unlimited, and yet he is the focal point of rising expectations in automating an incredible variety of applications.

To contend with the volume of new requirements while maintaining the corporate EDP center, the Data Processing Manager needs the most efficient system tools available.

- He needs systems which assure accurate source data entry and convenient integration with the host system.

- He must have dependable, fast and industry-compatible turnkey communications packages which the end user can handle.

- He would like a powerful high-level language to allow quick implementation of unique applications and afford flexible system growth well beyond data entry.

To accomplish complete transaction processing at end user sites he needs to distribute real computer capability, but he also knows that he can't afford to fragment his professional staff with each installation, and that he certainly can't justify an on-site programmer for a hardware installation of less than a thousand dollars per month.

(Continued on page 4)

New from Wang. Wang goes into graphic detail



Graphic CRT plus printer/plotter hardcopy give total graphic capability

SAN FRANCISCO - Full CRT visual display graphics and fast Printer/Plotter hardcopy were added to the Wang family of innovative peripherals at the WESCON computer conference Sept. 19.

Wang's new 2282 Graphics CRT and 2231W-3 plotting printer combine easily-revised visual plotting and fast hardcopy for a total approach to graphic requirements from bar graphs, pie charts, three-dimensional plots, graphs of standard mathematical functions and business curves, to small and large engineering drawings, architectural drawings, machine components and maps.

Wang's 2282 has a 12-inch diagonal screen with a seven-inch wide by six-inch high viewing area. The graphic matrix on the screen consists of 800X by 512Y addressable locations. Plotting vectors are generated by turning on a series of dots. Alternately, a vector can be created by specifying that a series of dots be turned off.

Wang's new 2231W-3 printer provides an accurate hardcopy of the graphics information displayed on Wang's 2282 display screen. The hardcopy is generated by printing strips of 800 dots by 8 dots. When not in the plotting mode, the 2231W-3 can be used as a 120 CPS matrix printer responding to normal PRINT commands from a Wang 2200 CPU.

Domestic U.S. price of the 2282 Graphic display terminal is \$3,600. Wang's 2231W-3 graphic printer is domestically priced at \$3,800. Delivery on both terminal and printer is 90 days after receipt of order.

For more information, circle 2282 on Reader Response Coupon.

WANG RANKS NUMBER FIVE!

Wang Laboratories, again, for the third time in the past four years, is among the top ten growth companies in the United States.

According to a full-page article in the August issue of FINANCIAL WORLD magazine, "Wang Labs is the rare kind of success story where an inventor has been able to turn manager and achieve impressive growth in sales and earnings. In fiscal 1976 (June 30), the company celebrated its 25th birthday with a compounded sales growth averaging an impressive 35%-40%. For the past decade it ranks fifth in per-share earnings growth in FINANCIAL WORLD's tabulation of the top growth companies."

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

Oregon PUC sets up center with WPS/30

WORD PROCESSING WORLD magazine, in its September issue, featured a two-page article on the Administrative Support Services department of the Office of the Public Utility Commissioner in Salem, Oregon.

Why the article in a national magazine? Because in less than a year, Assistant Commissioner Don Armstrong and Administrative Support Services Supervisor Rosemary Gritton reorganized the 342-person agency from a traditional, boss-secretary setup to a complete word processing/administrative support organization.

By reorganizing the WP/AS, the agency was able to keep up with their work demand, while eliminating six requests for additional clerical/secretarial positions, one full-time position, as well as temporary help where the agency had clocked hours equivalent to two full-time positions.

For their new word processing center, the PUC settled on a Wang Word Processor 30 with five Work Stations and two daisy printers, after trying several different systems on three month rental plans.

"We selected Wang equipment for three major reasons," Armstrong explained. "First, it was easy to learn, and the operators enjoy using it. Second, Wang's modular concept makes it less expensive than other alternatives. Finally, Wang provides local support and service, which we couldn't get from some manufacturers."

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



Rosemary Gritton, Don Armstrong, Darla Paoli, PUC, Salem, Oregon.

Wang publishes new magazine for WP users

CONCEPTS, a new quarterly magazine published by the Office Products (formerly Word Processing) Group of Wang Laboratories, made its debut in June at Syntopian V, the International Word Processing Association's annual show and conference.

The magazine, designed for Wang word processing users, provides useful and informative articles on subjects of interest to the word processing and office systems community.

If you are a Wang word processing user, and have not yet received a copy of CONCEPTS, send your name, title, company and address to Wang Laboratories, Inc., One Industrial Avenue, Lowell, MA 01851, Attn: CONCEPTS Circulation Department, and we will make sure your name is added to our list. If you are not a Wang word processing user, but would like to receive the magazine, send a check for \$4.00 (for a one-year subscription) to the above address.

Los Angeles insurance agency boosts sales with Wang's LIFELINE system

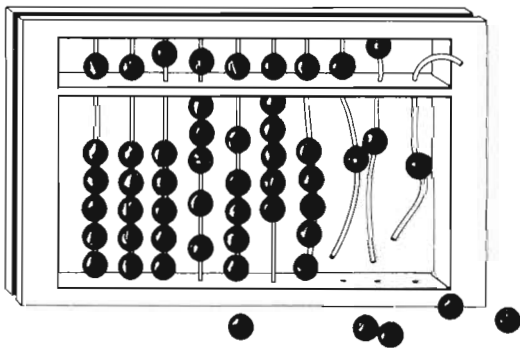
A Los Angeles branch of Pacific Mutual insurance company, headed by C.L.U. Charles Vance, has boosted sales to 60% during the last five years with a little help from their Wang small business computer. Vance, faced with a potential sales drop because of the loss of several experienced agents, found an effective sales tool in a WCS/20 equipped with Wang's LIFELINE software. The Wang system is an in-house policy



The LIFELINE system at the Vance Agency.

illustration system which, with a few input variables, produces unlimited customized policy illustrations for a wide range of Pacific Mutual policies. The system also automatically compares various policies, including those of competitive carriers, in terms of cash value, premium outlay, and investment return. In addition, Wang's LIFELINE is a complete letter writing, editing and mail list management program. The Vance agency relies heavily on this feature of LIFELINE to generate new sales leads, stimulate sales from current policy holders, and even recruit new agents. According to Vance, "The Wang system is an absolutely super way to manage a mailing list." With its LIFELINE system, the Vance agency now produces more penny-perfect custom policy illustrations faster than Vance had ever thought possible, and Vance has seen his sales soar from \$11 to \$17 million in a five year span. Quite an ascent even for Vance, who is a glider pilot in his leisure time.

Even the most reliable computer can break down.



Protect your Wang System with a PMC.

A Wang Priority Maintenance Contract gives you:

- complete service coverage
- longer equipment life
- an inflation-proof price
- minimum downtime
- automatic engineering updates

So, protect your system now. Downtime will cost you more.

Circle MAINTENANCE on Reader Response Coupon.

Record year again: Wang's sales up 39% in FY77

Dr. An Wang, president and chairman of the board of Wang Laboratories, reported early in August that for the fiscal year ended June 30, 1977, revenues totaled \$134,335,000, up 39% from the previous fiscal year's \$96,856,000. Net income was \$9,124,000 (\$.88 per share), up 48% from \$6,172,000 (\$.60 per share) reported for the fiscal year ended June 30, 1976.

On July 30, 1977 the Company issued shares in connection with the stock dividend declared on July 6 to holders of record on July 18. This dividend entitled the holders of each share of the Company's stock, both Common Stock and Class B Common Stock, to one additional share of Class B Common Stock for each share held.

According to Dr. Wang, "The Company's strong performance reflects the continued broad based growth of its small computer business and also the success of the new word processing products. Word processing orders were more than double those received in fiscal 1976. In addition, during the fourth quarter the Company made volume deliveries of its new PCS-II low cost computer products which appear to be very popular."

"They gotta everything" Luigi loves his Spark computer

NEW ORLEANS - Spark user Bob Smith is a man whose ship has come in. In fact, you can see it painted on the front of his New Orleans auto parts warehouse. But Smith admits he'd be sunk without the help of a creative advertising campaign . . . and his Wang computer.

Smith grew from a one-man, one-store operation to the largest imported parts distributor in the south partially through the use of local TV spot advertising. In his campaign Smith dressed up as Luigi, "the world's greatest foreign car mechanic" and extolled the merits of Foreign Car Parts Inc., saying, "They gotta everything." And when Luigi says "They gotta



Bytes on the bayou

NEW IBERIA, LA - If you ask Ernest Louviere about his favorite subject, you'll probably receive a long dissertation on the finer points of crawfish etuffe. But if you get around to his second favorite subject, you'll be rewarded with an informed overview of a Wang WCS-30 computer.

Louviere is Treasurer of McMahon Musson Chevrolet in New Iberia, where Wang Auto/Mate III software is employed to produce the volumes of accounting paperwork General Motors demands every tenth of the month, including daily operating control, vehicle sales follow up, payroll, and all accounting reports and journals.

New Wang system for first-time users: WCS-15

SAN FRANCISCO, CA - Wang Laboratories, Inc., of Lowell, MA, put direct access and high capacity storage within easy reach of first-time users as they unveiled their new WCS-15 computer system at WESCON September 19.

Positioned between Wang's PCS-II minidiskette computer and WCS-20 dual floppy, the WCS-15 expands Wang's extensive WCS line with a full-purpose computer for commercial, technical, scientific, and educational applications including data entry, retrieval, editing, and processing. The system is also ideally suited as an intelligent terminal with full processing capabilities.



The WCS-15 features a central processor with 16K bytes of user memory (expandable to 32K), a 12-inch CRT, a multi-zone keyboard with separate accounting-type number pad, and a single diskette drive -- all in one coordinated, desk-styled piece of office furniture.

Several user options are available with the system including expanded memory, a second diskette drive, a variety of printers or plotters, and a communications or instrumentation interface controller. Communications protocol options include Teletype or IBM 2741 terminal, or batch data transmissions to or from a host system via IBM's 2780, 3780, or 3741 Binary Synchronous Communications protocol.

For more information, circle WCS-15.



"Luigi" at his Wang computer.

Foreign
Car
Parts,
Inc.



Distributed data processing: the Wang approach

(Continued from page 1)

The Data Processing Manager knows that he cannot possibly expect user level personnel to cope with complex compilers, source and object codes, vectored interrupts, memory mapping or realtime multiprogramming disk operating systems.

Again, the answer may well be a "convenience" desktop system with a built-in interpreter.

Distributing such single-station systems in a computer network provides application capability at the user site far in excess of intelligent terminals, but with similar operating ease and low cost.

By clustering such systems at larger user sites and sharing expensive system resources such as disks, a local work station capacity can be developed, each individual work station actually being a complete "convenience" computer with its own processor and memory to carry out independent operations. Together, the work stations form a powerful but simple multiprocessing center at the remote site.

Clustered systems composed of multiple independent processors thus allow the Data Processing Manager to distribute inexpensive multiprocessing power which can handle heavy concurrent applications and yet continue to be operated and supported by the user department itself.

Individual systems easily convert to multiprocessors without any change in existing mainframe programs, and, most important, without the need for a complex operating system.

Open to all Wang users: Fifth annual SWAP meeting: Oct.31 - Nov. 2

Wang's users' society, SWAP, will hold its fifth annual meeting in the Sheraton-Boston Hotel, October 31 through November 2nd. Wang systems and applications in Manufacturing, Wholesaling, Distribution, Transportation, Banking, Finance, Insurance, Health Care, Medicine, Education, Engineering and Science will be covered by simultaneous sessions.

An information processing systems session is also planned to cover ISS, Data Base Management, Forms Processing, Multiprocessing and Multiprogramming, and state-of-the-art subjects. Special, two-day training schools will be available at discounted fees on the two days before and after the meeting.

Demonstration rooms will be open throughout the meeting to give all attendees the chance to see the latest equipment and systems in Wang's 2200 line of computers and its new Wang Word Processors.

Reception, banquet, luncheons, coffee breaks and a whole host of "extras" are all included in the meeting registration fee. Users of Wang systems, who are not members of the society, automatically receive a year's membership on payment of their registration fee. Registration



Dr. Herbert R. J. Grosch, President of the Association for Computing Machinery, will be the Keynote Speaker at Wang's 5th Annual SWAP Symposium.

fees are: for non-members, \$150; for SWAP members, \$125.

Hotel accommodations are only available for 500 Wang users so please get your registration application in early. If you have not received an application form please write or phone SWAP, c/o Wang Laboratories, One Industrial Avenue, Lowell, MA 01851, telephone: 617-851-4111.

Developing your own software? Check with your Wang office first.

A few years ago the Utah State Police pulled a car out of the mud near Vernal. They asked the stranded motorist why he was taking the old dirt road when the state had just completed a two-lane highway into Vernal. The motorist looked incredulously at the officer then replied, "Well, I guess it's because nobody ever told me it was there."

In much the same way, some Wang users have

spent considerable time and effort developing software only to find out later that Wang had already developed software substantially identical to their requirements.

One example is a large East-coast manufacturer who purchased a Wang system to supplement an IBM 370 and perform dedicated applications. Wang's Management Planning System (MPS) software came with the system, but the user never tried it. The diskette just sat in the drawer near the machine, ready for use.

Meanwhile, the company hired a few BASIC programmers, sent some people to Wang's Training Center for further program language training, and developed one of the first programming priorities for the new Wang system -- a financial projection and statistical forecasting system to assist in planning and management. The special analysis program included return on investment, financial forecasting, and several different interactive 'what if' projection capabilities.

Unfortunately, if the company had investigated before starting, they would have discovered that Wang had already done most of the work for them -- on the un-tried MPS diskette.

Discuss your upcoming programs with your Wang systems analyst or sales representative before committing programmers to a task that already may have been completed.

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

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