

DR. AN WANG
CHAIRMAN OF THE BOARD
CHIEF EXECUTIVE OFFICER

WANG

MEMORANDUM

TO: 2200 SOFTWARE VENDORS

FROM: Dr. An Wang 

DATE: August 13, 1985

RE: State of the 2200

Electronic News recently ran an article saying that our 2200 product would be phased out in two years. I felt so strongly about the error in that article, that I am writing to you personally to set the record straight.

We have no plans to end production of the 2200. In fact, we are continuing with hardware and software development projects that will add new life to the product for years to come.

The article was right when it said we were developing software for those customers who want to tie the 2200 into the VS, or migrate applications software to the VS family of computers. However, the article did not address what we were doing for those 2200 customers who wanted to stay with the 2200 and live with the many thousands of software programs that have been developed for that computer family. For those customers, we are continuing to enhance the product's price performance. For example:

- we announced in April two new VLSI versions of the product, plus a new multi-user operating system;
- we are working on new high-speed memory storage devices for the 2200;
- there will be more price/performance enhancements to current workstations as a part of our overall workstation program.

The 2200 is going to be with us for a long time. We remain fully committed to 2200 customers and the product itself. We feel badly about the misrepresentation in the Electronic News story, and we wanted to let you know how we felt about the product. The 2200 has been good to us, and I hope that it will continue to make you successful as well.

News

Wang Confirms Phase-Out Of 2200 Computer Production

By MICHAEL BUCKEN

LOWELL, Mass. — Wang Laboratories, Inc., last week acknowledged plans to phase out production of the 10-year-old 2200 computer line over the next 2 years while developing migration paths to the VS line and to the new Advanced Professional Computer (APC).

Believed to be currently wedged between the VS and existing Professional lines, the 2200 was unveiled approximately 10 years ago with two models — the Portable Computing System and the Work Station.

Xerox to Transfer Some IS Operations To Shugart Plant

SUNNYVALE, Calif. — Xerox Corp. will shift administrative operations connected with personal computer, workstation and other office system activities of the recently formed Information Systems division to its newly vacated Shugart facility in

John Thibault, Wang systems production marketing vice-president, last week said the company "is putting significant R&D" into developing compilers to enable 2200 applications to run on the 32-bit VS and Professional personal/computer lines.

Mr. Thibault added, however, that the 2200 line, which is market-

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SYSTEMS

Wang to Stop 2200 Production

Continued From Page 21

ed to small businesses as an entry-level system, remains a major Wang offering.

"The 2200 still (represents) a significant amount of revenue to Wang," he said, adding that the single- and multi-user line is "primarily sold through VARs and systems houses."

"We feel it (the 2200 line) can last another 2 years... according to our business plans," Mr. Thibault said. At that point, he said, a smooth migration to the VS and Professional lines will be available.

Mr. Thibault could not provide any installed base figures for the 2200 line, but the company is believed to have 60,000 units in the field.

Wang has been pushing its personal computer line upward, last week adding an Intel 80286-based model that is said to be compatible with the IBM PC AT (see story, page 26). At the same time the firm has come out with low-end additions to its VS line.

The VS 15, which supports about 10 users, is priced at about \$13,000; while the 2200 line ranges in price from \$5,000 to \$15,000.

(final draft 3:00 pm)

RESPONSE TO ELECTRONIC NEWS 2200 STORY

The 2200 continues to be an important product to Wang Laboratories, and will be for many years to come. We are continuing to enhance the product and improve its overall price/performance. Just this past April, we announced two new VLSI versions of the product, plus a new multi-user operating system for the 2200 family. In addition, we just began shipping 2200s with new packaging.

With over 65,000 systems booked and installed, and a product that generated \$75 million in revenue this past year, we are fully committed to the 2200 and are continuing with hardware and software development to further enhance the product.

In terms of hardware enhancements, we are continuing to develop products that will improve overall price performance of the product. In particular, we are working on new high-speed memory storage devices for the 2200, and price/performance enhancements to current workstations as a part of the company's overall workstation program.

In terms of software development, we are currently working on tools to enable 2200 customers to tie in Wang's latest PC products and link the 2200 to the VS family of computers. With a closer coupling to the VS, 2200 users will have the option to migrate their applications software packages to a VS or develop new software that uses resources of both the VS and 2200.

The 2200 has been enormously popular with our ISO community. Of our 300 plus VARs and software vendors, more than 200 of them offer some configuration of the 2200. They have been an active participant in the evolution of today's 2200, and in the development work we are currently undertaking.

The 2200 is going to be with us for a long time, we have contractual agreements for years to come, and we remain committed to 2200 customers and the product itself. There was a misunderstanding in the Electronic News--we remain fully-committed to the 2200.

TO: Senior Sales and R&D Management

FROM: Dr. An Wang

DATE: September 4, 1985

SUBJ: 2200 Task Force

In my recent memo correcting the errors from an Electronic News article, I stated that our commitment to the 2200 product line will continue with new hardware and software development projects to add new life to the product in the years to come.

To this end, I am announcing today the formation of a 2200 Task Force to carry out the corporate commitment. The task force will be staffed by professionals with many years of experience and technical know-how to accomplish the following broad objectives:

- o Enhance the connectivity of the 2200 Product line to the VS product line.
- o Improve the Price/Performance by following a program of modernization of the hardware by using the latest technology in componentry. In addition, by taking advantage of newer peripherals and newer manufacturing techniques.
- o Utilize the 2200 CPU as the heart of the Telenova Data Switch, for a cost effective interface.

The 2200 Task Force will be led by Miguel Brazao in addition to his current responsibilities. He will continue to report to Horace Tsiang, Chief Development Officer.

Mr. Brazao will be responsible for:

- o Technical Support; and
- o Product Marketing.
- o and will be monitoring Research and Development for 2200 System Products

Also, named to the task force are Mr. Bob Rainville, Technical Support Manager and Mr. Gene Schultz, Product Marketing Manager, reporting to Mr. Brazao effective immediately.

I will personally review the progress of the task force on a weekly basis to insure that the corporate commitment to the 2200 Product line is met on a cost effective basis.

THE WANG 2200

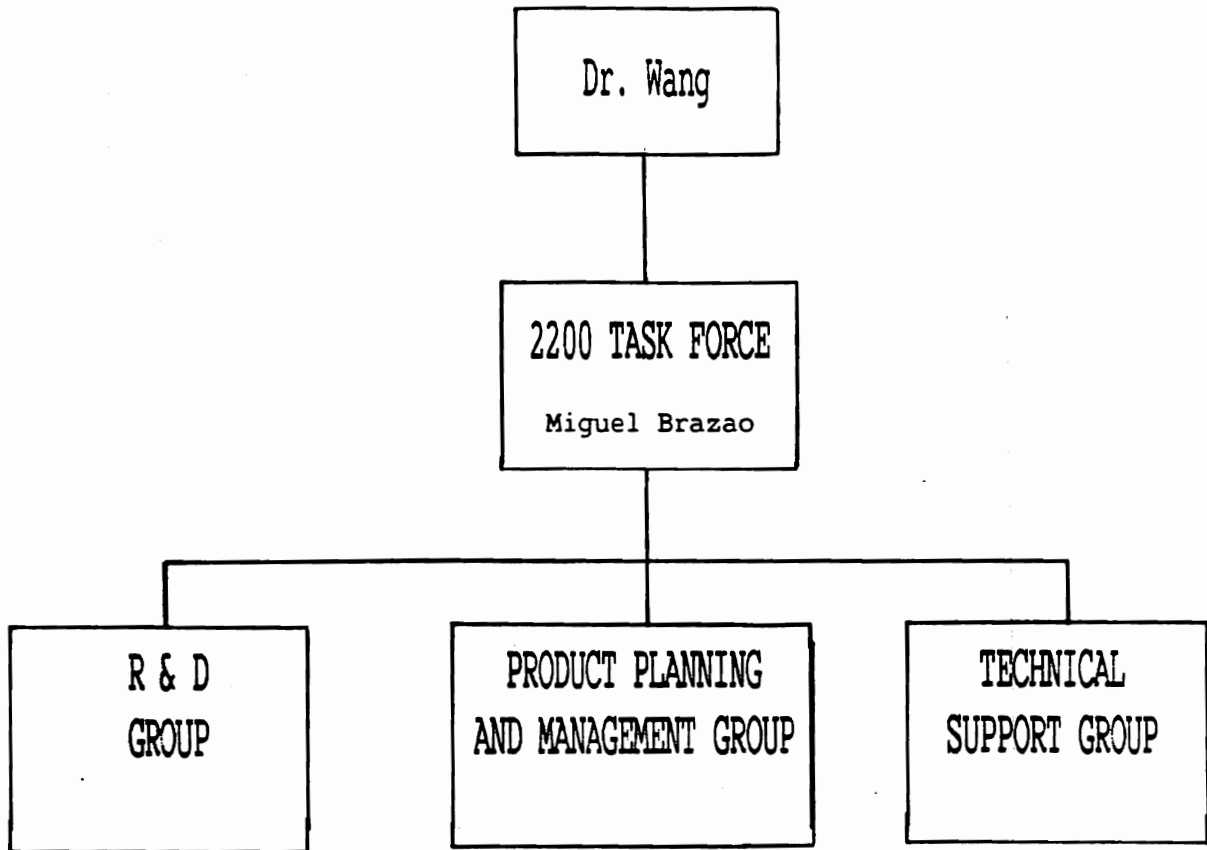
WHERE WE GO FROM HERE

PC MICROVP VS

RECENT DR. WANG QUOTES

- . " WE ARE CONTINUING WITH HARDWARE AND SOFTWARE DEVELOPMENT PROJECTS THAT WILL ADD NEW LIFE TO THE PRODUCT FOR YEARS TO COME"
- . "THE 2200 IS GOING TO BE WITH US FOR A LONG TIME. WE REMAIN FULLY COMMITTED TO 2200 CUSTOMERS AND THE PRODUCT ITSELF"
- . "TO THIS END I AM ANNOUNCING TODAY (SEPTEMBER 4, 1985) THE FORMATION OF A 2200 TASK FORCE TO CARRY OUT THE CORPORATE COMMITMENT"

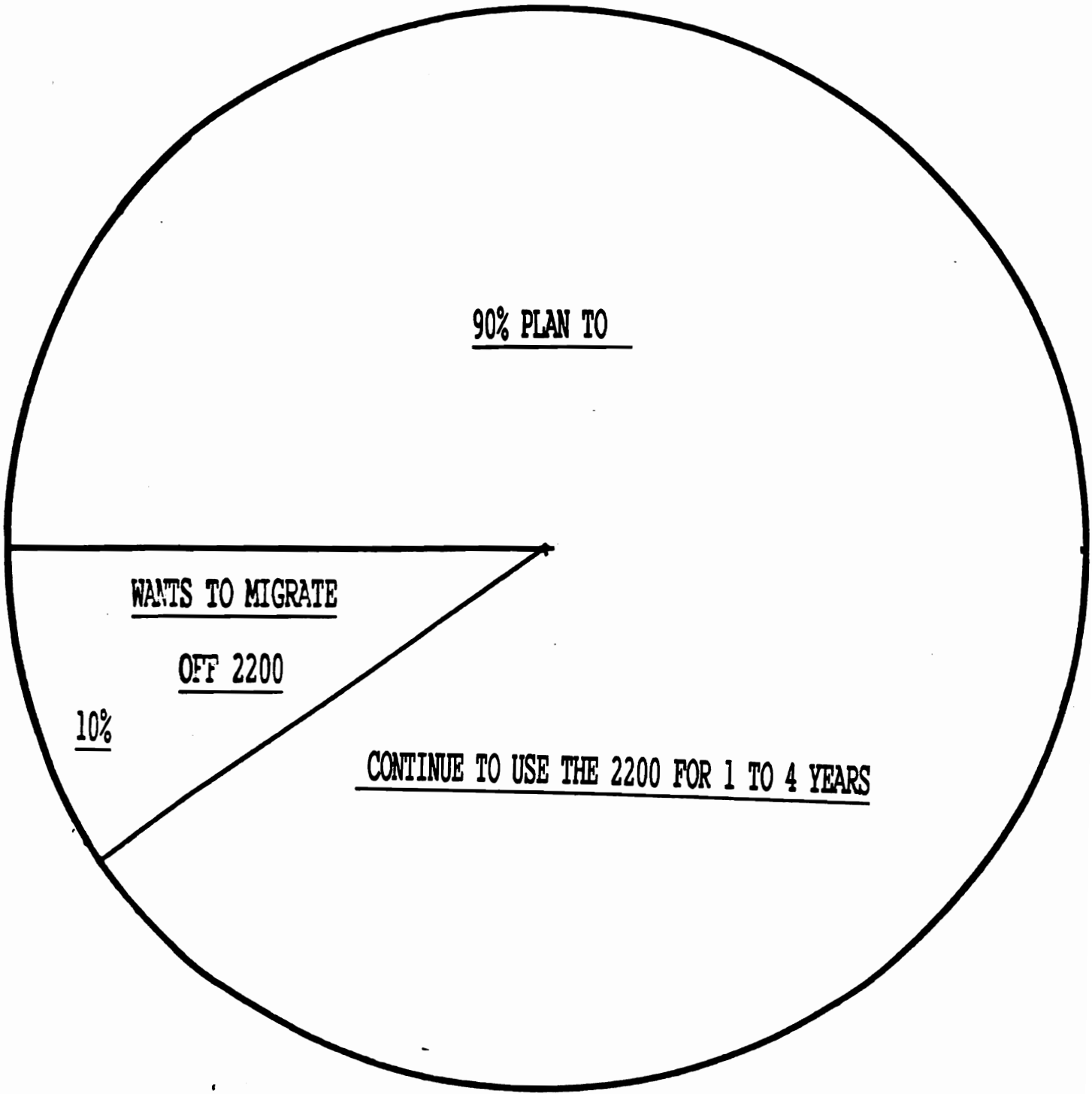
THE 2200 TASK FORCE



TASK FORCE OBJECTIVES

- . TO PROVIDE A DEDICATED 2200 PRODUCT DEVELOPMENT, MARKETING AND SUPPORT ORGANIZATION IN ORDER TO INSURE THE SUCCESS OF THE PRODUCT AND ASSOCIATED STRATEGIES
- . TO CONTINUE TO MODERNIZE, UPDATE, SUPPORT AND SELL THE 2200 AS LONG AS THERE IS A MARKET DEMAND
- . TO PROVIDE CO-EXISTENCE WITH, AND MIGRATION TO, OTHER WANG PRODUCTS
- . TO CONTINUE TO SUPPORT OUR USERS, SOFTWARE VENDORS AND THIRD PARTY RESELLERS

THE CURRENT 2200 USERS



90% PLAN TO

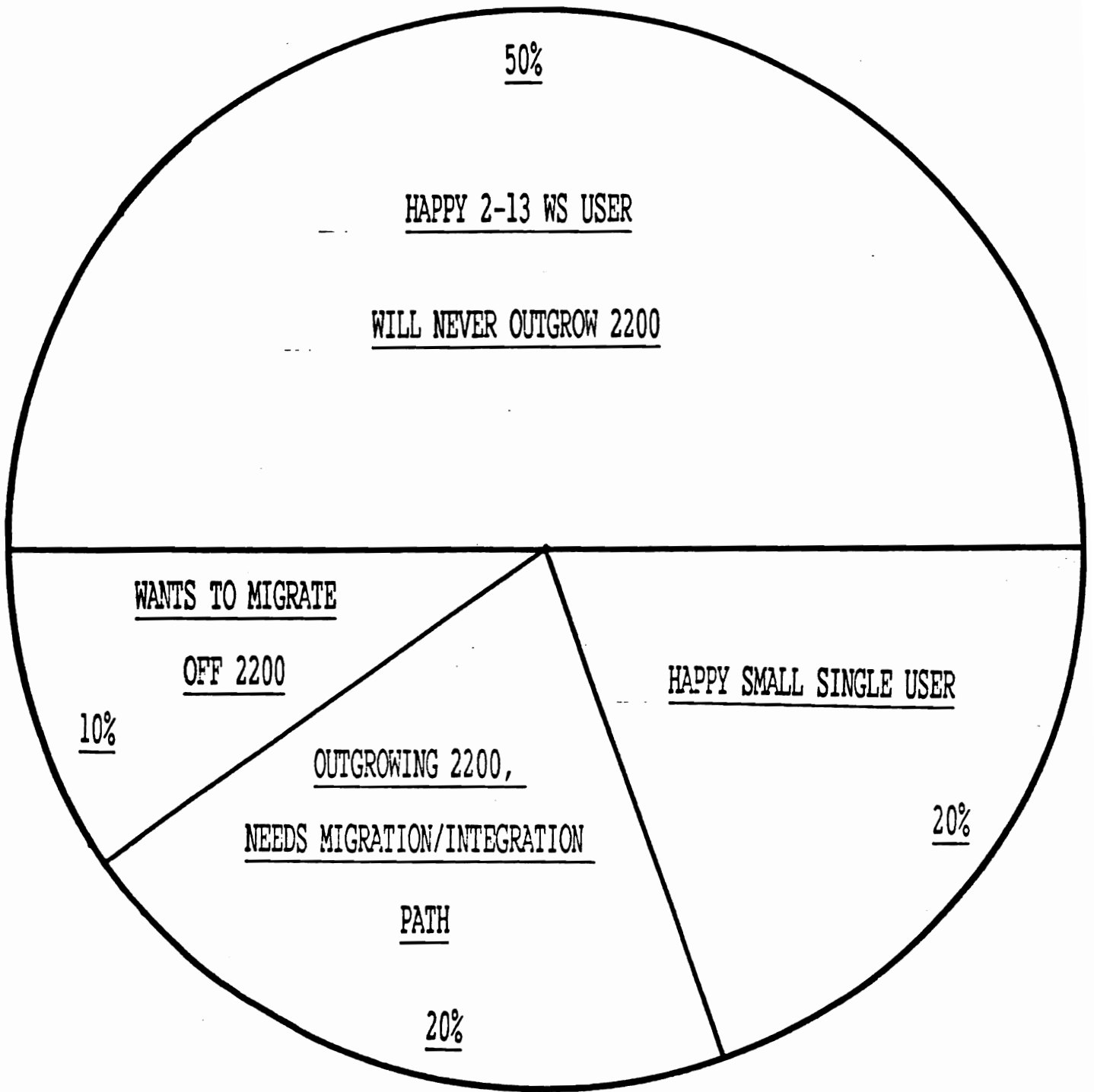
WANTS TO MIGRATE

OFF 2200

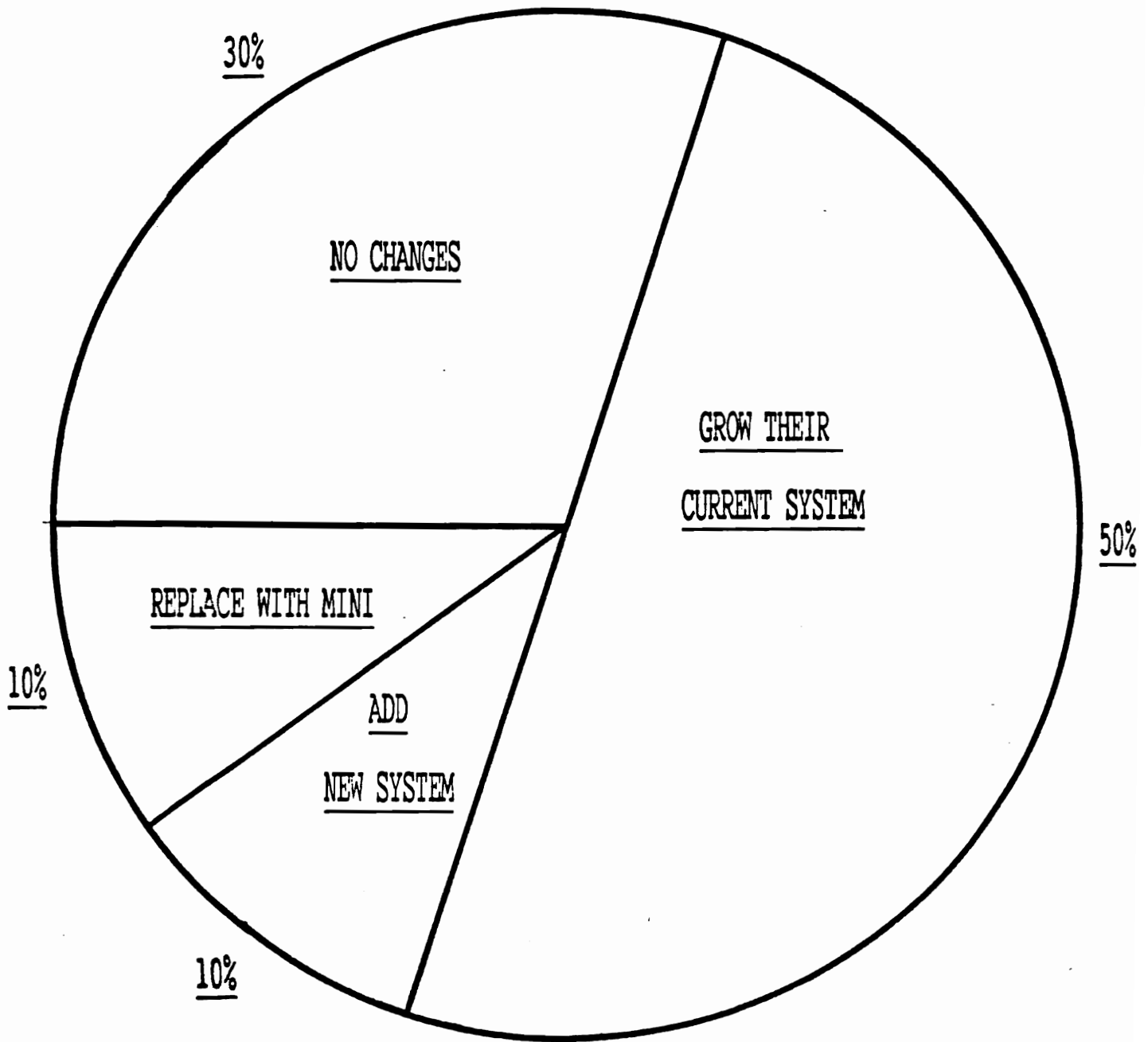
10%

CONTINUE TO USE THE 2200 FOR 1 TO 4 YEARS

THE CURRENT 2200 USERS



WHAT THE 2200 USERS PLAN TO DO



MICROVP HIGHLIGHTS

- . (VLSI) CHIP TECHNOLOGY
- . APPLICATION SOFTWARE, EXISTING BOARDS AND PERIPHERIALS ARE COMPATIBLE
- . 9 SLOT STREAMLINED CHASIS WITH SWITCHING POWER SUPPLY
- . ONE BOARD REPLACES 7-9 BOARDS
- . MONTHLY MAINTENANCE REDUCED 59% to 70%

2 CPUs (with 9 I/O Slots)

	<u>PRICE</u>	<u>MAINT.</u>
. 128K DATA MEMEORY, 32K CONTROL MEMORY	\$4,950	\$42
. 512K DATA MEMORY, 32K CONTROL MEMORY	\$7,300	\$47

CURRENT MODEL 2200

	<u>CURRENT</u>	<u>MICROVP</u>	<u>SAVINGS</u>	<u>PAYBACK</u>
	<u>MAINT. \$</u>	<u>MAINT. \$</u>		<u># MONTHS</u>
2200MVP-64 256K	302	47	255	28.63
2200LVP-64D 256K with 8 MB disk	\$341	103	238	30.67
2200LVPC-128 512K with 32 MB Disk	306	112	194	37.63
2200MVPC-128 512K	221	47	174	41.95
2200LVPC-64F 256K with 32MB disk	250	113	138	52.90

ANNOUNCED PRODUCTS

- * 2436 WORKSTATION AT \$1295 WITH \$15/MO MAINTENANCE

- * 2200 TO VS LOCAL COMMUNICATION OPTION -- (HIGH SPEED DATA-LINK)
PROVIDING THE FOLLOWING SERVICES:
 - . VSTE 2200 WORKSTATION CAN LOG ONTO THE VS AND EXECUTE
VS TASKS

 - . VDISK STORE 2200 DATA IN 2200 FORMAT ON THE VS

 - . DMS STORE 2200 DATA IN VS FORMAT ON THE VS. VS CAN
ACT ON THE DATA

- * 2436 WP WORKSTATION AT \$1795

- * 400 CPS DP MATRIX PRINTER AT \$2100 WITH \$30/MO. MAINTENANCE
(2200-PM017)

- * 8 NEW PACKAGED SYSTEMS
 - . WITH 0, 1, 2, and 4 WORKSTATIONS

 - . PRICES REDUCED \$400 TO \$800 PER PACKAGE

8 NEW "P" PACKAGES

8/1/86

	<u>PACKAGE COMPONENTS</u>	<u>PRICE</u>	<u>MAINT.</u>
P0	128K MEMORY, 10 MEG WINCHESTER DISK MXE AND DUAL CONTROLLER	\$6,950	\$80
P5	128K MEMORY, 10 MEG WINCHESTER DISK TRIPLE CONTROLLER AND 1 WORKSTATION	\$7,600	\$86
P6	128K MEMORY, 10 MEG WINCHESTER DISK MXE AND DUAL CONTROLLER WITH 2 WORKSTATIONS	\$9,500	\$110
P6+2	128K MEMORY, 10 MEG WINCHESTER DISK MXE AND DUAL CONTROLLER WITH 4 WORKSTATIONS	\$11,600	\$140
P7	128K MEMORY, 30 MEG WINCHESTER DISK MXE AND DUAL CONTROLLER WITH 2 WORKSTATIONS	\$10,765	\$120
P7+2	128K MEMORY, 30 MEG WINCHESTER DISK MXE AND DUAL CONTROLLER WITH 4 WORKSTATIONS	\$12,865	\$150
P8	512K MEMORY, 30 MEG WINCHESTER DISK MXE AND DUAL CONTROLLER WITH 2 WORKSTATIONS	\$15,265	\$178
P8+2	512K MEMORY, 30 MEG WINCHESTER DISK MXE AND DUAL CONTROLLER WITH 4 WORKSTATIONS AND TAPE CARTRIDGE	\$17,365	\$208

PROMOTIONAL P PACKAGES WITH 2280 DISK DRIVES

AVAILABLE 10/1/86 - 1/15/87

<u>PACKAGE</u>	<u>LIST PRICE</u>	<u>DISCOUNT</u>	<u>PROMOTIONAL PRICE</u>	<u>MAINTENANCE PRICE</u>
<u>P9</u>				
MicroVP-2	\$7,300			
22C11	300			
2236MXE	1,000			
2280-3A	16,500			
2436DE (2)	2,590			
TOTAL	27,690	24% DISCOUNT	<u>\$20,995</u>	\$200/Mo
		(\$6,690)		
 <u>P9+2</u>				
MicroVP-2	\$7,300			
22C11	300			
2236MXE	1,000			
2280-3A	16,500			
2436DE (4)	5,180			
TOTAL	30,280	24% DISCOUNT	<u>\$22,995</u>	\$230/Mo
		(\$7,285)		
 <u>P10+2</u>				
MicroVP-2	\$7,300			
MicroVP-2	\$7,300			
22C11 (2)	600			
2236MXE (2)	2,000			
2280-3A	16,500			
2280MUX	2,000			
22C80 (2)	1,000			
2436DE (4)	5,180			
TOTAL	41,880	28% DISCOUNT	<u>\$29,995</u>	\$324/Mo
		(\$11,885)		

Use MICROVP-P9A, -P9+2A and -P10+2A for 2436DW workstations and MICROVP-P9B, -P9+2B, and -P10+2B for 2426DW workstations.

2200 PM017 DATA PROCESSING MATRIX PRINTER NOW AVAILABLE.

400 cps (150 Lines per minute) selling for \$ 2100.00. Maintenance \$30/Mo

AVAILABLE 11/28, 2200-PM018 DAISY WHEEL PRINTER

60 cps Selling for \$1400 with Maintenance \$18/Mo.

SHORT TERM PROJECTS

- * LOW COST WINCHESTER DISKS ALLOWING 576 MB PER CPU
 - . NEW PACKAGING
 - . CASH MEMORY AND RAMDISK
 - . 10 MB REMOVABLE CARTRIDGE
 - . 40 MB PROGRAMMABLE STREAMER
 - . 20, 32, AND 64 MB FIXED DISKS

- * ABILITY TO MULTIPLEX 16 CPUs

- * 60 CPS DAISY WHEEL PRINTER AT \$1400 WITH \$18/MO. MAINTENANCE
(2200-PM018)

- * ENHANCEMENTS TO THE BASIC-2 LANGUAGE

2200 USER OPTIONS

USER TYPE

PRODUCT STRATEGY

Happy Customer

- . Update to the MicroVP
- . Add New Peripherals
- . PC as W/S & Freestanding MS-DOS Systems
- . Data-Link to VS
- . PCs running BASIC-2

Customer At Capacity

- . Off load tasks to PC/APC under PC BASIC-2
- . Add Multiplexed CPUs
- . Data-Link to VS
- . Migrate to VS using Data-Link as tool

Customer Wants to Migrate

- . PC/APC using BASIC-2 or compiled BASIC
- . VS Data-Link using Application Development tools like SPEED II or PACE
- . PCs as Workstations to VS, run 2200 Applications on PC using VS files while developing VS programs

VARs And Software Vendors

- . All of the above options

PC OPTIONS

THE WANG PROFESSIONAL COMPUTER CAN BE CONNECTED TO THE 2200 AND VS IN MANY WAYS

- . AS A 2200 TERMINAL USING THE 2200 SUPPORT UTILITY

- . AS A STANDALONE RUNNING PC APPLICATIONS UNDER MS-DOS OR 2200 APPLICATIONS UNDER PC BASIC-2

- . AS A 2200 TERMINAL CONNECTED TO THE VS UNDER VS TERMINAL EMULATION

- . AS A 2200 TERMINAL CONNECTED TO THE VS ACCESSING 2200 FILES ON THE VS IN EITHER 2200 OR VS FORMAT

- . AS A VS TERMINAL USING THE 928 LOCAL INTERCONNECT OPTION