MARKET STATUS

OS/2 HAVING MIXED ACCEPTANCE

Not ramping in volume (ie. not succeeding as successor to DOS)

Applications still in gestation (Excel, Pagemaker, AutoCAD shipped; 123/G, PMWord in Q2'90, Wordperfect in 2H'90)

Is being designed in at major corporations for major projects, typically involving distributed and/or database operation where competition is UNIX

CURRENTLY RETHINKING OUR EXPECTATIONS AND POSITIONING IN LIGHT OF ABOVE

Position DOS/Windows as being viable in future as the "personal desktop solution" (ie. not "dying")

Position OS/2 as vehicle for high-end/connectivity (ie. competitive with Netware/UNIX)

MAJOR ISSUES

BALANCE OF R&D INVESTMENT BETWEEN 286, 386, NT VERSIONS OF OS/2

286 OS/2: IBM still wants to invest to get "2MB" solution

386 OS/2: We need it to be as good as can be to keep faith in OS/2

NT OS/2: What we really need to compete with UNIX

How do we get Windows/OS2 to reinforce each other as opposed to compete.

DOS AND WINDOWS BUSINESS UNIT

REVENUES	Q1/Q2 FY'90	YEAR AGO	%
MS-DOS DOMESTIC			
Packaged Product DOS	6,057	2,026	299
Royalty	31,355	27,657	133
MS-DOS INTERNATIONAL			
Packaged Product	13,690	7,259	188
Royalty	52,713	39,675	133
WINDOWS			
Domestic USSMD	11,134	9,690	114
International Retail	12,579	8,077	156
Worldwide OEM	8,450	6,530	129
TOTAL BUSINESS UNIT	135,978	100,914	135

DOS AND WINDOWS BUSINESS UNIT

CURRENT PRODUCTS SHIPPING

MS-DOS Royalty and Packaged Versions 3.31 and 4.01
MS-DOS ROM Versions 3.22 and 3.32

Windows/286 2.11
Windows/386 2.11
Windows SDK 2.11

NEW PRODUCTS/ PRODUCT PLANS

DOS 5.0   Q1 FY '90
    Royalty, Packaged Product, RUP and ROM

DOS 6.0   Q2 FY '91
    Royalty, Packaged Product, RUP and ROM

Windows 3.0   4-17 FY '90
    Retail and Royalty

Windows 3.0   6-1 FY '90
    SDK/DDK

Windows 3.1   Q4 FY '90
    Retail and Royalty

COMPETITORS
Dr. DOS
Miscellaneous DOS Clones
Macintosh
Desqview

KEY ISSUES
Positioning of Windows versus OS.2 to Microsoft's Advantage
Max upside short of merging DOS and Windows

PRINTER BUSINESS UNIT

ORIGIN
BAUER ENTERPRISES, acquired July 1989

CHARTER
Provide extraordinary printer software tp complement DOS/Windows
and OS/2

PRODUCTS
Softprint:
(Revenue: $277K)
Languages: MS/Bauer PDL, PCL, HPGL, Epson, Diablo, IBM:
(Revenue: $595K)

NEW PRODUCT PLANS
TrueImage
(Contracts or LOI: Apple, Epson, NewGEN, Okidata, Fujitsu, Toshiba)

Generic drivers for Windows and PM

COMPETITOR
Adobe

REQUIREMENTS FOR SUCCESS
Accelerate Apple development

Complete TrueImage 1.0 and specs for product evolution

Incorporate TrueType Outline fonts into Windows and OS/2

Close IBM, HP, Linotype, Compugraphic, Compaq, Ricoh

Convert Bauer PDL customers to TrueImage royalty stream (Alps,
BGL, Goldstar, GVC, Everex, Hanzon, Interleaf, Konica, Mannesmann
Tally, Minolta, National Semi, Nippon Board, Olivetti, Peerless, Qume,
Samsung).

IBM

KEY GOALS

Move to single site development (MS: DOS, Windows, OS/2, LAN)

Move to customer driven product release plan with identical products

Preserve good business deal in JDA renegotiation

Decide on IBM as supplier of Comm and Database services

Manager potential channel conflict with LAN Manager, Windows, OS/2 (?)

Sell IBM on TrueType, TrueImage

Extend OS/2 importance by positioning on RIOS

Minimize friction based on our Windows aggressiveness

KEY OBJECTIVES

1. IBM Negotiations

2. PDL Business

   -Royal Business
       -Royal to IBM
       -PDL to HP/IBM

3. NT Plan
   -OS/2 versus Windows positioning
   -Network support
   -Which RISC, RISC versus 386
   -Release dates

4. IBM Extended Services

5. Personnel Plans/Focus
   -Post C6, Windows 3.0, OS/2 2.0, LAN MAN 2.0
   -Languages focus
   -New stars

LANGUAGES BUSINESS UNIT

REVENUES ($ IN THOUSANDS)

FY 90 $27,200
FY 89 $27,400

PRODUCTS SHIPPING

C 5.1   Quick C 2.0
MASM 5.1   Quick C w/Quick Assembler 2.0
FORTRAN 5.0   Quick Pascal 1.0
COBOL 3.0   OS/2 1.2 Toolkit
PASCAL 4.0   OS/2 1.2 Softset

NEW PRODUCTS

C 6.0
MASM 6.0
C 7.0 (C++, Pcode)
386 C (OS/2 2.0 32 bit)
Sequoia (PM, Windows hosted)
Upgrades to FORTRAN, COBOL, PASCAL, Quick products

COMPETITORS

Borland (C, Pascal, Assembler, Debugger)
Lattice, Watcom, MetaWare (C)
Lahey, Ryan McFarland (FORTRAN)
Micro Focus, Realia, Ryan McFarland (COBOL)

KEY ISSUES

Flat Market
Transition to 32 bit compilers and C++
Transition to graphical development environments
18-24 month product development cycle

SYSTEMS PERIPHERALS & ACCESSORIES GROUP

Business ('000s):

| | Q1-Q4 FY89 | | Q1+Q2 FY90 | |
	Retail	OEM	Retail	OEM
Domestic	$46,984	$747	$30,651	$1,435
International	$46,742	$892	$29,290	$1,445
TOTAL	**$93,726**	**$1,639**	**$59,941**	**$2,880**

TODAY'S PRODUCT LINE
Retail
OEM Mice: Wins at Unisys, Acer & Intel; HP license.

MOUSE PRODUCT PLANS
Windows 3.0 bundle
Hardware Only Mouse (driver and menus only)

NEW PRODUCT PLANS
Ballpoint: pointing device optimized for laptop computing.
Target date: September, 1990.

Sinker: font cartridges for HP Laser printers (II and IIP).
Target date: September, 1990.

COMPETITION
IBM will begin bundling mice with some PS/2s in the second half of 1990.

Logitech diversifying into trackballs and hand held scanners.
700 employees as of 3/31/89.

ISSUES
Mouse availability. We continue to be backlogged on Serial mice. Windows 3.0 will boost demand further. We are doubling our vendor's capacity.

Mouse patents. We are seeking to license and cross-license. Small revenue potential.

Meet Ballpoint and Sinker development schedules

UNIX BUSINESS SUMMARY
JANUARY 90

REVENUE
Ahead of budget:

YTD Revenue: $4.9M

YTD Budget: $3.9M

STRATEGY
Continue to work with SCO

Seek to use SCO to increase our leverage/control with key OEMs

Proposal being worked with SCO:

Move SCO off AT&T technology onto "NT" technology
(ie. satisfy OEM's need for OS/2 and "UNIX" with single
underlying kernel - common device drivers, support, etc)

Keep SCO in step with our processor strategy (RISC)

Use SCO selectively for supporting MS Apps on UNIX:

Character apps - yes (SCO shipped Word 5 in December, so
got orders of $1.7M worth of product)

GUI apps - no (SCO wants us to reconsider)

SCO STATUS
Units:

Q2'89	23K units	lost $'s
Q3'89	35K units	broke even
Q4'89	32K units	lost $'s ?? (not final yet)

Products:
Shipped SCO version of UNIX V.3.2 (merged product)
Shipped Word 5 for UNIX
Shipped Open Desktop
1K SDKs sold to date
Expect 25K+ units in 1990

SYSTEMS SOFTWARE DIVISION

STEVE BALLMER

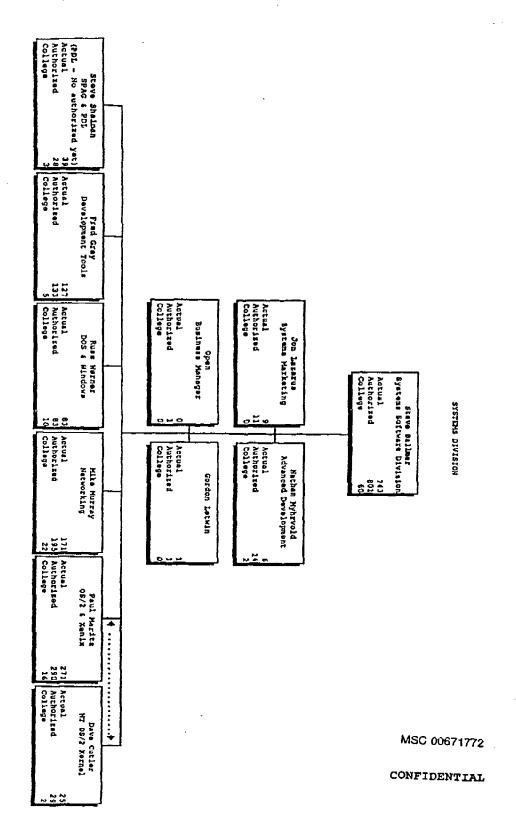### January 27, 1990

Steve Ballmer
Systems Software Division
Actual	743
Authorized	802
College	60

Jon Lazarus
Systems Marketing
Actual	9
Authorized	11
College	0

Open
Business Manager
Actual	0
Authorized	1
College	0

Nathan Myhrvold
Advanced Development
Actual	6
Authorized	14
College	2

Gordon Letwin
Actual	1
Authorized	3
College	0

Steve Shaiman
SPAG & PDL
(PDL - No authorized yet)
Actual	39
Authorized	28
College	3

Fred Gray
Development Tools
Actual	127
Authorized	131
College	5

Russ Werner
DOS & Windows
Actual	83
Authorized	83
College	10

Mike Murray
Networking
Actual	171
Authorized	195
College	22

Paul Maritz
OS/2 & Xenix
Actual	271
Authorized	290
College	16

Dave Cutler
NT OS/2 Kernel
Actual	25
Authorized	29
College	2

OS/2 BUSINESS SUMMARY
JANUARY 1990

SALES TO DATE

UNITS (reported thru 9/30/89, 6/30/89 for IBM)

	FY89Q4	FY90Q1	Installed Base
MS OS/2 SDK	946		5,383
IBM	11,045	N/A	76,545
Domestic OEM	2,611	5,839	22,971
International OEM	2,787	4,151	14,872
Total	17,389	9,990	119,771

REVENUE ($K) (reported thru 12/30/89)

	FY89	FY90Q1	FY90Q2	Total
MS OS/2 SDK	$1,255	$45	$0	$6,130
IBM	$855	$315	$326	$1,995
Domestic OEM	$1,251	$335	$544	$2,514
International OEM	$1,418	$317	$471	$2,765
Total	$4,779	$1,012	$1,341	$13,404

Notes:
1. IBM reports stronger sales in 2nd half 1989, 16K units in December in US

PROJECT STATUS

OS/2 1.2 (286 RELEASE)

Shipped by IBM

Includes Postscript & PCL drivers

Undergoing final testing at Compaq (test with Compaq LAN Man)

Expect shipment by Compaq this quarter, other OEMs next quarter

OS/2 2.0 (386 RELEASE)

In System Test with IBM

SDK released

Focus on size/performance on 4MB, 386 machine

Going back to ensure competitiveness (eg. add Win 3 binary capability, fonts, UI improvements)

Expect to ship to OEMs in September 1990, shipment by key OEMs by year end

NT OS/2

Minimal system (kernel and PM) running on i860 expected in April (slip of 6 months)

Goal set of shipping in 1991:

-Multiprocessor x86 server release (for "Systempro")

-Uniprocessor RISC release

MSC 00671774