```
**********************************
Mouse Manufacturer:  Mouse Systems
Required driver version:  7.01 or newer
Contact Phone number:  (415) 656-1117
BBS Number (415) 683-0617

This information applies to Microsoft MS-DOS version 5.0.

The products included here are manufactured by vendors
independent of Microsoft; we make no warranty, implied or
otherwise, regarding these product's performance or
reliability.

\*  MSINTERNAL:
\*  craigg
.END:
```

34
From o-anton Tue Jul 30 10:10:12 1991
To: bradsi
Date: Tue Jul 30 10:09:31 1991

Your account is credited..

I'll be interesting to watch this war...

You'll get to ride those cranks when you come down.
It's a fast bike.

Later...
A

35
From robho Tue Jul 30 10:23:59 1991
To: alexn bohmu davidma jimdu pamelaf pamelago ruthw sergiop tonylau
Cc: adamt andersk bernardv billspe bobkr bobo bradc bradsi bridgetc
    cameronm carls celesteb chriskel darbyw davidt donnag dougho
    dwaynew dwightk garygi.garyvot glennt gregs jeffr jefft jodys jonro
    kathrynh larryed lisawe markcl mattra mikede mikemur mikeols
    nancyla paulma peterhey pradeeps richab richardh richb richbr richf
    richt rickthom robg ruthannl stevek stevesh sunirk tomja tomsh
    .waynef
Subject: Fin. Analysts meeting, part 2 of 2
Date: Tue Jul 30 10:21:37 1991

MS 1991 FINANCIAL ANALYSTS MEETING   PART 2 of 2
JULY 25, 1991, 1:30 - 6:30pm
Cascade Room, Corp Campus

THIS EMAIL SUMMARIZES THE MAPLES, BALLMER, AND GATES
PRESENTATIONS.

PART 1 OF 2 COVERED GAUDETTE, HALLMAN, AND OKI
PRESENTATIONS.

Addendum to part 1 of 2 (Oki presentation):
   I should have mentioned that many analysts were
   surprised at Oki's announcement that Egghead was
   selling DOS 5 at about $10 below their cost. It
   caused some skepticism of Oki's assertion that MS
   products were the most profitable for resellers.

PLEASE FORWARD ANY COMMENTS YOU HAVE ABOUT THIS REPORT
TO ROBHO.

Rob Horwitz
OEM Marketing

================ QUICK SUMMARIES ================

Mike Maples   Mike's presentation, an overview of
Apps Strategy   our apps business, came across
                     exceptionally well. No real surprises.
                     Mentioned that the apps division won't

	be working on anymore OS/2 app versions since IBM has said that Windows apps will run on OS/2 2.0. His points about the factors which will distinguish applications vendors in the 1990s was especially interesting.
Steve Ballmer Systems Strategy	There were a lot of "new" things in Ballmer's speech like the concept of three modes in Windows (standard, enhanced, and "NT mode"), the announcement that OS/2 will be in the LM 2.1 box, and a much harder public stance vis a vis IBM ("IBM strategy is hard for me to fathom. Our customers can't figure it out either."). Showed a demo where an OS/2 app crashes OS/2 2.0. I'D STRONGLY RECOMMEND REVIEWING SECTION outlined in detail below.
Bill Gates Challenges and opportunities	Began w/ a discussion of overall PC market trends & our Windows strategy. Of particular interest to the analysts was the idea of putting Windows functionality into non-PC devices such as copy machines, faxes, phones, etc. Bill's sense of humor was well received. For example, he demo Win Word running under Windows for Pen and the document he edited was the controversial memo that recently leaked to the press. He also spoke about the competition (IBM, Apple, etc.), and our long term IAYF mission.

Mike Maples: Applications Strategy

- Progress vs. July 1989 Analyst Presentation
  - 1989: identified 25 product categories, had products in 9 of them. Over 1/2 products we had were for the Mac. Today we have products in over 20 out of the 25.
  - We've taken OS/2 apps off the chart (of categories). IBM has said that OS/2 2.0 will run Windows apps, so there is no need for me to spread my R&D thin
- Key issues in the apps division
  - Retain small company spirit
  - Efficient development
  - Professional growth
- Research areas
  - Traveling hardware, home, etc.
- Plans for FY'92
  - Pen, multimedia, home products
- Workgroup apps
  - Definition: Products that allow users and groups to access and share info across a network
  - Messaging will be key enabling technology
  - We will depend on systems software for certain services
  - We will support standards such as X.400 and X.500
  - We'll support a broad set of client & network platforms
- FY'91 recap
  - Shipped MS Mail vs. 3.0 for Appletalk nets
  - Consumers Software acquisition
    - Was the best product and architecture out there
    - Didn't loose any people in the transition
  - Schedule+ for AppleTalk Networks
- Application product "family traits"
  - Powerful things made easy — if user doesn't know how to do something, user should just try what makes sense and it should work
  - Integration, consistency — apps which work well together. By end of year virtually all our Win apps will support OLE.
- Application development tools in the 1990s
  - Spectrum of products for novice users to professional programmers
  - Today: Macros and scripts in apps, Visual Basic, C++
  - Future: Object oriented control language, application framework
- Major awards. Number of 1st place awards in past 6 mo:
  - MS Excel: 5

- Word: 5
- PowerPoint: 4
- Project: 8

What will distinguish app vendors in the 1990s?

- Vision
  - Application architecture moving from stand
    alone productivity apps, to data-centric tools
  - Taking advantage of new technologies: Pen, MM, object
    oriented technologies
  - IAYF
- Leadership.
  - You heard the following here first:
    - GUI is future
    - Inter-app communication (we invented DDE)
    - Objects, OLE
    - Computer Based Training, on-line help
    - Consistency, integration
  - Customer focus
    - We have a usability lab where we conduct tests
      every day.
    - Making it easier to do the common things is one of
      our greatest competitive advantages
  - Data access: we are on SQL Access committee, working on
    joint spec

Execution

- Great people investment
- Superior products which work together
- Strong financial performance
- Sound organization concept

QUESTIONS (paraphrased)

Q) What are the trends in MS's Mac and DOS apps sales?
A) In Q4, Mac sales were strong, better than we expected.
   Not as good a trend in Q3 as Mac hardware sales would
   indicate. The SPA reported that Mac SW sales had 13-15%
   unit growth while Apple reported that machines had a
   80% unit growth. Our software sales grew at a rate
   higher than the software average, but not significantly
   higher. As far as DOS apps are concerned, Word, our
   most significant DOS app, is holding its own.

Q) We are the number of share points you are willing to
   loose before lower prices?
A) I don't have a formula. My observation is that the cost
   of learning & using the product is greater than the
   "selling" price and is thus a larger factor in a
   business purchase decision. Also, with each version of
   our products we are adding more and more value. I don't
   expect price war.

Q) What was the Mac / Win revenue split?
A) The trend: our Mac sales (year to year) grew at only
   about a third of the division averages. Our Win product
   growth rate was significantly more than the division
   averages. Thus, the % of our business generated by Mac
   app sales is declining.

===
=   Systems Strategy: Steve Ballmer   =
===

FY'91 Recap

- Last Year's Accomplishments
  - MS-DOS 5: retail upgrade intro, standard for new PCs
  - Windows 3.0 sales (4 million +), Q4 sales > Q3
  - LM and SQL Server sales and infrastructure ramp-up
  - New and additional talent focused on Windows
  - BallPoint mouse introduction
  - OLE introduced for Windows
- Organizational changes
  - Brad Silverberg: DOS / Windows group
  - Jim Alchin: Advanced Windows services group
- The world has changed from a year ago, didn't anticipate

- LM / LS convergence stuck in "geopolitical muck"
- IBM / Novell distribution agreement
- DOS 5
  - 70M installed base, 18+M annual run rate
  - 1M DOS 5 upgrades shipped in the first 30 days
  - "No idea how to forecast sales" - hard to predict
  - 100% compatible with DOS, more mem. for DOS apps
  - Future releases in development - "healthy life for DOS going forward"

Windows Overview

- Market Perspective (source: SPA, IDC)
  - Win 3.0 installed base: 4.0M, annual run rate: 7.8M
  - MS-DOS   installed base: 70.0M, annual run rate: 18.0M
  - Mac   installed base: 5.0M, annual run rate: 1.1M
  - PC UNIX installed base: 1.8M, annual run rate: .9M
  - OS/2   installed base: .6M, annual run rate: .7M
- Windows
  - Our run rate est. "not radically different" from above #
  - In May, Win app business was about 40% size of DOS app business (source: SPA), Win apps mkt 2x > Mac market
- Windows customer feedback highlights
  - High level of satisfaction, increases the longer one uses Windows
  - Greatest benefit: ease of use, 2Nd: multitasking
  - Top support questions: setup, netwking, printing
  - UAEs represent < 2% of support calls

Windows Product Plans

- Windows 3.1
  - Usability, performance, robustness improvements
  - Truetype, Win 3.0 compatibility
  - DEMO: showed new file manager (drag and drop), launched Write with test doc. Showed Truetype font, used pen to edit doc, gave two examples of OLE: (1) Write and Paint working together and (2) Write and MM extensions (clicked on microphone graphic within document which caused trumpet to play).
- Windows: Scalable Architecture
  - OS with single user interface & single programming model
  - Concept of three modes in Windows (standard, enhanced, and "NT mode").
  - Real mode: goes away soon — not very interesting
  - Enhanced mode: gets pre-emption in future release
  - NT mode: a mode of operation which is even higher end
- NT Mode
  - Is self contained OS (not run from DOS)
  - C+ security, multiprocessing, fault tolerant
  - Packaging: NT mode probably in separate package
  - DEMO: showed how file manager looks just like Win 3.1, showed multiple apps running @ same time (DOS box copying files in background, rotating graphics object, multimedia). Demo crashed first time around and had to be repeated.
- Time line
  - Windows 3.1:   1991
  - Windows NT: 1992
  - Windows 3.x: 1992
  - LM for Windows NT: 1992
  - Win. Advanced Services 1993
- Windows Hardware Support
  - Win 3.1 standard and enhanced modes: intended for notebook, home, desktops
  - Windows NT mode intended for workstations, RISC, servers
  - Pen & MM extensions work on both Win 3.1 and NT kernel
- Advanced Windows Services
  - OLE 2.0 under development
  - Client/server app services like directory, RPC, to come

Server Software

- LM 2.1
  - Brief feature highlights: usability & performance improvements, Netware connectivity, add ins (TCP/IP, Mac support, dial-in)
  - LM 2.1 BOX WILL CONTAIN OS/2
- SQL Server and Comm Server updates continue
- Future support in all products for Windows NT

People Investment

- 1200 people working on Windows versions, development
  tools, networking technology

Windows Marketing

- $31M advertising and marketing
  - Amazing response to Windows Tech workshops
  - 100K tech resource kits shipped
  - >200K will attend Win conferences and tradehows in '91
- $34M for product support ~> (1) we are serious about
  customer, (2) we have to refine product
- Increased focus on developer support

IBM and OS/2 2.0

- Microsoft and IBM
  - 12 mo. ago we working together on a coherent strategy
  - Today our strategies are "different"
  - IBM OS announcements - incompat. with OS/2 "commitment"
  - "IBM strategy is hard for me to fathom. Our customers
    can't figure it out either."
- Why would someone buy OS/2 2.0 over Windows?
  - Unique apps? No.
  - As MS-DOS clone? Not compelling reason
  - As Windows clone? Tough to answer. IBM's latest OS/2
    2.0 beta can only run Win apps in real mode.
  - Robustness? Not a lot more robust than Windows. DEMOED
    an OS/2 app ("Terminator") running under OS/2 2.0
    which corrupts other apps and eventually brings down
    the system
  - Breadth / quality of hardware support? Prob not.
- ISVs already sold on Windows
- Some corps and OEMs have made signif. OS/2 investments
  - MS is licensing OS/2 2.0 to OEMs
  - We are building OS/2 and PM (1.x & 2.0) subsystem for
    Windows NT — aids migration to Windows NT
  - "Won't be available 1st day Win NT is available"

MS Strategy - "Windows, Windows, Windows"

- Evolutionary — no discontinuity
- Scalable — standard, enhanced, and NT modes
- Driven by IAYF vision
- "Open" in the PC tradition
- MS long term commitment

QUESTIONS (paraphrased)

Q) Other than eliminating PM APIs, is their anything
   different about NT Windows compared to the OS/2 3.0 you
   talked about in January?
A) No, we haven't had to change our tech. strategy

Q) Could you comment about expenditures?
A) PSS way up, marketing and advert. growing at similar rate
   as sales

Q) Does Windows NT support OS/2 apps or not?
A) Win NT doesn't. We will provide subsystem to allow OS/2
   apps to run on NT. Will not be packaged together.
   "OS/2 3.0" stays around until the day IBM would like to
   work together with us.

==
=   Challenges and Opportunities: Bill Gates   =
==

PC market overview

- PC sales 1981-91. Decade total is over 120M
- PC hardware market over past 4 years
  - US/Intl sales ratio. 1987: 55%/45%, 1991: 37%/63%
  - Top vendors have not maintained market share (top 10
    OEMs had 60% of market in 1987 and 48% in 1991)
  - Significant changes in the top 20 worldwide OEM list
- PC market in 1991
  - Emphasis on low cost manuf and distribution

- Erosion of name-brand price premium, dramatic increase
  in # of companies willing to buy from 2Nd tier vendors.
- Little product differentiation -> will see signif HW
  innovations by PC leaders, by necessity
- IBM no longer setting PC standard - now 19% of WW market
- Customers
  - They've "won". "The latest software and microprocessor
    technology has never improved so quickly or flowed so
    efficiently to the user."
- Intel Processors
  - Intel bringing prices down very fast -- faster than
    the market had anticipated
  - Intel is aggressively pushing the tech. forward -- 486
    will go to 66MHz and beyond.
  - High volumes and increased competition (AMD) is
    incentive for Intel to keep pushing ahead.
  - We will support other architectures like MIPS but these
    only become of significant interest if/when they have
    >2x performance (since would have to move app binaries
    to the new architecture)

Windows Strategy

- Opportunities for Innovation (OEMs)
  - PC styling, sound (multimedia), built in networking,
    portables / pen-based systems, graphics speed and
    resolution, multiprocessor (more of a server issue)
- Windows: a scalable architecture
  - One architecture, multiple implementations to handle
    notebook, pen, home, multimedia, RISC, and server.
    - Windows for DOS:smaller,simpler,Intel-optimized,ROMable
    - Windows for NT: security, multiproc, RISC
  - Advantages: common API (applications compatibility),
    common user interface
  - Same idea as IBM's and DEC's approaches with the
    360 and VAX hardware lines -- now is first time concept
    is being done with operating system software
- GUI Apps sales
  - All of the top 10 ISVs will be shipping Win apps this yr
  - Visual Basic allows casual users to write apps
- Application innovation - listed a bunch of interesting
  recently introduced Windows apps
- Objects: OLE
  - OLE allows apps to work with data, the format of which
    is completely unknown. Allows functionality to be
    added to existing applications.
  - There is more "techno-babble" about objects than all
    other subjects put together.
  - Continue to enhance OLE -- working on OLE vs. 2.0
  - We will use OLE more and more in our own applications
- Windows for Pen
  - Direct manipulation, gestures, handwritten input
  - Runs all existing Windows applications
  - Supports "pen centric" apps
  - Over 30 hardware manuf. signed up for Windows for Pen
  - DEMOED:
    - Various parts of the notebook applet including
      the drawing capabilities. Bill used it to draw a
      diagram of the recent alliances in the industry,
      with a quip about how the diagram looked awfully
      confusing.
    - A pen centric app developed by Slate corp (house
      insulation / heating cost form / report generator
    - A speeding ticket form for police to use on a portable
      computer which eliminates the need for paper
    - Using the pen in Excel (on a spreadsheet with MS
      financial data)
    - Using the pen in Win Word. The document he demoed on
      was the controversial executive memo that got into the
      hands of the press.
    - Handwriting recognizer and how it is trained
- Multimedia:
  - Integration of sound, image, animation, and information
  - Two groups within MS: apps and systems software
  - Expect somewhat slow take off
  - 30-50 new multimedia titles and apps by end of yr.
  - Spoke about "content acquisition" (and the 26% interest
    we recently acquired in a British publisher - gives us
    writes to exploit their material in electronic form)

Competition from a number of areas

- Apple/IBM: "Smushing together of Pink and Patriot Partner"
  - -Expect that their stuff is 2-3 years away
  - We expect to deliver in advance of them WITH
    COMPATIBILITY WITH EXISTING (TODAY'S) SYSTEMS
  - Apple: how design and develop software for Sys 7, Pink,
    and hardwriting system is totally different
- MIS message - IBM's "trust us" message is a challenge
  - MS's ability to communicate with all the other
    constituencies is extremely good. In the area of
    communicating with MIS, we must get better.
- Consumer products
  - Such products will have PC type functionality
    internally and will require an OS. Gave example of
    HDTV and "downloading" video game.
  - Microsoft investing early, will try to play a role

IAYF

- MS direction for 1990s
- Will articulate each year with more and more examples
- Is about making it easy for people to get at info
  of all types
- We demo our internal IAYF tools to visiting corp customers
- Vision requires distributed, object oriented systems, &
  significant changes in file system and shell
- Interesting to think of how this will effect other
  equipment you work with in the office and who MS should
  be working with beyond PC suppliers to make IAYF a reality
- Interesting to integrate a number of non PC devices with a
  PC or to build Windows functionality into the devices
  themselves
  - Phone: Use Windows app on PC as front-end to phone
  - FAX: Would want type of security and font capability
          we are building into Windows
  - Whiteboard: Replacement for traditional display
  - Copier: Is really a digital scanner + digital printer
  - Pocket organizers, size of checkbook or calculator
  - Consumer devices: cameras, games, TVs, VCRs

R & D Investments for the Future

- Still on track
- New twist is "Microsoft Research" group, doing true
  research in areas with may or may not result in
  shippable products
  - Will be recruiting person to run group over next few
    months
  - Will be about 50 people in group for starters
  - Research areas: linguistics, automated programming,
    automated testing, advanced graphics, etc.

SUMMARY

- MICROSOFT SYSTEMS STRATEGY IS WINDOWS
- Leveraging success of Win into new areas of opportunity

QUESTIONS (paraphrased)

Q) You've talked about integrating networking with Windows,
   what does this mean?
A) We've been intentionally vague. Over the past 6 mo. we
   have figured out what we need — exactly how we roll this
   out in a way which accommodates low, mid, and high ends
   of the market is part of our competitive strategy. We
   architect the latest version of the OS w/ all its
   networking functionality. As we ship it, me may adapt
   parts of it in different ways. The goal is to get number
   of networking facilities (advanced directory facility,
   email, file system replication, etc.) designed into the
   OS. Novell and Microsoft basically agree that desktop &
   server OSs largely converging — it will be interesting
   to see what each of us do in this area.

Q) As a result of your divergence w/ IBM, a lot of customers
   feel like they are loosing in terms of their compatibility
   as well as ability to make good choices about the future.
   How would you respond to that?
A) I'd asked them if they bought OS/2. Not many did so

there can't be too many people who say that. OS/2 wasn't
leading to products that sold in high volumes. As Windows
got more popular, did it make sense to have two different
approaches? There is no company that has worked harder
and sacrificed more [than Microsoft] in order to have a
unified message with IBM. Having two approaches was
inefficient and ineffective and we had to bring clarity
to this issue. If we could be executing this strategy
and have IBM involved with it, that would be great. That
invitation is open every day. But, we seem to be going
in different directions today.

Q) Your vision for the future suggests a huge acceleration
in PC hardware sales. At what point do you see this
happening - 1992 / 1993 or beyond?
A) Can't tell you when - I'm not the best market
prognosticator. With time, the definition of what a PC
is will get much broader. Most impact probably further
out than 1992/93.

36
From sharonh Tue Jul 30 10:49:17 1991
To: dwgroup
Subject: *!* July Birthday Party *!*
Date: Tue Jul 30 10:46:14 PDT 1991

...will be tomorrow, July 31st, at 4:00 in the lobby or outside in front
of our building if the sun is out.

Please come and celebrate with us in toasting and singing at the top of
lungs to our Cancerians and Leos.

* Tom Anderson *
* Eric Arneson *
* T-Jeffbo *
* Lisa Cram *
* Fred Dewitt *
* Ian Ellison-Taylor *
* Chris Guzak *
* Paul Kennedy *
* Laura Knapp *
* Paula McElroy *
* Donn Morse *
* Sankar Ramasubramanian *
* Dorothy Shattuck *
* Mark Simonton *
* Ken Sykes *
* Rich Tong *
* Hai Vu *

Hope to see you all there ... and please let me know if there's anyone
else that didn't make the list for this month ... thanks ...

37
From mikedr Tue Jul 30 10:59:08 1991
To: bradsi
Subject: review results
Date: Tue Jul 30 10:58:43 1991

When will I be seeing the financial results of the last review for my
group? Is this something that fell through the cracks when Adrian left?

38
From o-anton Tue Jul 30 11:04:55 1991
To: bradsi
Date: Tue Jul 30 11:04:43 1991

Seems to me that WinNT has everything in it that OS/2 was
supposed to have. Are you responsible for it also? Or
is Maritz still doing system stuff?

39
From chriswo Tue Jul 30 11:10:40 1991