## Microsoft Systems Strategy Presentation to Gateway November 24, 1992



#### Jonathan D. Lazarus Vice President, Systems Strategy Microsoft Corporation

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Plaintiff's Exhibit 5521 Comes V. Microsoft

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# Windows Momentum

- One million new users per month
- Business balanced between the United States and International
- The standard for OEMs

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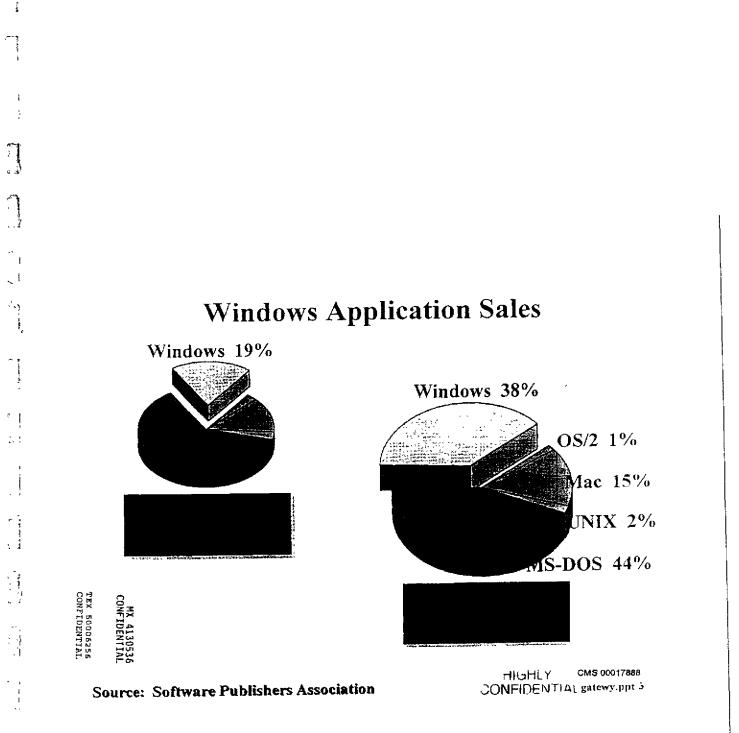
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#### **Microsoft Systems**

#### Protect customer investment

- Scale to address new hardware
- Incorporate new functionality

#### Lower cost of ownership

- Provide consistent functionality across applications
- Require less support and easier administration

#### Remain open

- In the MS-DOS tradition
- Published interfaces
- Connectivity to other environments

#### • Extend to new classes of devices

- Windows in the office
- Windows in the home

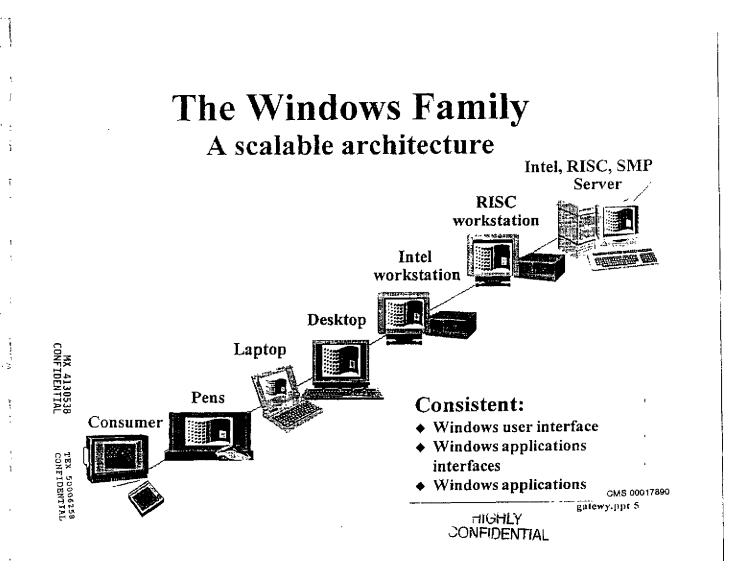
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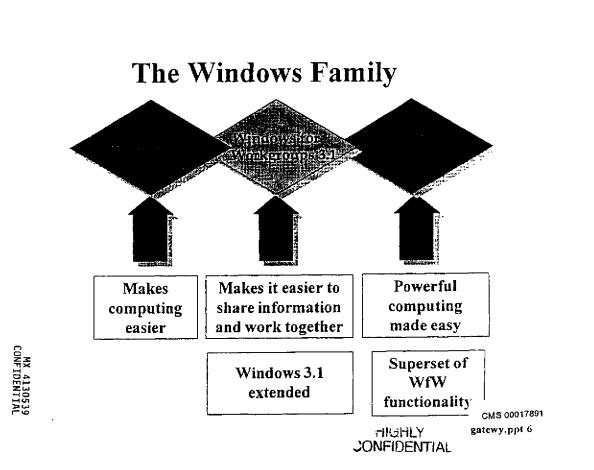
- Windows in portable devices

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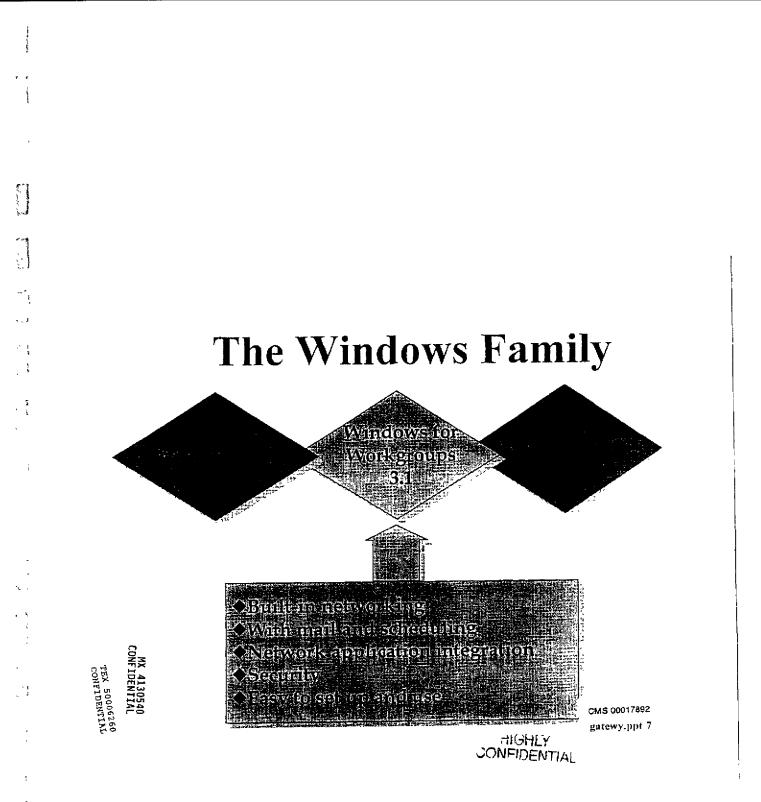
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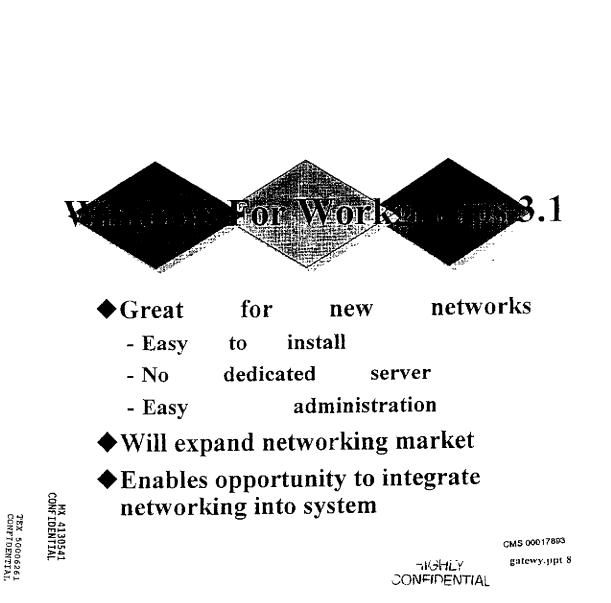




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- Great for existing networks
  - Easy to install

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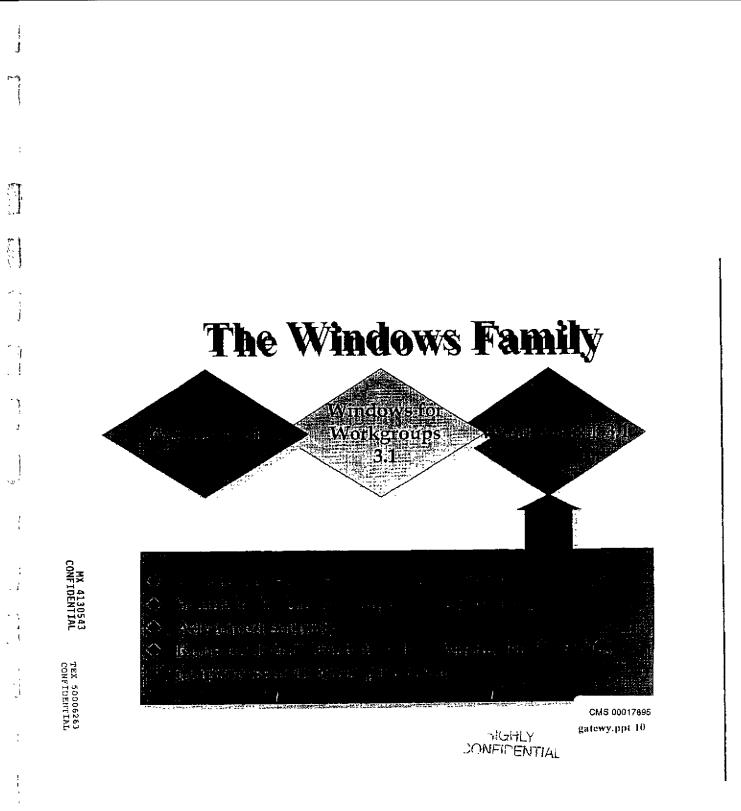
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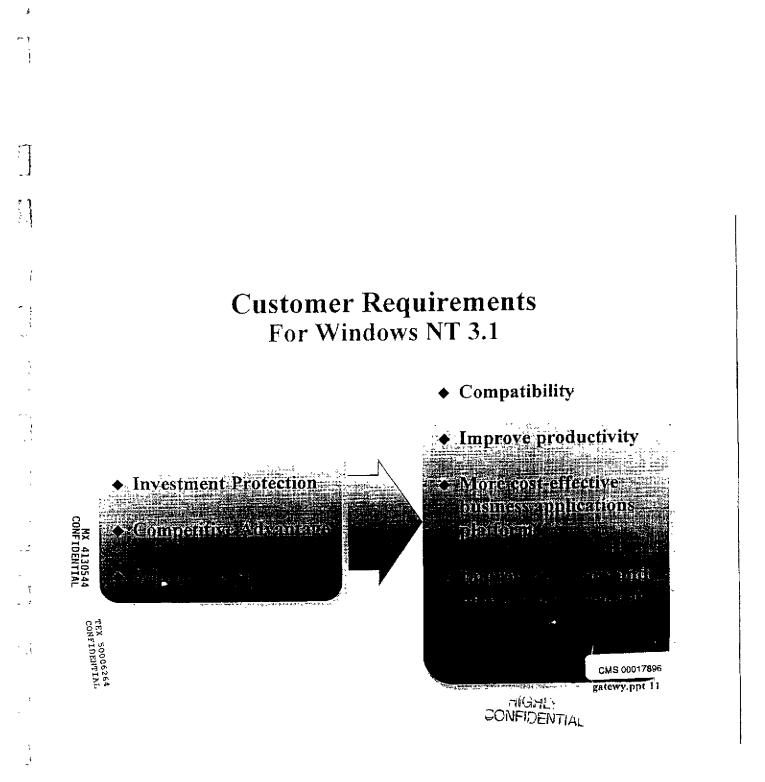
- Works with NetWare, LAN Manager, VINES
- Allows flexible sharing of local resources

Workgroup capabilities add value to existing networks

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## A Wide Range of Applications

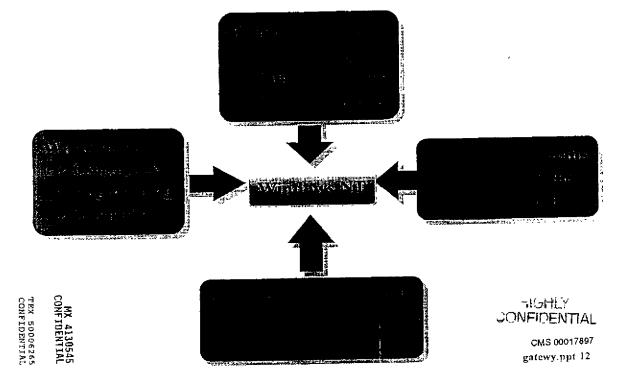
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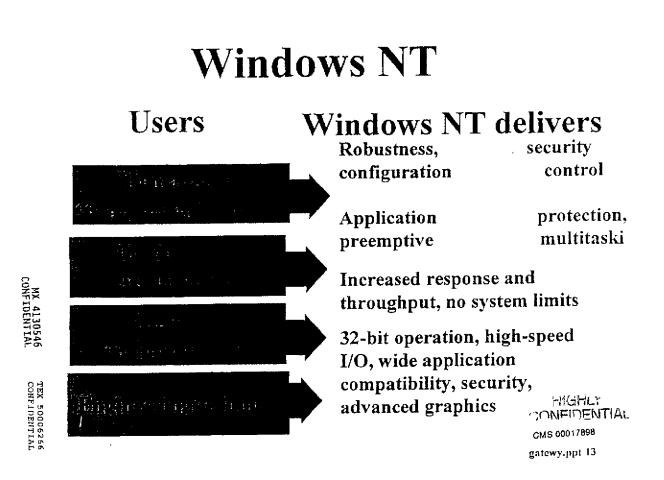
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## Windows NT Momentum

- 5,000 ISVs attended Professional Developers Conference
- ♦ 30,000 Software Development Kits sold
- ♦ 3,000 Beta sites
- ♦ 300 Win32 applications demonstrable
- 10 Multiprocessor systems demonstrated (AST, Acer, ALR, Compaq, Micronics, NCR, Olivetti, Sequent, Tricord, Wyse)
- ◆ 1,000 IHVs attended U.S. Device Driver Conference

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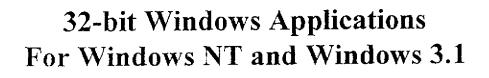
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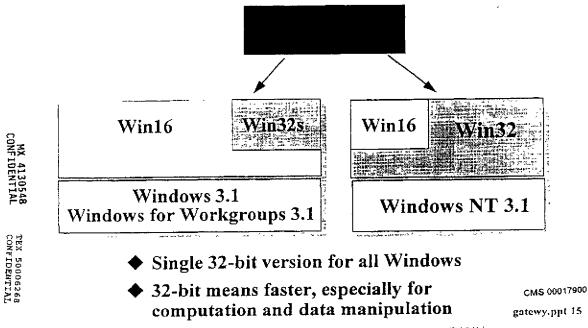
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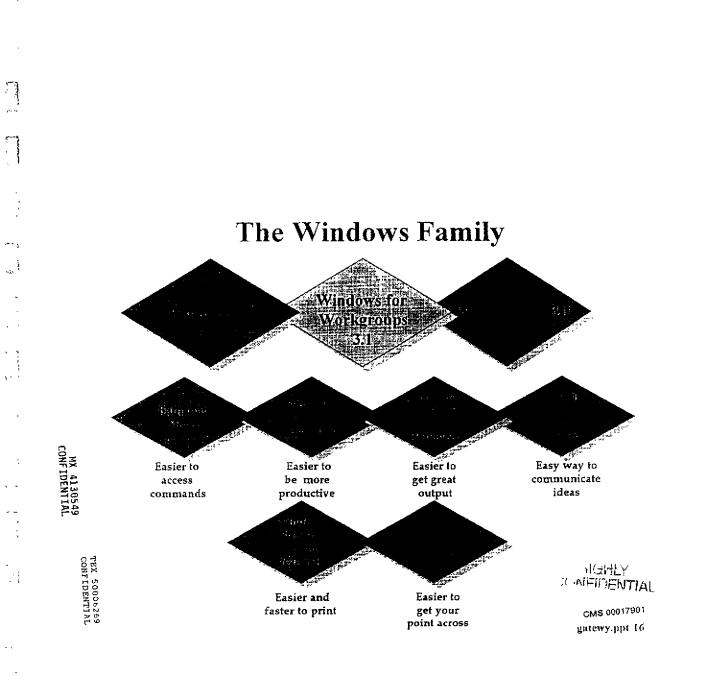
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## **Upcoming Enhancements**

- **♦ MS-DOS 6.0**
- ♦ Mobile Windows
- ♦ Systems Management Tools

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## **MS-DOS 6 Product Objectives**

Make PCs easier to manage

- More disk space
- More memory
- Data integrity
- Workgroup computing
- Great platform for Windows
- ◆ 100% MS-DOS 5 compatibility
- Provide OEMs cost-of-goods and product flexibility



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#### **MS-DOS 6 Overview**

- ♦ Integrated compression
- Complete automated memory management
- ♦ Windows integration
- ♦ Data integrity
- Workgroup computing
- PC management tools
  - backup, undelete, interlink, antivirus, defrag
  - some tools available as optional enhancements
- ◆ User-oriented release (no new drivers)

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#### **Mobile Windows**

- New product based on Windows 3.1 and MS-DOS 6
- ◆ Includes Windows for Pens 2.0
- Has enhanced mobile connectivity functionality
- Desktop integration
- ♦ Ships H2 1993

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#### Windows System Management

#### ◆ Built into Windows:

- Windows 3.1 Win Login
- Windows NT Remote admin, monitoring, OS upgrade, single network passwork, SNMP/Netview connectivity, etc.

#### "Hermes" - Windows Systems Admin Package - ('93 release):

- Fully manage Windows & Windows NT, and MS-DOS (partial), clients in the distributed environment.
- Perform Automatic System Inventory reports, Software Distribution & Installation, Remote Access, etc.

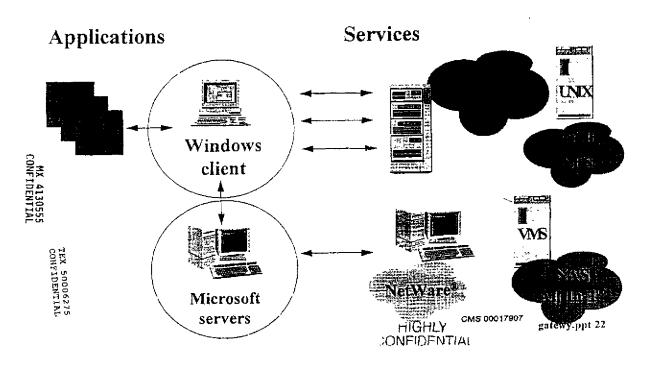
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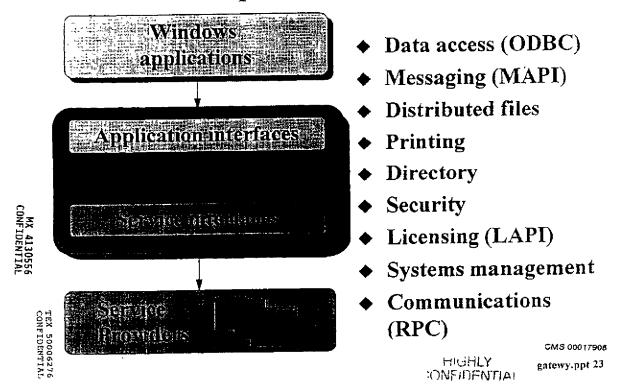
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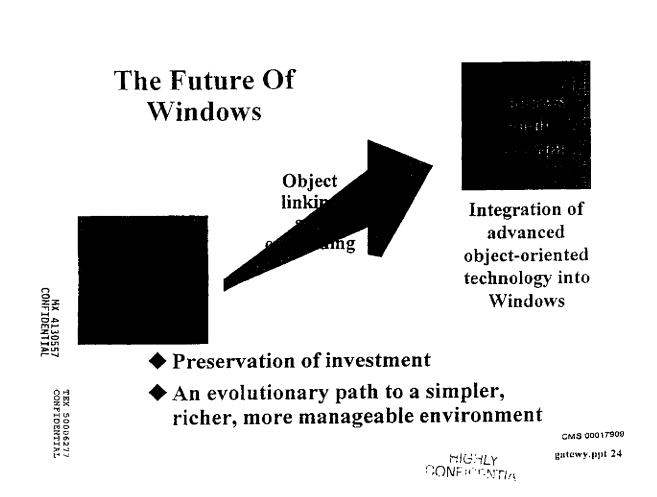
## *Windows* Open Services Architecture (WOSA)

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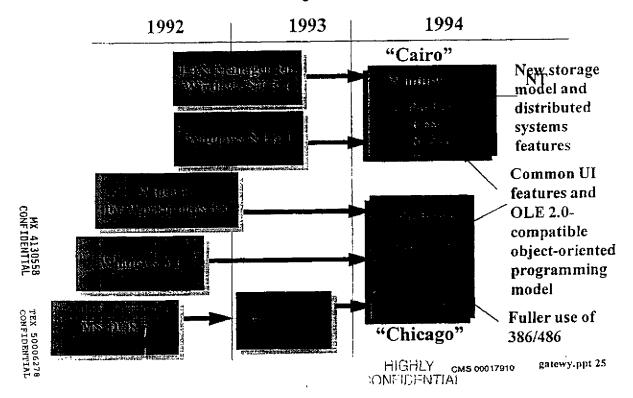


## Windows Open Services Architecture





# Windows Family - Future Releases



#### Windows Chicago

Successor to Windows 3.1/MS-DOS 6.0

- Targeted at mainstream desktop (4mb 386)

Usability improvements

- Integrated file and program manager

Integrated protect mode operating system

- Robustness
- 32 bit device drivers
- High performance disk I/O and layered SCSI architecture

Great setup and configuration

Great network and workgroup functionality

Support for 32-bit applications

- Direct support for 32-bit API
- 32 bit applications run in separate, protected address space
- Multithreading, pre-emptive multitasking, beziers, paths
- Asynchronous input model

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#### Windows Cairo

- u Project that will yield a new version of Windows in 1994
- Cairo is designed to radically change (simplify and improve) how people use computers:
  - Document- vs. application-centric view
  - Query vs. names
  - Full distributed system operation (integrated directory service, etc.)
  - Unified systems management
- Will be fully upward-compatible with Windows; builds off OLE
- Integrated compression
- Complete automated memory management
- Windows integration
- Data integrity

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- ♦ Workgroup computing
- PC management tools
  - backup, undelete, interlink, antivirus, defrag
  - some tools available as optional enhancements
- User-oriented release (no new drivers)

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## Windows Product Innovation

♦ Mobile PCs

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♦ Hot desktop PCs

Windows NT workstations and servers

1993 Windows Hardware Engineering Conference March 1-3 in San Jose

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## **Mobile PCs**

- With/without pen
- ◆ Convertible
- Integrated trackball
- ♦ Ultra light weight
- ◆ Battery/power management technology
- ◆ Color vs. gray scale
- ◆ Wireless communication emerging capability

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#### Hot Desktop PCs

- Many implementations of fast graphics ATI, S3, Wingine
- ◆ Audio is mainstream
- ♦ Access to CD-ROM
- ♦ Easy networking
- ◆ Video acceleration (optional)

#### Attractive for home and business

- Educational/training
- Access to information
- Games

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- Presentations
- Email and document annotation

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## Windows NT Workstations and Servers

#### **Workstations**

- Robust, secure, multitasking environment on PC platform
- Developers and corporate MIS
- Desktop multiprocessing

#### Servers

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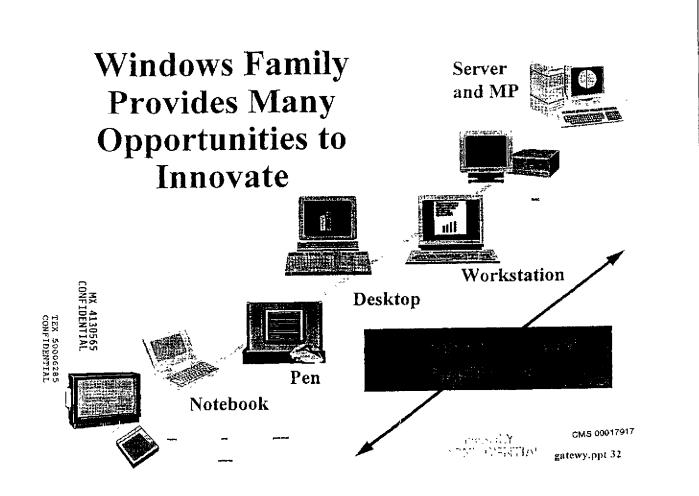
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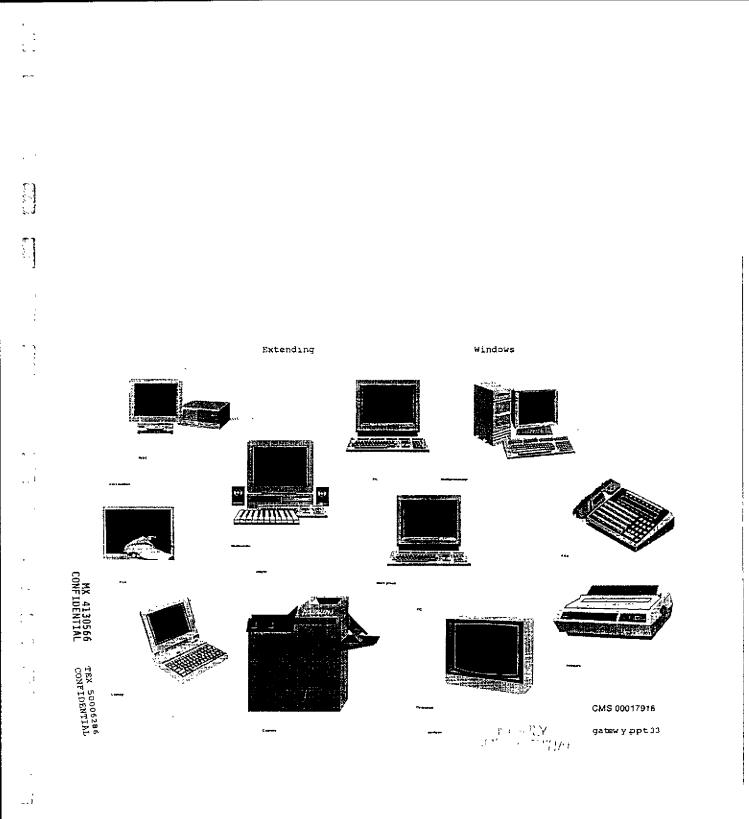
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- Robust, secure, minicomputer-class operating system
- Opportunity for inexpensive servers for down sizing
- Opportunity to build high reliability servers with special hardware management
- Multiprocessing, fault tolerance, etc.

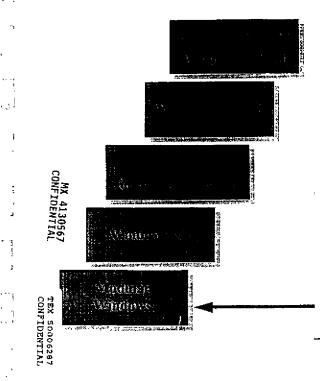
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#### **Modular Windows**



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- ♦ Based on Windows 3.1
- Targeted at non-traditional computing hardware: TVbased devices, personal information assistants, etc.
- Windows development tools
- New user interface models

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#### Modular Windows In The Office

- ♦ Fax/copier/printer
- PBX/phone

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- ♦ Voice mail
- ♦ Video conferencing
- ◆ Electronic data exchange



## Modular Windows In Portables

- Broadcast information
- Personal information

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- ◆ Electronic/voice mail
- ◆ Data to/from desktop automatically
- Optional: CD-ROM, keyboard

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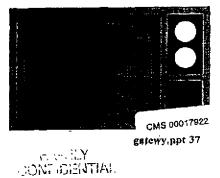
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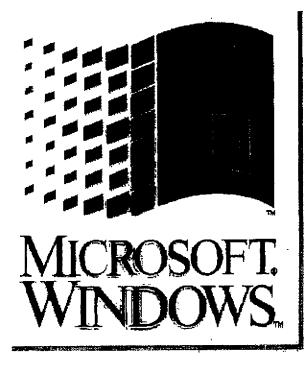
## Modular Windows At Home

- ◆ Home control (VCR, audio, other)
- Phone integration (interactive)
- ◆ Information browsing (cable)
- ◆ Games, photo-CD, education



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