

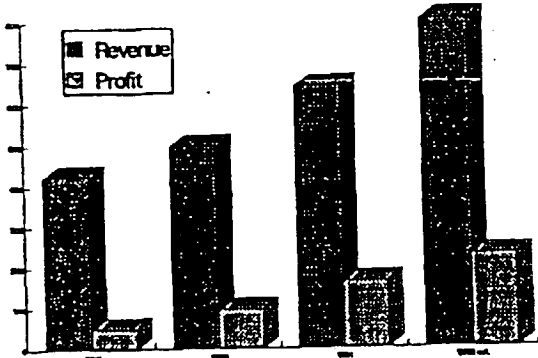
Novell Competitive Review

Jim Allchin

Exec Present 8/27/96

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Revenue and Profit



Exec Present 8/27/96

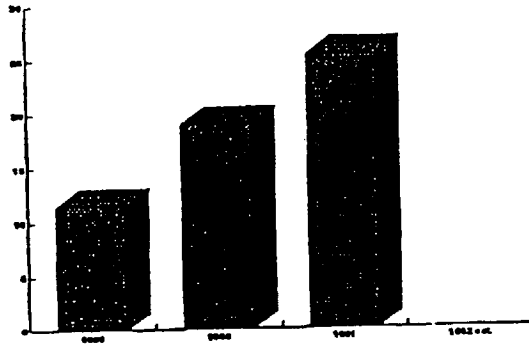
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Return on Sales (% Profit)

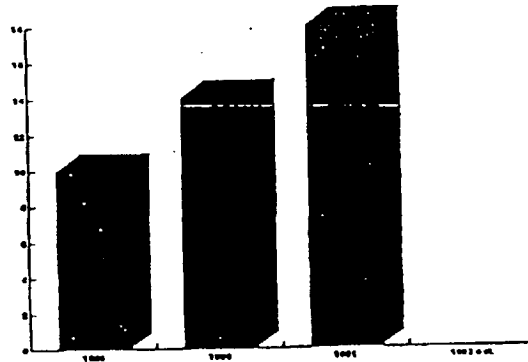


Exact Percent: 8727%

3

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Employee Growth (%)



Exact Percent: 8727%

4

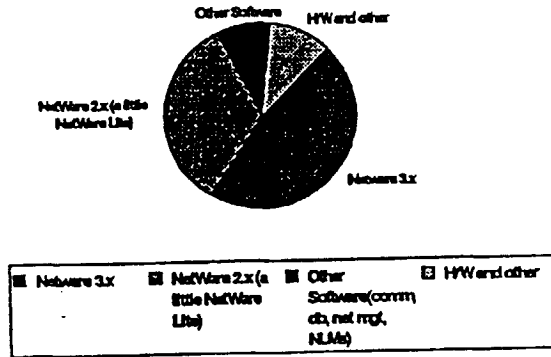
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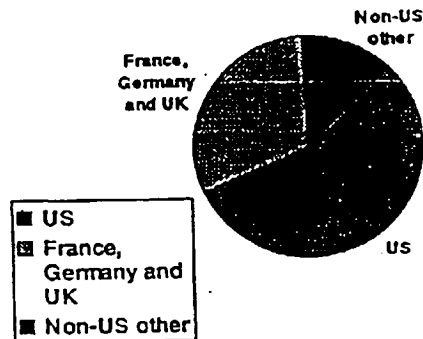
Sales Distribution (\$\$\$) FY91



Exec Present: 9/23/91

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Domestic vs. International FY91



Exec Present: 9/23/91

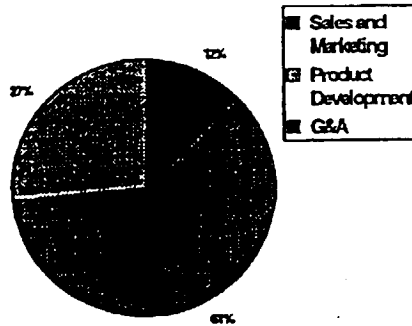
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% Operating Expenses FY91



Basic File Name: 022996

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Today

- o Approx 3,000 people
- o 33 US locations; 17 International locations
- o 15 Subsidiaries (DRI being one of them)
- o 10 Corporate Executive Officers
- o 20 Vice Presidents (In addition to the 10 Corporate Officers)
- o Ray owns approx 11% of outstanding shares
- o 54% ownership in Novell Japan, Ltd. with Canon, Fujitsu, NEC, Sony, Toshiba, and SOFTBANK Corp.)
- o Total short and long term debt: approx only \$2.4M
- o Single largest outside investor in USL (still minority)
- o Platinum resellers (350-500); Gold resellers (2500-3000); authorized resellers (5000-6000)

Basic File Name: 022996

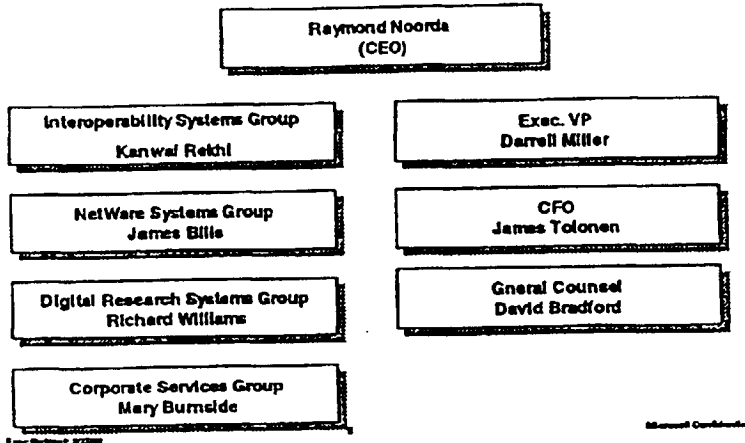
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Company Structure



Who IS Novell?

NOVELL Inc. is an operating system software company and the developer of network services, specialized and general purpose operating system software products, including NetWare, DR DOS, DR Multuser DOS and FlexOS. NOVELL's NetWare networking computer products manage and control the sharing of services, data and applications among computer workgroups, departmental networks and business-wide information systems.

2/25/92 Press Release
Boilerplate

Exec. Release 2/25/92

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Positioned against MS

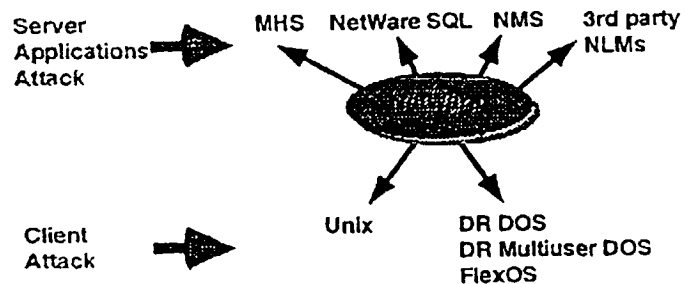
- o They own the server marketplace (60-65% units)
- o They support connections to all clients:
MS DOS, DR DOS, Mac, OS/2, Unix, Windows
- o They own (or investing in) different clients:
 - + DR DOS to attack MS DOS
 - + Unix (Univel) to attack Windows NT
- o NLMs (server applications) are growing
 - by 3rd parties – especially Server DBs
 - by Novell

Doc Ref ID: A70711

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In Attack Mode



Doc Ref ID: A70711

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NetWare Systems Group NetWare Family

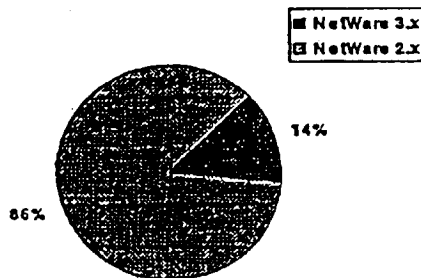
- o Bread and butter money of company
- o NetWare 3.11 (5-1000 clients)
- o NetWare 2.2 (being phased out)
- o NetWare Lite (2-25 clients)

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1.3 million Novell servers (large base of 2.2)



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Netware 3.11

Netware 2.2

Users List

5	\$1,095
10	\$2,495
20	\$3,495
50	\$4,495
100	\$6,995
250	\$12,495

386 and up, 4 MB

Users List

5	\$895
100	\$5,495

286 and up, 2 MB

Exec Product 32294

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NetWare 3.2

- o Due last of 1992
 - Expected announcement: a few weeks before NetWorld Fall
- o Major upgrade push
- o Key features (my guess):
 - "X.500" directory
 - system-auditing software
 - new security system (public and private key)
 - good backward compatibility and easy upgrade
 - simultaneous announcement of OS/2 and AIX support
 - class library to wrap NetWare APIs

Exec Product 32294

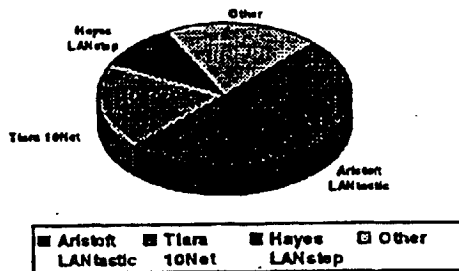
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1991 Peer-to-Peer LAN OS Market Share



source: Montgomery Securities

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NetWare Lite Basic Feature Set

- o File and Print service
- o Uses IPX ODI drivers
- o Simple user level security (Read, All or None) with accounts per server
- o Chat
- o 25 user limit

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NetWare Lite Strengths

- o Novell name and channel support
- o Solid file and print service
- o Simple install
- o Easy to use
- o Excellent doc set

Exam Product: 222222

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NetWare Lite Weaknesses

- o No Windows integration
(no server under Windows and no WinNet driver)
- o Low performance (slow and a bit fat at 75K)
- o Little end user sex (no mail)
- o Incompatible with NetWare
- o Not internationalized

NetWare Lite is less than we expected from the leader in network operating systems. InfoWorld 12/23/91

Exam Product: 222222

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NetWare Lite Marketing

o Facts

- Announced 9/91; shipped 10/91
- SW only \$99 per node (25 user limit)
- HW bundles
 - Eagle \$615 for first two; \$300 for additional
 - Xircom \$850 for first two

o Best Guesses

- Very well distributed through Novell channels (no NetWare certification needed)
- Run rate between 25,000 and 50,000 per month

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NetWare Lite Future Plans

- o No brainers
 - Improve Windows story (WinNet driver and bug fixes)
 - Add to sex appeal (buy utilities, bundle basic mail app)
 - Fix NetWare Interop story
- o New release or upgrade in early 1992
- o Possible moves:
 - Rename to "NetWare for Windows"
 - Bundle Lotus or Borland application (CC: Mail)
 - Latest claim: they will add MAC, etc. support

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What Novell Pushes

- o Hardware Independence
- o High performance
- o Open architecture
- o Reliability/Security/Manageability
- o Workstation independence

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Why does Novell Win Reviews?

- o Better flexibility
- o Overall performance
- o Better ease of administration
- o Overall better value

Summarizing Software Digest and Infoworld reports

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A New Battle Ground

NetWare on downsizing fast track
InfoWorld 2/10/92

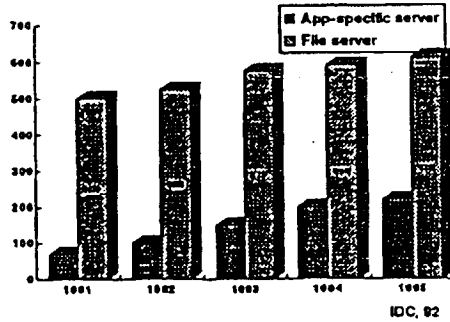
NLMs training in Client/Server Olympics
PC Week 2/21/92

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Worldwide file & App-specific Server Forecast



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Univel

- o **Players:**
 - Joel Appelbaum, pres., CEO
 - Grover Righter, VP Product Group
 - Greg Fallon, VP Sales & Channel Mgt
- o **Novell has 55% share in Univel; (15M in USL)**
- o **Labs in Sandy, Utah, Summit, N.J.**
Headquarters in San Jose
- o **First Product:**
 - ESDT (Extended Security Desktop) =
Unix SVR4.1 (slimmed-down) +

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Univel Products

- o **OS**
 - ESDT (Extended Security Desktop) =
Unix SVR4.1 (slimmed-down) + NetWare Core Protocols
 - 4 MB memory, 60-80 MB disk
 - beta test starts in March; shrink-wrap in September
 - claim no DOS performance loss
- o **Tuxedo**
- o **C++ OODB**

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DRSG

Digital Research Systems Group

- o Formerly Digital Research Incorporated
- o Acquired October, 28 1991 for 3m shares Novell stock (\$70m then, \$140m now)
- o Business unit within Novell
- o Appx. 350 employees
- o Dick Williams is GM of DRSG and Novell Exec VP Sales

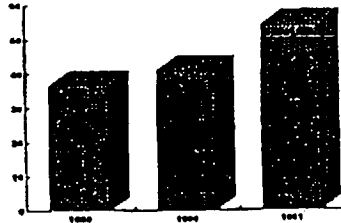
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DRI Revenue

FY Revenue (through 9/30/91)



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DRSG Products

- o DR DOS 6.0
- o Multiuser DOS
- o FlexOS
- o GEM
- o Apps

Doc Ref: 87792

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DR DOS 6.0

- o DR DOS 5 + minor tweaks + bundled utilities
- o Price is \$99 (from \$199 for DR DOS 5.0)
- o Compression, Online docs, PC-Kwik cache, File transfer, Password protection; task swapper, undelete

Doc Ref: 87792

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DR DOS 6.0

- + Advantages:
 - o More features, especially for power users
 - o Compression
 - o Bootable
- Disadvantages:
 - o Less stable than MS-DOS
 - o Three releases so far, incl bug fix to rebase
 - o Windows compatibility questions
 - o Corporations are wary

End Product 02218

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DOS Sales (U.S.)

DR-DOS 6.0

Appx 30k units per month
175k units in first 6 months
Bundled with first 50k Netware Lite
Estimated share: ~9%

MS-DOS 5 Upgrade

80k retail + 20k vpp
800k

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DR DOS OEM's

- o CompuAdd Express (U.S.), Printatorm (Mexico), Vobis (Germany)
- o Vobis is now shipping 66% MS-DOS
- o We've converted ALR, EMI. Working on Cardinal
- o IBM ????

Small Print 1/2/88

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DR DOS Strategy

- o Technically superior DOS. Best DOS, Best Value.
- o Focus on power users, woo the press
- o Frequent releases to "stay ahead" of MS-DOS and get additional reviews.
- o Leverage Novell -- name, distribution, bundles, product
- o Aggressively try to gain key OEM's (esp IBM)
- o Deny Microsoft Income (OEM pressure)

Small Print 1/2/88

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DR DOS Possibilities

- o IBM Deal
- o Bundle with Netware Lite, Netware
- o Sales promo's
- o New release this year
- o More ties to Netware
 - Integrated client support
 - Remote install, upgrade
- o More ties with Borland? Bundles, comarketing, joint direct offers, ... ?

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Novell's Biggest Strengths

- o Incumbent (why change?)
- o Channel and customers are trained
- o The best file server: Performance!
- o Good heterogeneous support
 - client OS
 - h/w (LANs, disks, etc.)
- o Relationship with IBM (a safe choice)
- o Better manageability (3rd party and NMS)

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Novell's Biggest Weaknesses

- o No ownership of Windows technology
- o No directory service
- o Server applications (NLM) environment is very poor
- o NetWare Lite is a weak product
 - Isn't directly compatible with NetWare
 - performance not good
- o Fighting against an incumbent on the desktop (USI)
 - MS OEM deals already signed
 - Why change?

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Coming

- o NetWare 3.2 (end of year)
 - Directory service
 - Public/private security system
- o Tighter integration between DR DOS, Unix, and NetWare
 - quick turn on DR DOS releases (higher release numbers for more press)
- o Lots more NLM add-ons
 - messaging, database, network management
- o More native ports of NetWare (e.g., HP)
- o Unbelievable push of DR DOS into the channel
- o Secondary push of ESDT into the channel

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Winning Against Novell

1. Embrace them as equals to other server platforms

This prevents DR DOS, Unix from gaining on the desktop

2. Defend DOS through additional releases

3. Ship Windows for Workgroups (Sparta)

This attacks them from below.

4. Love our LM customers and get the 3COM (& IBM) business

If we don't, Novell will easily gobble them up

5. Ensure that Windows NT has exceptional file performance

Gives us the server advantage, given all the other NT features (Windows API and address space protection being the most important)

6. Move as aggressively as possible with Cairo

This will neutralize the directory and security issues, plus give us more advantages.

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1. Embrace Novell

- o Support SPX/IPX in DOS and NT as MS standard transport
- o Provide DOS and NT Novell redirectors as standard part of our offerings
 - DOS, Windows, and Windows NT
- o Ensure RPC works on their transport
- o Ensure that our Directory can connect to theirs

Dev. agreements underway

Worth considering:

Make an NLM for Cairo for installed base of Novell servers.

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2. Defend DOS

- o Stay aggressive. Put them on a treadmill.
Release new DOS versions yearly.
- o Respond immediately to any bundling with IBM
- o Ties Into Windows

Underway:

- Current 6-week \$49.99 sale (now)
- Stacker partnership (very soon)
- Blue Janus (April)
- Astro (August)
- Astro Janus (August)
- Cougar (Mid-93)

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3. Sparta Attack

- o NetWare Lite is weak
- o We can undercut them totally in this part of the market
- o Include more sex (e.g., Mail) in Sparta
- o Localize (and get the International market)
- o Ensure ease of use, great performance, and seamless interoperability with LM

All underway!

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4. Love our LM Customers

- o Ensure we don't lose any current customers by providing good support and telling them about the future
- o Get 3COM and IBM customers
This is a large base waiting to be taken
- o Continue to work with the channel to get them trained for support, etc.
- o International push?

Plans in place. Is there more that we can do?

Exec Purpose: 92702

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5. Windows NT

- o We must be as good a file server as NetWare
This means performance, capacity, etc.
- o Prepare a major marketing attack with the beta launch to highlight why Windows NT is the best server platform
- o Get server applications ported to NT.
This is underway, but we need every DB vendor, etc.
We need to suck up their time instead of doing NLMs
- o Consider aggressive pricing

Strongly suggest that we begin NCP NT Server work (white room)

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6. Cairo

- o We need a high-end story on Directory Services and the future of Distributed Computing.
- o We need to get Digital (and others) to buy into our approach and get them signed up
- o Connect to the NetWare Directory from Cairo

Execution!

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2/26/92 Novell Meeting - Insights

- o They believe we sabotaged Windows 3.1 against DR
- o They believe having Windows running on DR is good for MS ("It expands the Windows mkt")
- o They had a heart attack when they learned there were NCP clones. They are terrified about us doing an NCP server on NT. ("We'll take legal action against a clone.")
- o They *really* want us to do an NLM to "tell the world that we back Novell Operating Systems".
- o No plan to do Windows clone. High probability to do a new environment.
- o Directory is running
- o Noorda is a fox ("can't remember why you're here" vs. "breakfast meeting about the risk of dev. project 6").

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Status of Novell Agreements

- o Windows 3.1 done
- o Letter for NT code should be signed today
(It says that everything is returned if no final agreement is reached.)
- o Global SDA essentially done
- o Development projects (1-3) within reach – however,
major disagreement over 6 and possibly 4.
 1. Non protect mode DOS and Windows client
 2. Protect mode DOS and Windows client
 3. Windows NT client
 4. Directory Interoperation
 5. MS RPC support for NetWare
 6. MS provides help (and source code) to DR to guarantee

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Bad Things

- o Novell bundles DR DOS with NetWare
(possibly with another GUI)
- o Novell and Borland merge
- o Novell picks up some type of low end Windows UI clone
(e.g., Geoworks, etc.)
- o Windows for Workgroup isn't fast nor product of the year
- o Windows for NT does not equal NetWare performance
- o Cairo stumbles and directory services are delayed

We have the plans: we must execute.

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