

NetWare. There were hints that Novell was just using 3Com until it could bring out its own adapters. But mostly 3Com was still in its snit about the beating EtherSeries took from NetWare.

Here we placed our second losing bet against Novell. Declaring war against our largest customer, we decided to stop selling EtherLinks through Novell.

Well, it turned out that NetWare buyers were happy to consider adapters other than 3Com's, especially if they were dirt cheap. Our adapter growth rates slowed as Novell found cheap Ethernet adapters to sell under its NetWare label. In fact, Novell began giving adapters away to win big end-of-quarter NetWare purchases.

More recently, Novell and others have found it difficult to remain in the adapter business. 3Com's bets on quality, automation and support have allowed it to maintain its leadership in Ethernet adapters to this day, despite this second losing bet against Novell.

Betting Against Novell, on Microsoft

By 1988, with 3Com—if not its NOS—still booming, I walked Microsoft, 3Com's OEM supplier of DOS for file servers. Microsoft was then introducing OS/2 with IBM and was ramping up its NOS efforts.

Microsoft presented demos to show us that the new OS/2 LAN Manager was far along. IBM had adopted OS/2 and LAN Manager, Microsoft said, so ours would be a three-way partnership in the creation of a new NOS standard. Needing 3Com's networking expertise, Microsoft proposed that 3Com join in the development of LAN Manager.

3Com had previously bet and won with the IBM-Microsoft team, back when we chose PC-DOS over Unix and CP/M in 1981. And so, instead of switching to NetWare or moving back to Unix, we placed our third losing bet against Novell by agreeing that Microsoft and 3Com would co-develop OS/2 LAN Manager.

Like IBM, all 3Com had to do was sign a LAN Manager OEM contract, and then later pay royalties as sales took off through 3Com's network dealer channels.

The Microsoft-3Com LAN Manager partnership started immediately downhill. At our first joint press conference we found ourselves arguing with Microsoft about whether to call it

the Microsoft-3Com LAN Manager, the Microsoft LAN Manager co-developed by 3Com, or the OS/2 LAN Manager by Microsoft with 3Com in the general vicinity.

Next, LAN Manager code drops from Microsoft started slipping and bugs proliferated. Explanations for OS/2's delayed ramp grew more elaborate. And then early signs of Microsoft's falling out with IBM materialized with the damaging announcement of IBM's all-too-different LAN Server.

Although they may show signs of

Mr. Noorda didn't take 3Com's rude rejection to heart. He moved Novell's advanced NOS off its proprietary hardware, changed its name to NetWare, and launched an aggressive marketing campaign that left 3Com in a paralyzing snit.

hope in the future, neither OS/2 nor its LAN Manager took off as anticipated in 3Com's OEM contract with Microsoft. Even with 3Com shipping nearly 70 percent of all LAN Managers—way ahead of even IBM—3Com was still not getting near its contracted royalty minimums, and was having to pay for many copies not sold.

Then, Microsoft double-crossed 3Com, among others, by introducing its own end-user version of LAN Manager into 3Com's well-developed network dealer channels.

Cutting Losses

In recent months, to cut losses on this third losing bet against Novell, 3Com negotiated out of its burdensome LAN Manager partnership with Microsoft. In doing so, 3Com wrote off tens of millions of dollars, a substantial percentage of which were prepaid royalties to Microsoft.

3Com also wrote off substantial sums to cover continuing support of

customers through transitions to Microsoft's new version of LAN Manager or to NetWare, which 3Com now also sells for its file servers.

In early 1991 the depth of the damaging division between IBM and Microsoft was further revealed when IBM began marketing NetWare. It is now up to Novell and Microsoft to slug it out in the NOS business, with IBM and 3Com offering both.

Back to the Future

3Com bet and lost against Novell an extraordinary three times. While fighting over the NOS market, 3Com and Novell both became \$400 million networking companies, Novell with its NOS and 3Com with just about everything else.

After the drubbing 3Com took in the NOS market, analysts wrote that Novell had a 70 percent market share in networking; of course, this could not be true with both companies being the same size. NOS had mistakenly become synonymous with the totality of networking. 3Com's prestige plummeted even as the company's sales grew. This was the major loss in 3Com's three bets against Novell.

3Com is now refocused on the other 90 percent—the winning parts of its networking business.

Other 3Com bets have paid off, especially in interneting, terminal servers, hubs and, of course, EtherLinks, which are now shipping a fantastic 100,000 per month.

Networking market analysts are finally beginning to realize that there really is much more to networking than the NOS.

Now that you've heard me explain away my snubbing of Ray Noorda at COMDEX in 1983, I'll have to go back a year to 1982 and tell you about the meeting in which 3Com told Sun Microsystems founder Andy Bechtolsheim, who was then still a graduate student at Stanford University, that we would not go into the workstation business with him.

Well, you see, we were betting on the new IBM PC and Andy...this will take some doing. ■

Bob Metcalfe founded 3Com Corp. in 1979 and is now writing a book, Ethernet versus Godzilla.