



Market Strategy Report

IBM's New NT Server Strategy:
Can It Make NT Work for
It—Instead of Against It?

September 1998

“If ‘coopetition’ was actually in the dictionary, there would be a picture of IBM and Microsoft next to it. The trick for IBM is to calculate correctly just how much skin it needs to put into the NT game to come out ahead.”

—Laurie McCabe

**NT Strategies:
Servers, Software
and Solutions**

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Table of Contents

IBM's New NT Server Strategy:
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Sections	Section 1	IBM and Microsoft's Intricate Relationship	2
	Section 2	Defining Netfinity's Role in IBM's Server Lineup	4
	Section 3	Can Netfinity Gain Back Lost PC Server Ground?	8
	Section 4	ServerProven—Making Up for Lost Time	11
	Section 5	IBM's NT Software Conundrum	14
	Section 6	Global Services—Advantage IBM	19
	Section 7	The Two Faces of IBM's NT Strategy	22
Figures	Figure 1	IBM's Server Opportunity Matrix	5
	Figure 2	IBM's Cross-Brand Server Sales Model	7
	Figure 3	IBM Turns the Performance Corner With Netfinity Benchmarks	10
	Figure 4	ServerProven Program Components	12
	Figure 5	IBM's New Suites for Windows NT	17
	Figure 6	IBM's Increasing Services Revenue	20
	Figure 7	IBM—Personifying the Role of Microsoft Partner and Competitor	22
Addenda	Appendix A	Market Strategy Reports	24
	Appendix B	<i>SummitVisions</i>	28



Executive Briefing

IBM's New NT Server Strategy: Can It Make NT Work for It—Instead of Against It?

IBM is no longer in NT denial. In the past, the vendor may have wanted to wish Microsoft's Windows NT Server away, but NT Server is growing eight times faster than the total server operating system market—and IBM realizes it is more than just a passing fad. For the most part, IBM has replaced its NT antagonism with a practical attitude and a proactive strategy designed to help it profit from NT's market success.

IBM has to make up a lot of lost ground, however, to successfully execute this strategy. In the past few months, the vendor has transitioned from its stove-piped, brand-centric server organization and sales model to a centrally managed, solutions-oriented structure. The company hopes, among other things, that this new setup will give its Intel-based NT servers a clearer role in IBM's server portfolio and enable IBM's sales force to be competitive with other NT server vendors. (For an overview of IBM's server strategy, see Summit Strategies' Vendor Strategies report, *Segmenting and Positioning IBM's Server Family*, August 1998.)

IBM has also replaced its lackluster PC Server brand—which many NT application developers snubbed in favor of higher-performance platforms from higher-profile NT Server OEMs—with its new Netfinity line. IBM is investing heavily in development and branding for this new line, compensating for PC Server's deficiencies. It is also rolling out intensive ServerProven partnering programs to woo key solutions providers to the Netfinity platform.

Meanwhile, IBM is repackaging and remarketing its vast software portfolio for NT, and making it easier for its customers to integrate NT Server into legacy computing environments. Finally, IBM is trying to position its huge Global Services organization as the *best* NT integrator in any customer environment. If it can increase Global Services' presence in NT strongholds, IBM can take back some of the account control it has lost to other PC server vendors.

But, even as it makes these substantial changes, IBM continues to wrestle with its high-profile role as Microsoft partner *and* competitor. No matter how well it positions Netfinity, IBM's proprietary servers and operating systems will still often be pitted against NT Server. IBM's NT Server software products also compete head-to-head with Microsoft's BackOffice applications.

Most important, although IBM has embraced NT to a much greater extent than ever before, its strategic vision, unlike some of its NT Server competitors, does not—and never will—revolve around Microsoft and NT. IBM's ultimate vision of a Java-based, network-centric computing world will often put it at odds with Microsoft's NT-Server-centric agenda. However, IBM knows that NT will play a big role in the market. It realizes that it must extend its NT market share and account influence *now* to have a better chance of achieving its big-picture goals later.

Will IBM's refreshed Netfinity and NT Server strategy make NT work for IBM—instead of against it? Or, will its competitive agendas continue to get in the way? The trick for IBM is to calculate correctly just how much skin it needs to put into the NT game to come out ahead.

On the “partner side” of its NT split personality, IBM has to play defense—and prove that it is a “real” NT partner. In many respects, the company is overcompensating for its past missteps in developing and marketing its NT strategy and offerings. Going forward, IBM can leave no stone unturned in increasing market awareness for the Microsoft-friendly parts of its personality. Because its server and software strategies still often conflict with Microsoft's, IBM will need to rely heavily on Global Services' ability to provide premier NT integration capabilities to gain and grow account control. The sheer volume of IBM's services, support and consulting personnel gives the company an edge in winning consulting and services business at large global accounts, even when NT plays a big part in these accounts' IT environments.

But, even as IBM walks the NT walk and talks the NT talk, it hasn't—and never will—drink *all* of Microsoft's NT Kool-Aid. IBM will continue to position its Network-Computing-Framework- (NCF) and Java-centric stance as providing more open and integrated Internet and e-business solutions than Microsoft. As a result, the many other Microsoft partners that are relatively free of potential conflicts with Microsoft will likely always be perceived as having an edge on IBM in the NT market. And, no matter how well it may cover the NT bases, IBM will usually be perceived as a Microsoft competitor rather than a Microsoft partner.

However, while IBM's “competitor side” gets in the way of IBM becoming an NT leader, it also means that IBM will never be a Microsoft follower.

IBM's real bets are on itself and on where it believes the market is headed after the NT wave crests. While it is willing to pull out a lot of stops to win in the NT market, its NT initiatives will always be within the context of its broader agenda. IBM will always focus on its ability to provide comprehensive solutions integration across multiple, highly scalable platforms and operating-system environments.

Although it may be uncertain just how much skin it needs to put into the NT game to come out ahead, IBM's split NT personality makes sense—for IBM. It has been around long enough to know how the game is played, and will choose its fights and liaisons with Microsoft carefully to harness as much NT momentum as it can for its own purposes. And, unlike some of its competitors, which need to ride Microsoft's coattails, IBM may be the only vendor with the financial wherewithal, market clout and partnering abilities to supersede Microsoft's NT agenda with its own network-centric vision. Over the long term, IBM is betting that Internet and Java momentum is even stronger than Microsoft-centric, Windows NT client/server momentum—and that NT is one more competitive storm that IBM will weather and emerge from stronger.

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in NT strongholds, IBM can take back some of the account control it has lost to other PC server vendors.

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Will IBM's refreshed Netfinity and NT Server strategy make NT work for IBM—instead of against it? Or, will its competitive agendas continue to get in the way? This report examines IBM and Microsoft's relationship, analyzes how NT fits into IBM's corporate server plans, and evaluates its NT-specific initiatives across its hardware, software and service divisions. It also discusses the relative importance of NT to IBM's more universal goals.

Section 1 IBM and Microsoft's Intricate Relationship

IBM and Microsoft's relationship isn't simple. While the two vendors have a history of conflicting agendas and mutual distrust—which could encompass a complete report by itself—they each depend on their partnership to succeed. As a result, IBM has developed a dual personality when it comes to NT.

On one hand, IBM has, at least within its Intel-based Netfinity server and software businesses, overcome its ambivalence about NT. While IBM continues to sell its own OS/2 operating system to installed-base customers (and NetWare, Sun Solaris, and SCO UnixWare and OpenServer to whoever wants them), Microsoft's Windows NT Server is now IBM's strategic operating system for Netfinity servers. IBM has also ported most of its server software and middleware to the NT platform, creating a cross-platform portfolio of middleware solutions that allow customers to more easily integrate NT into heterogeneous computing environments.

In addition, IBM has over 125 engineers in Kirkland, WA, next door to Microsoft's Redmond headquarters, to work with Microsoft. While a number of Microsoft's other systems partners have also established Redmond-area operations to work closely with the big software company, IBM's Washington team is probably second only to Compaq/Digital Equipment's in size. IBM engineers test NT source code daily, and work closely with Microsoft to certify IBM components on NT, beta test NT operating-system code, serve as a site for Microsoft's NT 5.0 First Wave Program and develop IBM software for NT.

And IBM is even the sole OEM sponsor for Microsoft's Business Applications Conference this September. IBM mainframes and Netfinity servers will be featured at the event, which Microsoft expects about 4,000 to 5,000 developers to attend.

But, on the other hand, IBM is still fiercely loyal to—and fiercely competitive with NT Server systems with—its RS/6000, AS/400 and S/390 systems. These platforms not only provide it with higher margins than Netfinity servers, but also ensure IBM more account control than NT, which flighty server customers can swap onto another vendor's PC servers in a heartbeat.

And, as noted earlier, many of IBM's NT Server software products—and, of course, Lotus Domino—compete directly with Microsoft's BackOffice server applications. IBM's middleware, including its CICS transaction processing system and its MQSeries of messaging systems, also competes with Microsoft's alternative middleware offerings. At the same time, however, IBM promotes NT Server as the strategic *operating system* for its Netfinity products. The vendor will also lead with its own NT applications and middleware, *and default to BackOffice and Microsoft solutions only when necessary.*

These conflicting intricacies cause enough distrust on both sides to inhibit closeness in the relationship. To continue acquiring the information that it needs for NT software and hardware development, and to capitalize on NT growth, IBM must continue investing engineering resources to maintain the relationship. Yet, it needs to walk a fine line with Microsoft on the marketing side. Unlike some of its Netfinity competitors, IBM is not a one-trick pony and, to Microsoft's chagrin, frequently will lead with its other server platforms.

These complexities have dogged IBM in the NT market from the beginning, and they are not about to go away. However, IBM is laying the foundation for a pragmatic NT strategy that it hopes will leverage NT Server's growth to its own advantage.

Section 2

Defining Netfinity's Role in IBM's Server Lineup

In addition to figuring out how to simultaneously—and successfully—compete and partner with Microsoft, IBM also has to decide where to position its Intel/NT servers within its own server family. As a vendor with multiple server brands and operating systems, IBM traditionally left it up to customers to decide which were best suited to their computing requirements. Its sales organization and sales compensation plans were structured so that each server brand group had a vested interest in selling its own product line, meaning that IBM sales teams often wound up competing against each other in the same accounts—confusing and sometimes alienating customers. And, as a corporation, IBM often favored its higher-margin proprietary server brands over its Intel-based NT server offerings, allowing more focused and aggressive NT server competitors to zero in on the somewhat-neglected IBM accounts that were considering NT solutions.

IBM needed to provide its Intel-based NT servers with more distinct positioning within its total server and operating-system portfolio. To facilitate this shift, it had to move from a product focus to a solutions focus, which would allow it to market the computing platform and solutions that best suit each customer. At the same time, it had to offer a choice when more than one IBM server brand fit the bill. To accomplish this, IBM united its four server-marketing groups into a single Server Brand Management organization under former AS/400 vice president Bill Zeitler in November 1997.

This new structure allows IBM to centrally manage server product development and branding, and enables it to better reconcile its cross-platform server positioning. Instead of selling platforms, IBM can now focus on selling “best-fit” server solutions into its target, corporate-wide solution markets. These include seven high-growth areas, which it clusters into the following three broad categories:

1. *Core businesses*, which include office infrastructure (especially PC file and print server consolidation) and enterprise resource planning (ERP);
2. *E-business*, which consists of e-mail, messaging and collaboration (most notably Lotus Domino), Web serving and e-commerce; and
3. *“Deep computing,”* which includes large, database-driven applications, such as Business Intelligence (BI) and compute-intensive, scientific/technical applications, such as simulation.

(Note: IBM industry units also have additional initiatives underway in three other application areas: supply-chain management, customer relationship

Figure 1

IBM's Server Opportunity Matrix

IBM's new solutions-oriented server organization defines "lead platforms" for most solutions and recommends alternatives for customers with specialized requirements.

		S/390+ Equivalent	Unix (RS/6000)	Non-Unix Midrange (AS/400)	NT & Equivalent (Netfinity)
Core Business	Office Infrastructure	File/Print Consolidation for S/390	Open System Management (Tivoli)	NT IPCS	Lead Platform (File/Print, Network Management)
	Transaction Processing (OLTP, ERP)	Upgrades, Large ERP for S/390	ERP for Unix	Upgrades, New ERP (Custom Servers)	ERP for NT, SMB
E-Business	Collaborative (Enterprise Notes)	S/390 DB2 Integration Required	Scalable Domino for Unix	Scalable Domino for AS/400	Domino for NT
	Web Serving	Dynamic Access to S/390 Data	Lead Platform (ISPs)	AS/400 Customers	ISPs When NT Preferred
	E-Commerce	Data on S/390	Net.Commerce for Unix	Net. Commerce for AS/400	Net. Commerce for NT
Deep Computing	Business Intelligence	Data on S/390	Lead Platform for Open DBMS & Scalable Data Mart	Data Warehousing & Data Marts for AS/400 Customers	Data Marts
	Scientific/ Technical/ Engineering		Lead Platform (Sci/Tech,Catia)		

Source: IBM

management and payment systems. IBM may elevate these to corporate solutions focus status in the future.)

Within each corporate solution area, IBM drills down two more levels to create specialized sub-segments, each with its own platform and service requirements. As shown in Figure 1, this solutions-oriented server organization defines "lead platforms" for most solutions and recommends alternatives for customers with specialized requirements—such as those with particular scalability needs or those that already have most of their application data on other platforms.

Even with this new solutions matrix, some overlap still exists. But IBM contends it will lead with Netfinity/NT Server in selected sub-segments,

both to grow its penetration in installed-base accounts and to gain new business. It will use Netfinity and NT Server to target discrete markets within each of its broad solution categories:

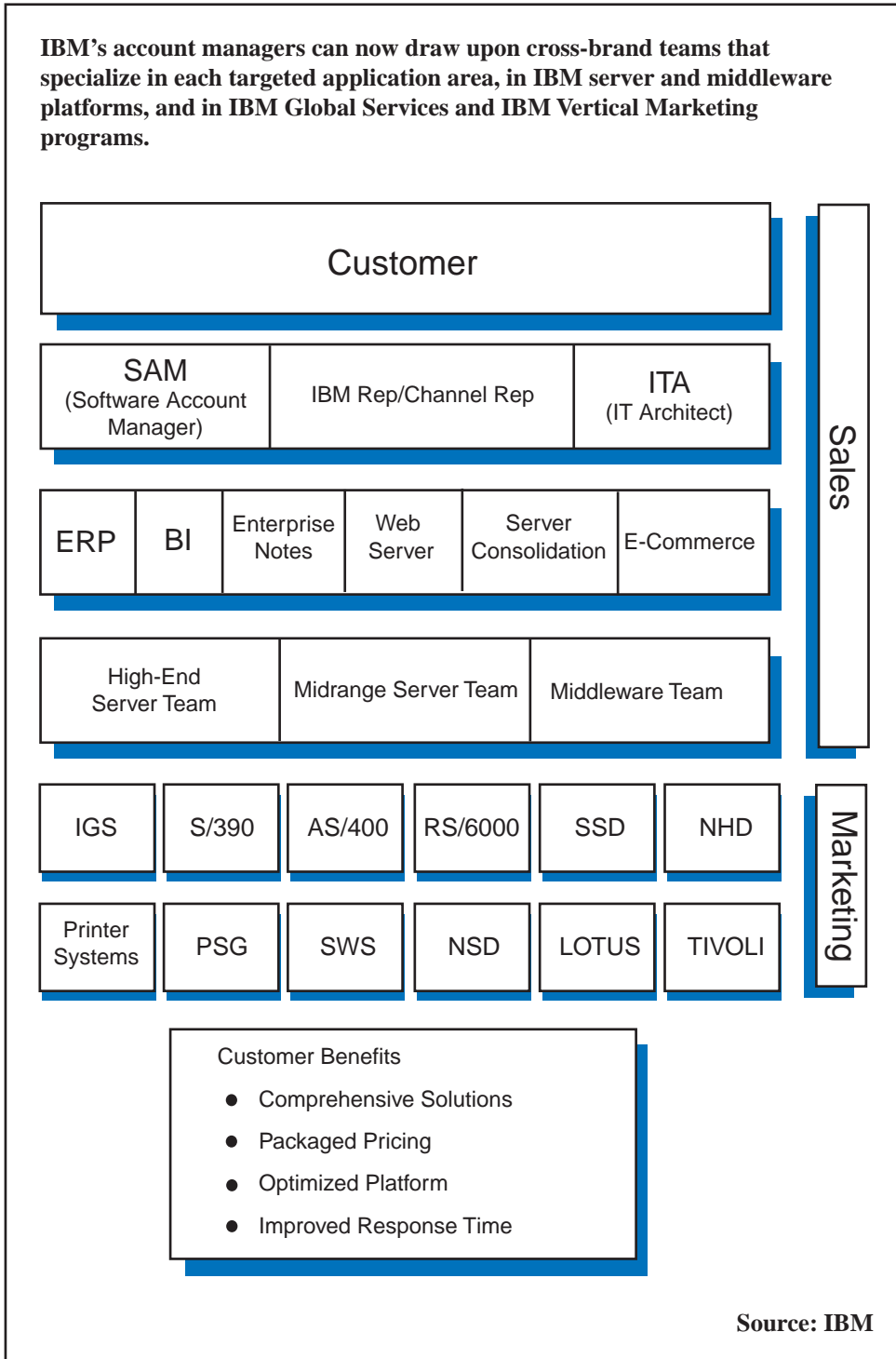
- *Core business.* Within the ERP solution market, IBM has designated Netfinity/NT Server as a lead platform, serving as both a complete solution for small and midsize businesses, and an application server to S/390, AS/400 or RS/6000 in three-tiered environments. In the office-infrastructure market, which consists of file/print serving and network management, IBM has positioned Netfinity/NT as its primary *server-consolidation* platform.
- *E-business.* IBM has staked its future on e-business, which is a strategic area for all its server platforms. IBM positions Netfinity/NT Server for less-demanding Web serving and e-commerce solutions. For collaborative computing, Netfinity is IBM's lead Lotus Domino/Notes server, and IBM bundles a free version of Domino or Domino Internet Starter Pack on each Netfinity server. In the Web serving market, Netfinity is IBM's primary server in less-demanding, departmental-level implementations, as well as for Web server customers that prefer NT to Unix. IBM also recommends Netfinity with Domino Merchant and, when it's available, Net.Commerce for NT for less-demanding e-commerce applications.
- *"Deep computing."* While the RS/6000 and AIX are IBM's most strategic weapons in this market, IBM positions Netfinity/NT Server as its primary data-mart platform to provide small-to-midsize customers (which often don't need the scalability of Unix systems) with BI solutions.

IBM's server segmentation strategy gives Netfinity a more defined solutions and market focus. As important, IBM has reorganized its sales structure and compensation plans to ensure that its sales people execute the strategy. The company is moving from brand-driven, "silo" sales to a cross-brand structure that focuses on solutions selling. This new, more-holistic approach enables IBM's sales force to focus on selling the best solution for the customer and refocuses IBM's product groups on competing with external competitors—instead of with each other. Its account teams are still vertically focused, and they provide single points of contact for IBM's entire product and services portfolio (see Figure 2). However, they—and IBM's channel partners—can now draw upon cross-brand teams, which specialize in each targeted application area, in IBM server and middleware platforms, in IBM Global Services and in IBM Vertical Marketing programs.

One cross-brand server team, the High-End Server Team, focuses on high-end products (S/390, high-end storage, and networking). The other cross-brand server team is the Midrange Server Team, which IBM has cross-trained to

sell Netfinity, AS/400 and RS/6000 solutions. Most significant for the Netfinity brand, the teams are measured on *aggregate, cross-brand* revenues, making Netfinity an equal to its peers in terms of sales compensation.

Figure 2 IBM's Cross-Brand Server Sales Model



IBM's recognition that it must have a strong value proposition and clear market positioning for Netfinity and NT Server solutions removes *some* of the barriers that IBM had previously created for itself in the NT market. The next steps for its Netfinity organization are to regain lost ground and increase IBM's share of the NT server market.

Section 3 **Can Netfinity Gain Back Lost PC Server Ground?**

Intel-based servers are forecast to increase from 21 percent of server revenues now to more than 41 percent in the year 2001, when they will also account for 50 percent of all server unit shipments (according to IDC). As the fastest-growing operating system, NT Server is driving much of this growth. However, as the market has grown, IBM's share has dropped.

IBM's discordant past with Microsoft and its problems in clearly positioning its Intel-based servers aren't the only reasons for IBM's declining market share. The vendor's PC Server brand often stacked up poorly against competitors' Intel-based server offerings in many price, price/performance and feature/function comparisons.

But, within the last several months, IBM has started making up for these shortcomings. The vendor leveraged its high-end systems expertise to design its new, Intel-based, Netfinity server line, which it introduced last September. Netfinity completely replaces IBM's old PC Server line, which will be completely phased out this quarter. With Netfinity, IBM hopes to optimize NT Server application performance, attract new partners and steal back some of the market share it has lost.

Today's Netfinity lineup includes the Netfinity 3000, 3500, 5500 and 7000 lines, which range from Pentium II uniprocessor to 4-way Processor Pentium Pro and Xeon SMP systems. Unlike their PC Server predecessors, Netfinity servers address high-availability requirements with features such as:

- *Predictive failure components*, which alert the customer to a pending component failure so it can be fixed before it breaks;
- *Redundant/hot swappable components* for reduced downtime and higher availability;
- *Capacity planning*, to facilitate upgrades;
- *Hot Add capability*, to add capacity without user impact;

- *Light Path Service aid*, to more easily diagnose problems and repair components; and
- *Netfinity Manager* (for system management), which is integrated with Intel's LANDesk as part of IBM/Intel's Advanced Manageability Alliance to create an industry-standard manageability foundation.

IBM's engineering efforts have resulted in Netfinity coming out on top in several high-end and midrange PC server performance and price/performance benchmarks (see Figure 3). For example, in June, the Netfinity 4-way (Xeon processor) 7000 M10 server, running IBM's DB2 Universal Database, set record performance and price/performance results on the TPC-D benchmark. IBM plans to ship the Netfinity 7000 M10 in September 1998.

Looking ahead, IBM is developing 8-way SMP Netfinity systems, which will be based on the Intel/Corollary Profusion 8-way SMP architecture. (See Summit Strategies' Industry Dynamics and Market Strategies report, *Jockeying to Win in the 8-Way SMP NT Server Market*, April 1998, for a full description of Intel/Corollary's Profusion strategy and architecture.) It is hoping to provide leadership in balanced system design by effectively using its 20 years of 8-way SMP design experience to optimize performance across the operating system, middleware, applications, processors, memory and I/O subsystems.

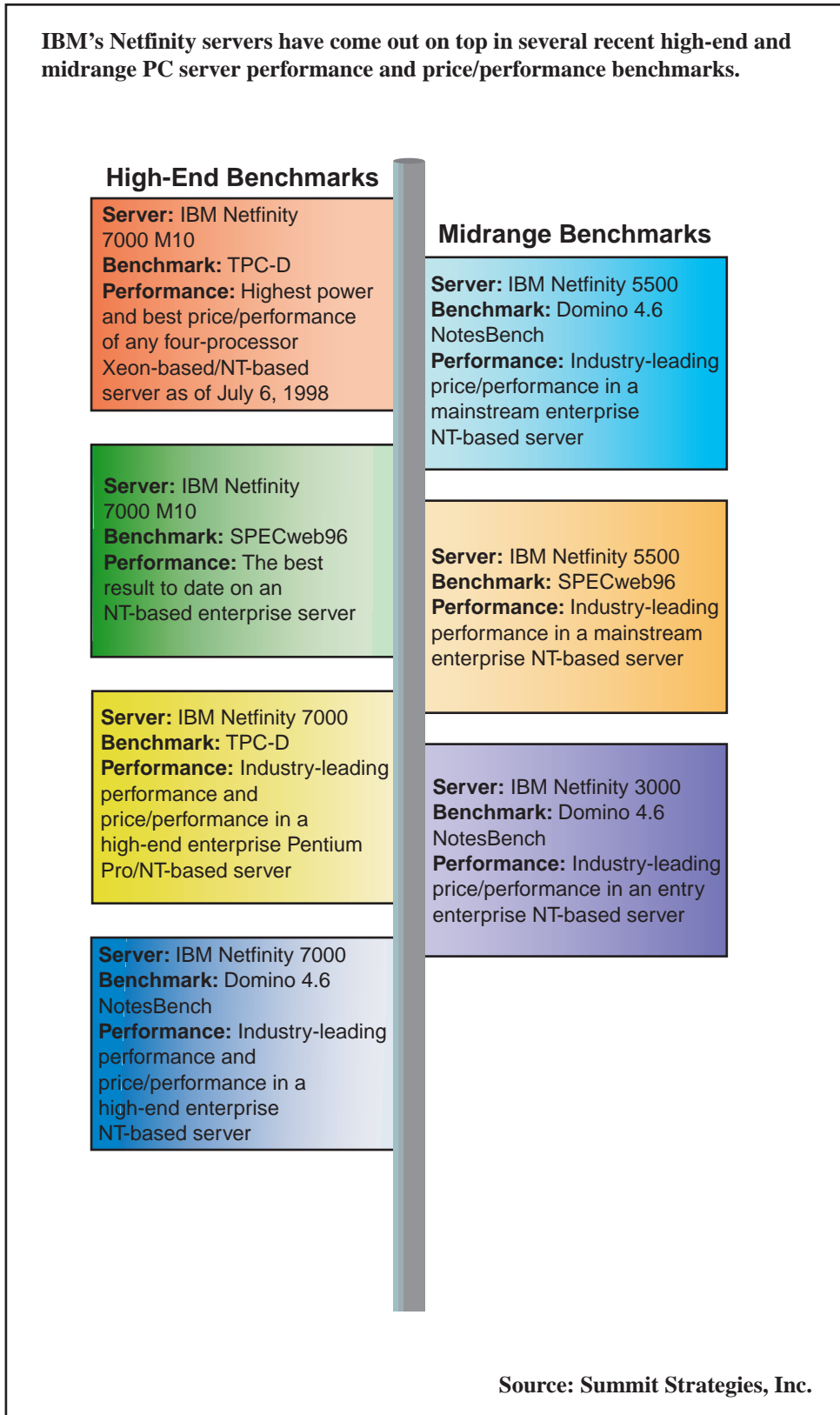
The vendor has also laid out a clustering roadmap for Netfinity servers, which currently supports Microsoft Cluster Server (MSCS) for simple two-node failover. (IBM also enhances MSCS with IBM Cluster Systems Management for improved cluster control.) The vendor plans to bring its large-cluster experience and single-point-of-management capabilities to the Netfinity/NT Server platform in 1999.

In addition, IBM will introduce new Netfinity Fibre Channel hardware and software products in September 1998. These products will enable Netfinity to take advantage of flexible, high-speed clustered storage solutions and allow it to compete more effectively with Compaq, Dell and others that are already shipping fibre-channel storage solutions for their NT Server product lines. (These, plus a number of additional enhancements to the Netfinity line, will be examined in greater detail in a forthcoming Summit Strategies' Vendor Strategies report, *Can IBM Restart Its PC Server Business?*)

With these new, improved products, IBM can field a much more competitive Intel-based server platform. However, IBM has to work overtime to compensate for its past mistakes if it is to convince developers and resellers—and, ultimately, end users—that it is truly a contender.

Figure 3

IBM Turns the Performance Corner With Netfinity Benchmarks



Section 4 **ServerProven—Making Up for Lost Time**

IBM's deficient PC Server brand made attracting critical partners difficult. Except for a few ISV deals, IBM's NT Server partnering initiatives with key solutions providers were lackluster. In fact, IBM couldn't fully leverage even its most successful ISV relationships on other platforms to the NT Server arena. For instance, JD Edwards, a very important IBM AS/400 partner, was noticeably absent from IBM's list of major NT server partners. And Lotus may be the most embarrassing example: Compaq owns 55 percent of the NT Server market share for IBM's Lotus Domino solutions.

And speaking of Compaq, is its commanding market share lead as daunting as it seems for major NT solutions vendors, such as Baan, Lotus and SAP? While IBM admits it was slow getting started and must make up for lost time, it claims that software vendors don't want to get locked into one OEM partner and are looking for alternate NT Server hardware partners.

With these factors in mind, overhauling its Intel-based server brand was clearly job one for IBM. With Netfinity, IBM finally has a platform that is capable of delivering competitive application performance benchmarks. And IBM's ServerProven Solutions program is chartered to develop key ISV partnerships that will drive its solutions-oriented Netfinity strategy.

ServerProven is offered through IBM's Solution Partnership Centers (SPCs) and provides ISVs (and customers with custom applications) with access to pre-sales and consultant technical expertise. Also, customers' business products and solutions can be tested and certified as "ServerProven" on the Netfinity platform. IBM and its ServerProven partners test all the building blocks of any given solution; optimize workload performance for the hardware, software and options; document the results; and engage in joint marketing initiatives.

Resellers and SIs can use the password-protected ServerProven Solutions Web site, which provides end-to-end information for configuring customer solutions quickly, easily and cost-effectively. Unlike Compaq and Hewlett-Packard (HP), which charge a fee for similar programs, IBM provides resellers free access to ServerProven Solutions. ServerProven resellers also have free access to IBM Knowledge Base for help in diagnosing problems. With Knowledge Base, resellers key system symptoms into an IBM database that, with the aid of artificial intelligence, returns a diagnosis and suggests solutions.

IBM is well underway in establishing ServerProven partnerships with over 100 North American ISVs, most of which offer multiple applications through the program. IBM opened the program in Europe, the Middle

East and Africa (EMEA) in the second quarter of 1998, and expects to add Asia Pacific (AP) in the third quarter of this year. ServerProven encompasses solutions for small and midsize customers, and large enterprises, and includes vertical applications and horizontal solutions. ServerProven also provides participating partners with extensive technical and marketing assistance, as shown in Figure 4.

Figure 4

ServerProven Program Components



ServerProven’s small and midsize business focus is on testing “real-world” solutions that these businesses can quickly deploy. IBM has recruited over 40 partners to address this market, and has opened five Worldwide Solution Partnership Centers targeted at small and midsize business developers in North America and EMEA, with additional centers planned in AP. These centers will also house IBM’s Intel Application Solution

Centers (see Summit Strategies' NT Strategies: Servers, Software and Solutions report, *Intel: Countdown to IA-64*, April 1998). IBM was the first vendor to provide global rollout for Xeon and Merced support through Intel Application Solution Centers (ASCs), with three initial locations and plans to expand. Microsoft's Small Business Server, Jack Henry's NetTeller banking solution, AccountMate's Visual AccountMate accounting applications and Cisco's Networked Office Stack for Internet Access are examples of solutions for Netfinity 3500 and 3000 servers that are tested and now available through the ServerProven program.

For large enterprise-application partners, IBM has jointly staffed International Competency Centers with major ERP vendors, including Baan, JD Edwards and SAP. These centers facilitate cross-platform integration; performance optimization and benchmarking; sizing, implementation and tuning guides; and Ready-to-Run packaged solutions. IBM also plans to expand this program to include leading industry, vertical-solutions developers and will work with IBM Industry Solution Units to help ISVs build joint marketing plans.

IBM's most promising Netfinity partner may be SAP. With 2,500 SAP customers using its platforms and 4,600 in-house SAP specialists, *and as one of SAP's largest customers* (19 SAP projects are currently underway in IBM for use by over 100,000 IBM employees and Business Partners), IBM can bring a lot of strengths and experience to its Netfinity SAP partnership. It is positioning Netfinity as the preferred Windows NT server for SAP's R/3 software in small and midsize organizations, and has adapted its experience in successfully marketing and supporting Ready-to-Run R/3 packages on the AS/400 to Netfinity servers. And its efforts are paying off. IBM has grown its share of the SAP/R3 market on NT Server 300 percent since last year, and SAP ranked IBM as the number-one provider of new R/3 installations across platforms in 1998.

While many of its other Netfinity partnerships are in a more embryonic phase, ServerProven appears to be picking up momentum with key NT Server ISVs. Baan, for instance, recently selected the Netfinity 7000 to use at its Technology Center as the NT launch platform for its new BaanSeries product family. IBM and Baan also established a joint International Competency Center to provide benchmarking, performance optimization and other technical support for Baan products running on IBM platforms, including Netfinity. IBM is taking a mid-market focus with Baan, and has been offering Baan solution bundles for midsize businesses since April. As a result of these programs, the two vendors are starting to build a significant number of joint Baan/Netfinity wins.

And IBM's long-time AS/400 partner, JD Edwards, has given IBM a second chance on NT. JD Edwards recently posted leading NT Server

benchmarks on Netfinity and has established a competency center in Denver with IBM. And, in July, the Netfinity 7000 posted the leading results in all key categories for JD Edward's OneWorld benchmark, including response time and utilization rates.

Going forward, IBM will try to translate its success with its AS/400 midrange business partners over to Netfinity and NT Server with ServerProven partnerships. IBM will provide AS/400 ISVs with the specific training, technical support and incentives to penetrate the NT Server market more quickly and sell their solutions on the Netfinity platform.

Section 5 IBM's NT Software Conundrum

Getting its NT Server hardware business back on track is key to IBM's NT success. But IBM is also investing heavily in its NT software businesses—and for good reasons. Software revenues account for up to 70 percent of IBM's gross margin. Software sales accounted for over 16 percent of total sales and almost \$13 billion of its 1997 revenue, and IBM managed to squeak past Microsoft to retain its position as the top software vendor in the industry. But IBM's software business actually declined 2 percent in 1997 compared to 1996. Contrast this with Microsoft, whose software revenues grew 39 percent in the same time period. While IBM's second quarter 1998 software revenues were up 4.6 percent over the same quarter last year, it is not keeping pace with Microsoft or growth in the industry as a whole. In all likelihood, IBM's relatively slow software growth rate is at least partially due to the fact that it hasn't marketed its NT products aggressively enough.

But, despite IBM's anemic growth in software sales, software continues to be a highly profitable endeavor for the company. Compared with the capital-intensive hardware business and the labor-intensive services business, software is a highly profitable endeavor. IBM can't afford *not* to continue to pursue the high-growth NT software market.

Incredibly, IBM's investments in NT software have yielded the largest portfolio of Windows NT software in the industry—with more products than even Microsoft. Of course, Lotus is the biggest revenue generator in IBM's NT software portfolio. In fact, NT is Lotus' number-one operating system and Lotus is Microsoft's largest ISV. But, in addition to Lotus, many of IBM's middleware and application products run on NT, and 12 IBM software solutions carry Microsoft's "Designed for BackOffice" logo. IBM has 11,000 software developers developing middleware for the NT platform: 8,200 developing and porting IBM software to NT, 2,000 for Lotus and 800 for Tivoli. Its NT software family includes its flagship middleware and applications, including:

- *DB2 Universal Database*, IBM's relational database;
- *DB2 for Domino*, to provide Notes and Domino users access to DB2;
- *DB2 Connect*, to connect Windows NT desktops to DB2 databases;
- *MQSeries Server* messaging server;
- *TX Series*, for transaction processing with CICS and Encina;
- *Tivoli Management Software*, for system management;
- *WebSphere Application Server*, a Web server;
- *Adstar Distributed Storage Manager*, for automated backup, archiving and disaster recovery across the network;
- *eNetwork Communications Server*, which provides a secure, scalable gateway and Host Publisher to integrate existing applications with the Web;
- *VisualAge ebusiness*, a tool set to create dynamic, transaction-oriented Web applications;
- *Visual Warehouse* and other IBM business intelligence solutions; and
- *Net.Commerce* e-commerce solutions.

In general, the markets outside of IBM's legacy customer base have paid little attention to most of these products, opting instead for Microsoft's BackOffice and middleware and/or products from Microsoft's ISVs. Of course, some of IBM's NT software, especially its Lotus and Tivoli offerings, has done well in the NT market. Lately, however, even IBM's Lotus offerings seem threatened by Microsoft. Lotus pioneered the messaging and collaboration market in 1989, and Lotus products are growing both in units shipped and revenues. But, it took Lotus nine years to grow its installed base to 25 million users, and Microsoft Exchange Server has mushroomed to over 16 million seats in just the last two years—and out-shipped Lotus last quarter.

So what's a vendor to do? In 1996, IBM tried to market Software Servers—formerly code-named Eagle—to compete more effectively against BackOffice (see Summit Strategies' Distributed Enterprise Markets and Strategies report, *How Suite Is It? The Packaged NT Server Market*, May 1997, for more details). IBM started porting many of its

software products to NT, streamlined over 70 point products into a smaller number of functional solutions, and began integrating its software and middleware solutions to run across multiple platforms. But, instead of selling the resulting Software Server applications as a packaged suite, IBM sold them as a modular set from which customers could mix and match components. IBM contended that customers wanted integrated server software components but would rather buy only the modules they needed—and that they didn't want to pay for the overhead involved in buying prepackaged suites, such as BackOffice.

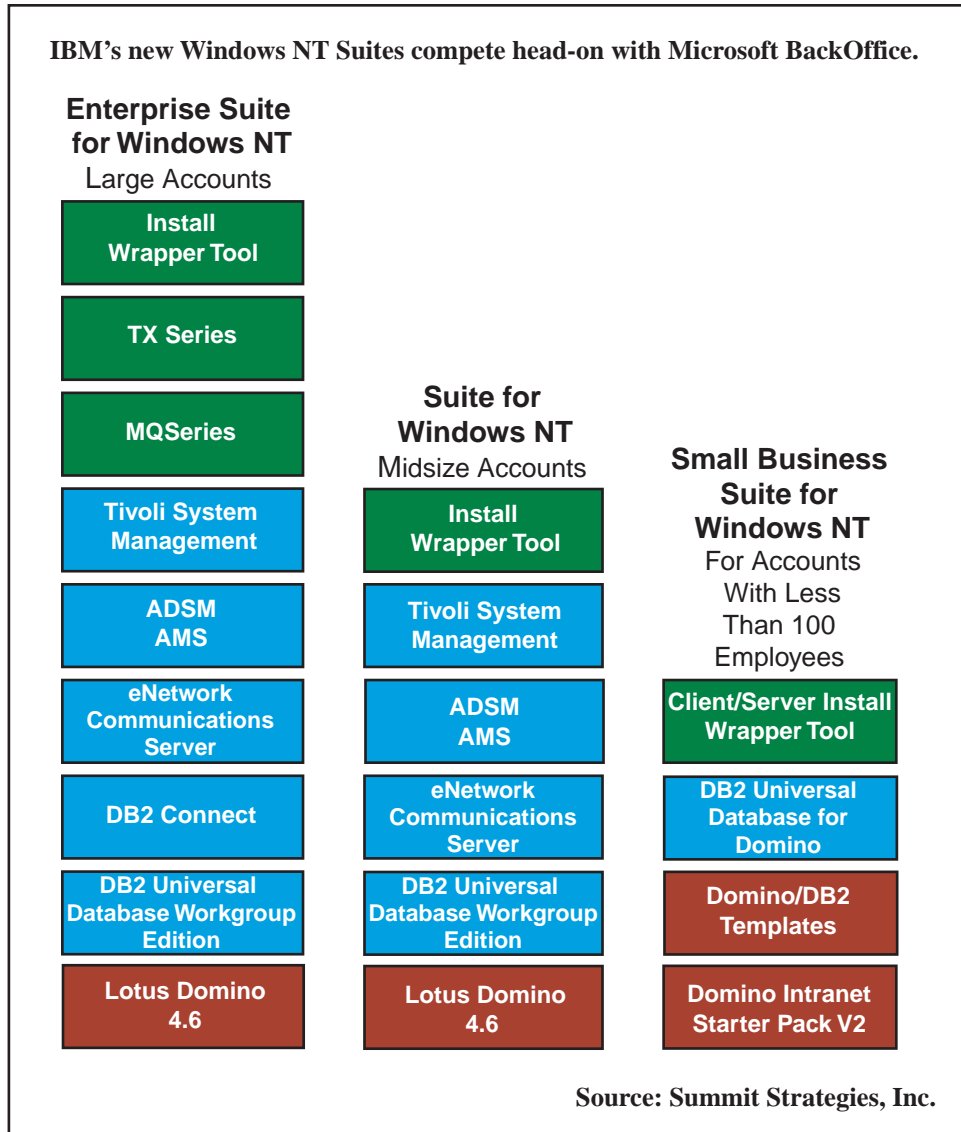
Software Servers *did* fulfill the promise of porting IBM solutions to NT Server and integrating many IBM technologies into a more manageable number of functional products. But the Eagle never really landed with NT customers, and NT Software Servers withered on IBM's marketing vine.

However, with NT Server growth rapidly outpacing any other platform's, IBM had to go back to the packaging drawing board. After all, its hold on over 70 percent of the world's business data is potentially threatened by Microsoft's efforts to hook into this data with technology such as "Cedar," which integrates Microsoft Transaction Server with IBM CICS and IMS. In February, IBM announced three new server software suites that compete head-on with BackOffice (see Figure 5). These suites have a lot in common with software servers from a product standpoint. But, this time, IBM is positioning its Windows NT Suites to compete directly with Microsoft's three BackOffice bundles:

- *IBM Enterprise Suite for Windows NT* competes with BackOffice Enterprise Edition. It provides large accounts with Web-server, mail, application, messaging, database, transaction and network-integration capabilities and products, including Lotus Notes/Domino, MQSeries, TX Series (for transaction processing with CICS and Encina), DB2 Universal Database Workgroup Edition, DB2 Connect, eNetwork Communications Server and ADSM. It also includes Intel's LANDesk Management Suite, which can link to Tivoli Systems Management software. Customers may optionally purchase the Tivoli software to add heterogeneous systems management capabilities to their environments.
- *IBM Suite for Windows NT* competes with BackOffice Standard Edition. It provides midsize customers with an independent, department-level application server, and includes Lotus Domino, DB2 Universal Database Workgroup Edition, Tivoli Systems management, eNetwork Communications Server, ADSM and AMS.
- *IBM Small Business Suite for Windows NT* competes with both Small Business Server (SBS) and BackOffice Standard Edition. Unlike SBS,

Figure 5

IBM's New Suites for Windows NT



which is limited to 25 client licenses, IBM's Small Business Suite provides unlimited client licenses. It is designed to provide companies with 100 or fewer employees with a Domino/DB2 solution, and includes Domino and Domino Templates, DB2 and a simplified client/server installation routine.

IBM is hoping to persuade NT Server customers that its NT Suites can provide better alternatives than BackOffice, for the following reasons:

- *IBM provides the richest and most mature portfolio of products for NT Server.* IBM has been investing since 1993 to port its software to NT. In 1998, it is focusing on building proof points for its NT software

story and underscoring its NT credentials with the fact that over 70 percent of Domino users run the application on NT.

- *Only IBM can offer consistent cross-platform middleware for integrating systems across heterogeneous environments.* BackOffice can't provide NT customers that also deploy other IBM server platforms, HP/UX and Sun Solaris with cross-platform availability or the same level of integration.
- *Customers can acquire and deploy IBM middleware products more easily than before.* Targeted suites make it easier to acquire the right solutions at discounted prices than single applications do. In fact, IBM's licensing terms for its Suites allow components to be installed across multiple systems (unlike BackOffice) with software licensing instead of system licensing. All components are Web ready, and each suite also features a new, single-boot install wrapper to simplify and speed installation.
- *IBM provides a simplified application development model and better support for ISVs.* It hopes to attract ISVs by making it easier for them to build solutions around its middleware products.

Of course, IBM's head-on competition with BackOffice applications limits its ability to portray itself as a "real" Microsoft partner. Although NT Server is IBM's strategic operating system for Netfinity, the company believes that its NT solutions are more robust and open than Microsoft's—and will *always* lead with its own solutions and middleware ahead of NT.

Outside of its true-blue installed base, this makes IBM's NT software a difficult sell for several reasons. First, Microsoft's BackOffice Enterprise Edition is available from virtually every PC server OEM—many of which will also preload BackOffice applications. Few OEMs (except for IBM itself) sell or preload any of IBM's NT software offerings—with the exception of its Lotus and, to a lesser degree, Tivoli products. IBM's route to the enterprise market is mostly limited to its own sales force, IBM Global Services and system integrators.

IBM will also have difficulty winning over channel partners that serve small and midsize companies. IBM must compete against Microsoft's 13,000 Solution Providers in the middle market and 250,000-plus value-added providers (VAPs) in the small business space. While IBM has 27,000 resellers that provide customers with customization and support for Lotus Domino solutions and related third-party applications, many of these partners don't resell or support IBM's other software products.

And, because about 40 percent of IBM's Best Team and Lotus partners are also Microsoft partners, IBM will need to do more to sell its entire portfolio of NT solutions to BackOffice resellers in order to expand outside its legacy customer accounts. To accomplish this, the vendor is waging a campaign to recruit the top 20 percent of BackOffice resellers to its ranks, with the message that IBM's suites can help them extend their businesses into multiplatform accounts. It has dedicated 200 sales representatives to selling IBM solutions platforms to ISVs, which will lead IBM's push into the small-business market.

But, for these programs to work, IBM will need to offer new NT partners compelling products, bundles, discounts and sales programs. This won't be easy. IBM will need to live up to its "Superman for NT" print ads for its NT solutions to appear on most customers' and resellers' radar screens.

Section 6 Global Services—Advantage IBM

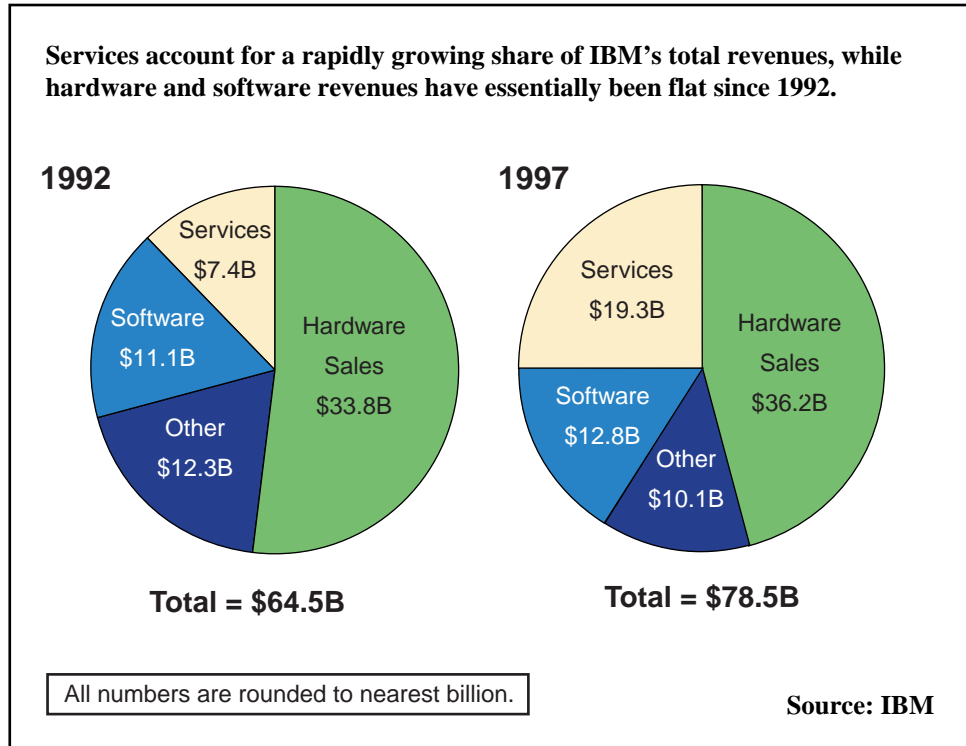
IBM's 1997 services revenues totaled close to \$20 billion (excluding maintenance service), or almost a quarter of its 1997 revenues. Its services business grew 22 percent in 1997 over 1996, and IBM CEO Louis Gerstner believes that services revenues can continue to grow at double-digit annual rates. In addition, with 116,000 services, support and consulting professionals around the world (approximately one-half of its total employees), it has more support personnel than any other vendor—giving it an immediate advantage in a world strapped for IT resources. Services are contributing more and more to IBM's total revenues, profits and growth prospects (see Figure 6). And IBM's multivendor Global Services organization is well on its way towards remaking IBM into a services-led company (see Summit Strategies' Industry Dynamics and Market Strategies report, *Enterprise Systems Vendor Leaders in 2003: Their Roles, Business Models and How They Will Get There*, August 1998).

Unlike the NT server and software markets, in which conflicting IBM agendas often compromise the company's position, the NT services market provides IBM with a clear run. IBM's Global Services has been a multivendor support organization for 30 years and provides a comprehensive support portfolio for Microsoft solutions.

In fact, IBM has gained NT experience and amassed an impressive array of NT Server programs since it became a Windows-NT-certified Microsoft Solution Provider in 1994, including:

Figure 6

IBM's Increasing Services Revenues



- *IBM Global Services Microsoft Practice*, which provides architectural, design, installation and management services for Microsoft-only solutions through joint Microsoft-IBM engagements and training.
- *IBM Global Services Consulting for Microsoft Technologies Practice*, which offers customers a full range of customized services supporting enterprise-class NT and BackOffice solutions through IBM's status as a Microsoft Service Advantage provider. Services include solution design, solution architecture, application development, Internet and intranet development, solution planning and integration.
- *IBM Integration Services for Windows NT*, which help integrate non-Windows NT platforms with, and/or migrate them to, Windows NT.
- *Cluster Solution Planning Services*, which provide assistance in planning and deploying clustered NT solutions.
- *Recovery Management Services for Windows NT Server*, which help customers to recover and restore Windows NT 4.0 server environments quickly and effectively.

- *IBM Integration Services for Microsoft BackOffice*, for remote design and planning assistance to deploy NT and BackOffice servers.
- *Technical education* for Microsoft Windows NT, BackOffice and IBM's NT solutions.
- *Approximately 3,800 Global Services engineers* (in addition to the 125 engineers at IBM's Kirkland Programming Center) responsible for integrating customers' Microsoft and IBM products on NT Server, and 810 personnel to support IBM middleware running on the NT platform.
- *Solution Partnership Centers*, IBM's porting labs for Netfinity ServerProven solutions (discussed fully in Section 4).

True, IBM's most comprehensive services are for customers implementing IBM's own NT-based solutions. Programs such as IBM SmoothStart Services for its DB2 Universal Database, Lotus Domino, Domino Go Webserver and Net.Commerce, provide customers with rapid design, configuration and installation for these solutions. IBM's business partners sell these services, which are delivered to customers as complete solutions from IBM and its partners.

IBM Services' preference for its own solutions doesn't diminish its consulting and SI solutions expertise, which is probably the richest in the industry, or its ability to integrate NT into heterogeneous environments. IBM can apply its vast pool of services professionals and its own NT software solutions, as well as those from Microsoft and other software vendors, to best meet the demands of complex IT organizations. It has developed specific NT Server solutions practices for ERP; Business Intelligence (BI); e-business; Internet/intranet server; and mail, messaging and collaboration—which should help the company drive demand for its services in these high-growth NT markets. For instance, IBM has 2,500 dedicated BI specialists and developers. No competitor—other than perhaps Oracle—can even come close to matching IBM's depth in this market. IBM is also extending its industry-specific expertise to the NT platform, with service programs, such as Decision Edge for finance and insurance, and Discovery Series, which is targeted at the banking and telecommunications industries.

IBM ServerProven and Knowledge Base programs are offshoots of IBM's Solution Centers and Global Services. If IBM can effectively package and transfer its vast internal solution and vertical market expertise in the NT channel—and do so more effectively than the competition—it can provide a meaningful and profitable differentiator to attract both new partners and customers.

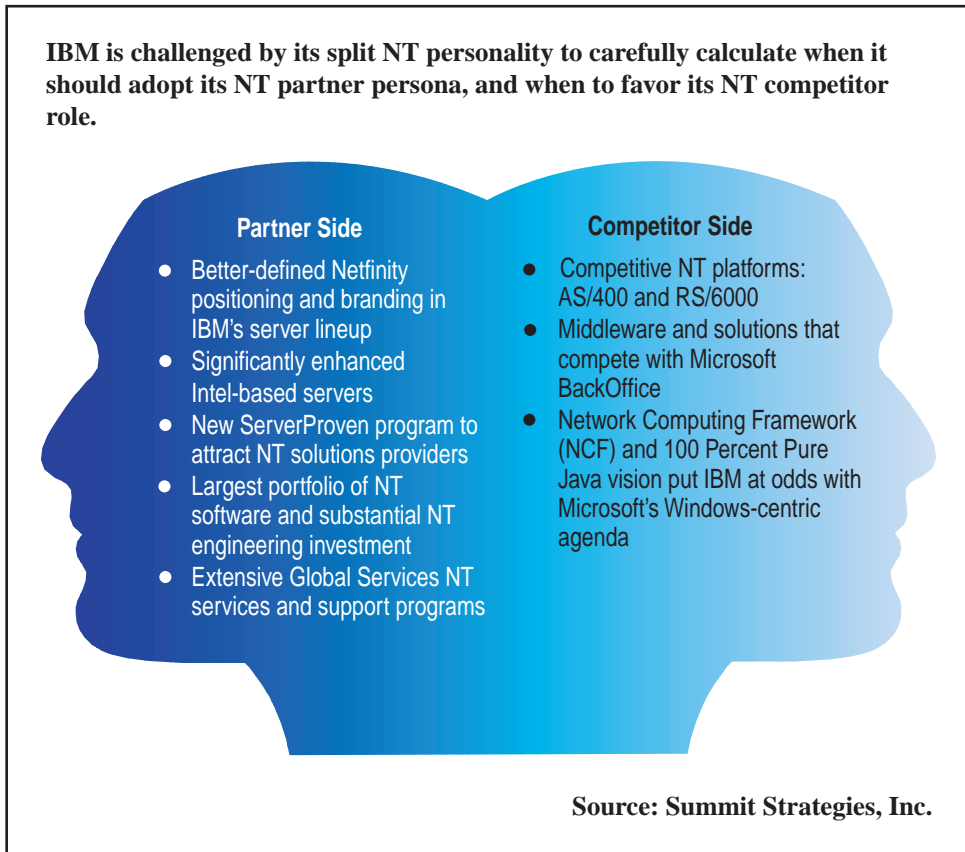
Section 7

The Two Faces of IBM's NT Strategy

If “coopetition” actually was in the dictionary, a picture of IBM and Microsoft would be next to it. IBM epitomizes the dual role of Microsoft partner and competitor, and it probably always will (see Figure 7). The trick for IBM is to calculate correctly just how much skin it needs to put into the NT game to come out ahead.

Figure 7

IBM—Personifying the Role of Microsoft Partner and Competitor



On the “partner side” of its NT split personality, IBM has to play defense—and prove that it is a “real” NT partner. In many respects, the company is overcompensating for its past missteps in developing and marketing its NT strategy and offerings. Going forward, IBM can leave no stone unturned in increasing market awareness for the Microsoft-friendly parts of its personality. Because its server and software strategies still often conflict with Microsoft's, IBM will need to rely heavily on Global Services' ability to provide premier NT integration capabilities to gain and grow account control. The sheer volume of IBM's services, support and consulting personnel gives the company an edge in winning consulting and services business at large

global accounts, even when NT plays a big part in these accounts' IT environments.

But, even as IBM walks the NT walk and talks the NT talk, it hasn't—and never will—drink *all* of Microsoft's NT Kool-Aid. IBM will continue to position its Network-Computing-Framework- (NCF) and Java-centric stance as providing more open and integrated Internet and e-business solutions than Microsoft. As a result, the many other Microsoft partners that are relatively free of potential conflicts with Microsoft will likely always be perceived as having an edge on IBM in the NT market. And, no matter how well it may cover the NT bases, IBM will usually be perceived as a Microsoft competitor rather than a Microsoft partner.

However, while IBM's "competitor side" gets in the way of IBM becoming an NT leader, it also means that IBM will never be a Microsoft follower. IBM's real bets are on itself and on where it believes the market is headed after the NT wave crests. While it is willing to pull out a lot of stops to win in the NT market, its NT initiatives will always be within the context of its broader agenda. IBM will always focus on its ability to provide comprehensive solutions integration across multiple, highly scalable platforms and operating-system environments.

Although it may be uncertain just how much skin it needs to put into the NT game to come out ahead, IBM's split NT personality makes sense—for IBM. It has been around long enough to know how the game is played, and will choose its fights and liaisons with Microsoft carefully to harness as much NT momentum as it can for its own purposes. And, unlike some of its competitors, which need to ride Microsoft's coattails, IBM may be the only vendor with the financial wherewithal, market clout and partnering abilities to supersede Microsoft's NT agenda with its own network-centric vision. Over the long term, IBM is betting that Internet and Java momentum is even stronger than Microsoft-centric, Windows NT client/server momentum—and that NT is one more competitive storm that IBM will weather and emerge from stronger.

What's your opinion? E-mail the author:

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Appendix A

Market Strategy Reports 1997 - Present

For more information on any Summit Strategies Market Strategy Reports, contact Alexandra C. Rhetts at 617-531-8120 (arhetts@summitstrat.com).

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Appendix A Continued

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Appendix A Continued

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Appendix A Continued

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Appendix B Continued

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