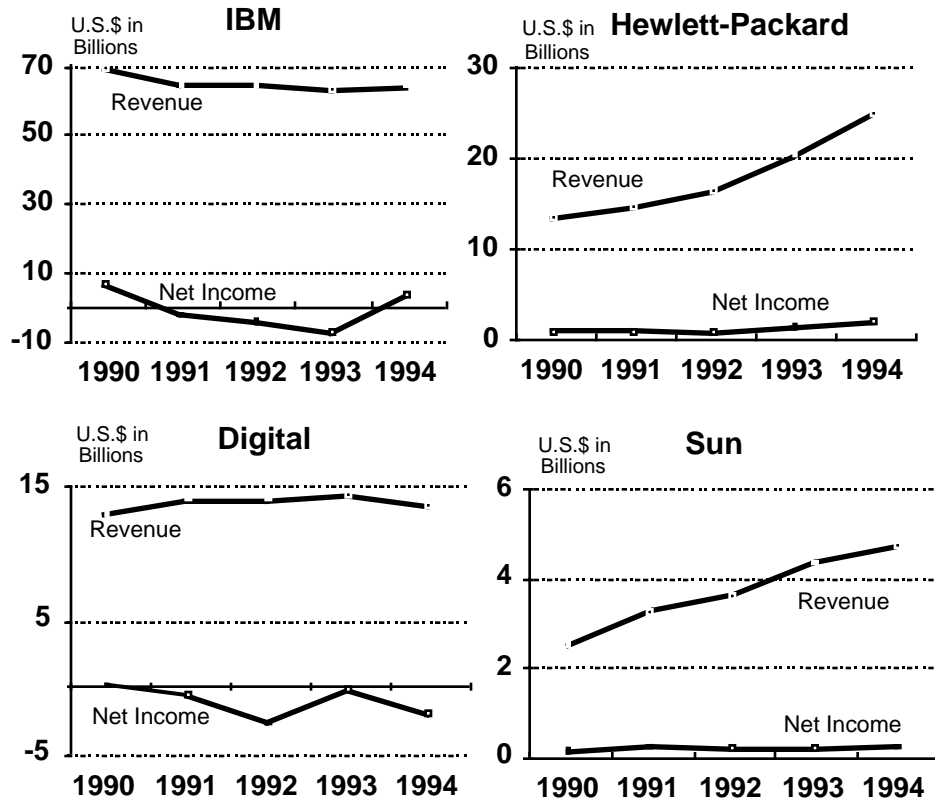


## Which vendors will lead, which will follow and which will falter?

Reader Notes



Source: IBM, HP, Digital and Sun

Reading system vendors' annual reports was a gloomy exercise in 1994, since most vendors were losing money. In 1995, we have witnessed an upturn in the fortunes of many vendors, as both painful vendor cost cutting and increased demand have resulted in a return to profitability and even, in some cases, a remarkable stabilization of gross margins. However, other system vendors have not shown profitable results, even in these relatively prosperous times, and for them the future looks bleak indeed.

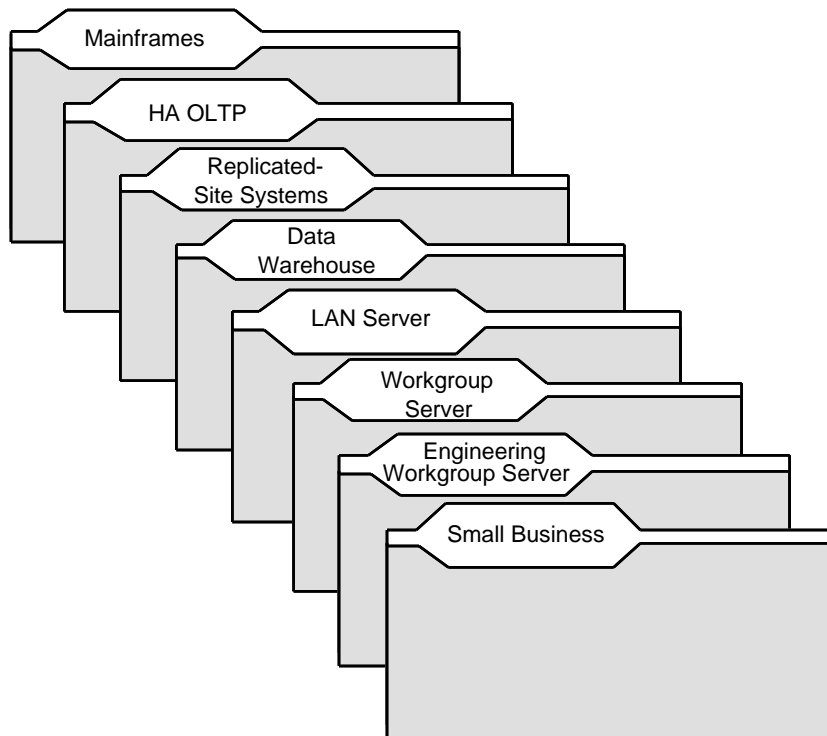
Looking ahead to 1996 and beyond, choosing vendors includes an examination of:

- Whether a vendor has a clear picture of a viable future business strategy and model.
- How far along the vendor is in the "reinvention" process.
- Whether the vendor has the skills and resources to implement the new strategy.



Having a broad vision, addressing every aspect of enterprise computing, will be an increasingly risky vendor strategy (0.8 probability).

**An Enterprise Computing Portfolio**



Source: Gartner Group

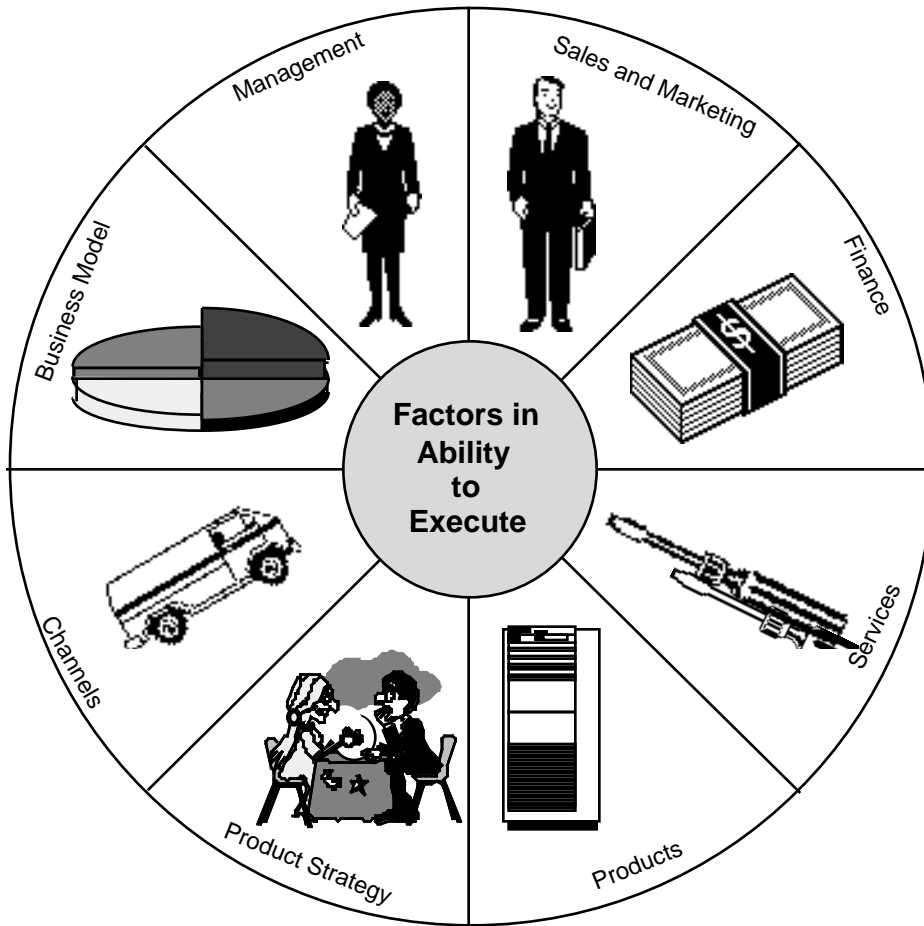
**Key Issue: Which vendors will lead, which will follow and which will falter?**

System vendors have been trying for years to turn their customers into “single-vendor shops,” but the increasing rarity of single-vendor shops has already suggested that such a goal is beyond the grasp of any vendor. Nonetheless, it is convenient for a customer to be able to buy from one vendor for a wide range of requirements, and that helps to cement a long-term working relationship. So, breadth of vision can be good, but it can also dilute engineering resources, confuse the sales force and generally overstretch the vendor.

When we look at a vendor’s breadth of vision, we look for the number of enterprise-computing categories that the vendor targets. We judge serious presence in a category by asking whether there is marketing focus for the category, whether the vendor develops products for it, whether there are value-added partners and application solutions in place, whether there are future products planned, and whether the vendor is already recognized in the market for that category of computing.



Vendors that fail to focus in an era of constrained profit margins will weaken their ability to execute (0.8 probability).



Source: Gartner Group

**Key Issue: Which vendors will lead, which will follow and which will falter?**

The lavish, “cost is no object” approach to delivering products that was common for system vendors during the 1960s and 1970s is now impossible. When evaluating a vendor’s ability to survive in the new world, monitoring successful change in the business model and in channels is at least as important as monitoring product capability. We anticipate that successful server vendors:

- 1) Will increasingly turn to creative alliances to deliver whole products globally, and to broaden their solution range.
- 2) Will decrease the size of their direct sales forces, focusing on the largest accounts.
- 3) Will offer a broad range of multivendor services.
- 4) Will maintain a tight focus on “products we do better than anybody else.”



**AS/400 stability problems will cause the majority of users to delay production use of new version 3 client/server software until 1H96 and RISC processors until 1H97 (0.8 probability).**

**Key Issues during the next 12 months:**

Will key ISVs move their “modern” applications to AS/400? Will the results be effective? Will AS/400’s installed base make a quick and easy migration to 64-bit RISC?

**Key event expected during the next 12 months:**

Volume installation of OS/400 version 3, release 1 (V3R1); delivery of the PowerPC-based family of AS/400 models.

**Key events during the past 12 months:**

Announcement of the PowerPC-based family of AS/400 models; initial shipments of OS/400 V3R1; shipment of Advanced 36 models.

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**Key Issue: Which vendors will lead, which will follow and which will falter?**

The value proposition of the AS/400 has always been “complex technology made simple.” This value proposition drove IBM to invent proprietary interfaces and integrated componentry, and it built a large AS/400 ISV community and installed base. Meanwhile, AS/400’s competition has become centered on two key environments — Unix and Windows NT. Their attraction has been low cost and high volume, “new” cross-platform middleware and applications, and common interfaces, built on powerful (and rapidly improving) processor technology.

IBM has reacted with much-improved client/server capabilities and standard industry interfaces and functionality in V3R1 — possibly the largest software release ever produced for AS/400. Stability problems have plagued the release since its delivery in early 1995. IBM is also in the process of making the transition to 64-bit PowerPC RISC processor technology. The Advanced 36 was shipped in 1994 with this processor base, and the rest of the AS/400 line will be shipped by 1H96. However, we predict that, because of a completely rewritten microcode, stability problems will slow installation of these systems until 1H97.



**IBM's AS/400 strategy will revitalize AS/400 ISVs and increase revenue from the installed base (0.8 probability); however, revenue from new ISVs and new customers will not grow significantly through 1996 (0.6 probability).**

Execution: 67 Percent



Vision: 51 Percent



### Strengths

- Installed-base loyalty and opportunity
- Comparatively easy customer transition to RISC
- Broad and robust vertical application suite

### Challenges

- Lagging high-end performance due to the lateness of PowerPC implementation
- Attraction of important new ISVs
- Overcoming “old, tired” image
- Maintaining long-term IBM investment
- Stabilizing V3 and RISC releases quickly

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### Key Issue: Which vendors will lead, which will follow and which will falter?

IBM's AS/400 strategy is similar to the strategies that other midrange vendors, such as HP (MPE/iX) and Digital (OpenVMS), have tried with little success. However, AS/400 is starting with a stronger installed base and a more flexible technology, so AS/400 should not be dismissed. However, AS/400 has several challenges to overcome to compete against Unix and Microsoft NT for new customers. 1) IBM has reinvigorated current ISVs to modernize their applications, but new ISVs still have a “wait and see” attitude — and new applications are critical. 2) Although unfair, AS/400's “old, tired, nonstrategic” image is keeping many new customers from even evaluating the AS/400. 3) IBM investment in AS/400 development has been strong, but IBM will be forced to make expense-reduction decisions among its various servers. 4) AS/400's database requires constant IBM investment to compete with cross-platform RDBMSs — but lacking Oracle still keeps AS/400 out of many bids. 5) IBM has invested heavily to transform AS/400 into a heterogeneous server platform based on 64-bit PowerPC RISC technology, but stability problems will delay rapid migration of the installed base and tarnish the “new and improved” image IBM is working to build.



**IBM's murky positioning of the RS/6000 SMP and SP systems will impede IBM's sales efforts vs. HP, despite the increasing scalability of the RS/6000 SMP and the availability of commercial software for the SP (0.8 probability).**

**Key Issue during the next 12 months:**

Can IBM parlay the RS/6000's initial market success into scalable enterprise server environments?

**Key event expected during the next 12 months:**

Further improvements in SMP scalability (PowerPC 604 processors in 1H96 and 620-based systems in 1H97); the SP will increasingly benefit from the next generation of RDBMS software tailored to loosely coupled environments.

**Key event during the past 12 months:**

Introduction of a PowerPC-based, four-to-eight-processor SMP server with commodity pricing.

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**Key Issue: Which vendors will lead, which will follow and which will falter?**

IBM's RS/6000 and HP's 9000 are found in more than 80 percent of the "Unix short list" discussions we have had with clients. However, although both of these vendors scored very well according to the System and Server Evaluation Model analysis, each platform has weaknesses that can render it unsuitable for some environments.

The RS/6000 has historically lagged behind its competitors in scalability. With the shipment of J30 and R30 RS/6000 systems in December 1994, IBM made its long-overdue debut in the SMP scalability race and since then has been furiously working its way up the "SMP learning curve," with the systems' initial limit of four PowerPC 601 processors raised to eight in 3Q95. However, the upgrade to the PowerPC 604 has been effectively delayed until 1H96. Even very respectable TPC-C results (3,119 tpmC running DB2 for AIX on an eight-processor R30) fail to address our concerns about the RS/6000's real-world scalability beyond 300 concurrent database users.



IBM will concentrate its RS/6000 efforts on platform enablers and price/performance; third parties will provide “push” demand for solutions and channel tactics (0.7 probability).

Reader Notes

Execution: 65 Percent  Vision: 51 Percent 

### Strengths

- ISV attention
- “Path of least resistance” to Unix for IBM installed base
- PowerPC marketing visibility

### Challenges

- Lack of clear positioning of SMP vs. SP systems
- Current lack of server scalability
- Resource competition within IBM vs. AS/400

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### Key Issue: Which vendors will lead, which will follow and which will falter?

The RS/6000 occupies an enviable position: It receives more attention, both from ISVs and from Gartner Group clients, than its market share implies. However, the RS/6000 must battle not only external competition (which often takes the form of HP as the “safe” choice or of Sun Microsystems Inc. as the price-aggressive choice), but also internal competition (regarding resources and the “mind share” of the sales force) against the AS/400.



**Digital's focus on needed improvements in cost control and organizational/process efficiency, combined with strong sales of new products, has finally resulted in a return to financial stability, if not growth.**

**Key Issue during the next 12 months:**

Will Digital be able to articulate a convincing strategy to re-establish a lasting role as a full-service systems vendor?

**Key event expected in the next 12 months:**

Digital will announce a coherent software strategy (0.6 probability). However, users have been left in the lurch on too many software investments and should be extremely cautious about further investments in Digital-developed software products.

**Key event of the last 12 months:**

With two profitable quarters under its belt and a strong upturn in product revenue, Digital has finally managed to shake the image of a company that is in a financial tailspin, allowing potential customers to evaluate the company's products solely on merit.

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**Key Issue: Which vendors will lead, which will follow and which will falter?**

During the past two years, Digital has struggled with the multiple challenges of totally revamping the management, organization, culture, business model and core product strategies. Positive signs include strong cost-cutting efforts, increased sales through indirect channels and dramatic growth in Alpha sales. Digital is still struggling, however, with declining profit margins, "brain drain" in the employee ranks, loss of customer trust, and an ongoing inability to articulate a compelling reason to buy from Digital.

Two profitable quarters and rising product revenues are welcome signs that health may be returning, but Digital must still demonstrate that clear strategies are in place to support stable earnings in the future.





To regain its stature as a top-tier systems vendor, Digital must do all of the following by YE95: 1) demonstrate a total-cost-of-ownership advantage, 2) show a rich supply of applications for Alpha, 3) deliver enterprise server solutions through indirect channels, and 4) demonstrate stable profitability.

Execution: 52 Percent  Vision: 55 Percent 

**Strengths**

- Alpha price/performance
- Streamlined R&D
- Strong innovative service capabilities

**Challenges**

- Confusing product strategies
- Prolonged organizational chaos
- Lost credibility and visibility

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**Key Issue: Which vendors will lead, which will follow and which will falter?**

Digital has failed to articulate a sustainable vision as a value-added systems provider. Furthermore, an ongoing investment in Alpha technology is only justified if Digital can position itself as a comprehensive system provider, rather than a high-volume, low-cost, low-margin, generic Unix server vendor. Now that Digital is a portfolio of autonomous business units, survival questions are best phrased: "Can this business unit survive if the Computer Systems Business Unit (CSBU) does not?" We believe that the Storage, Networks, Components and Personal Computer Business Units all have a 0.7 or better probability of survival if CSBU fails. (We include successful sell-off or spin-off as "survival.") Without a realistic added-value strategy and implementation, the CSBU will be unable to sustain a profitable business (0.6 probability). (A clear "whole product" strategy and a rebirth of solid partner relationships could reverse this.) Multivendor Customer Services is linked to CSBU and will also decline (0.6 probability).



HP's current midrange server market dominance and "safe choice" status will decline by YE97 (0.6 probability).

**Key Issue during the next 12 months:**

How will HP retain competitive leadership in the Unix server market against increasing competition from other Unix suppliers, such as IBM, Sun and Digital?

**Key event expected during the next 12 months:**

The release of the next-generation PA8000 processor (1H96 in K series servers) and the first release of loosely coupled systems.

**Key event during the past 12 months:**

The release of the K series, HP's "commodity SMP" server, and the release of the long-overdue HP/UX version 10.

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**Key Issue: Which vendors will lead, which will follow and which will falter?**

HP's K series SMP system has the potential for a significant share of the current wave of commodity SMP system procurements, due not only to HP's current server market share leadership, but also to excellent price/performance and scalability.

HP has thus far enjoyed front-runner status as a credible large-host alternative system supplier to IBM and Digital in open systems.



The biggest inhibitor to HP's growth will come from HP itself, as it must manage growth, middle-market channel coverage and professional services in support of large, global accounts (0.8 probability).

Execution: 80 Percent ↓ Vision: 70 Percent ↓

### Strengths

- PA-RISC performance
- High-quality, industry-accepted systems/network management
- Strong top management direction and management accountability
- Product breadth and ISV relationships

### Challenges

- Increasing perception of HP as "arrogant"
- Professional services expansion and depth
- Global-account revenue growth
- Sales coverage, coordination and order fulfillment

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### Key Issue: Which vendors will lead, which will follow and which will falter?

HP has achieved the highest ranking in "ability to execute" and "vision" among the system vendors evaluated. HP turns in consistently positive financial results and is highly regarded as a well-managed organization. HP's Unix product success has captured ISV priority in porting software, which will feed HP's momentum during the next 24 months.

Our strongest concern involves HP's ability to manage growth. For HP, like other vendors, the shift to greater indirect coverage has been mandatory to reduce the cost of sales and to invest more heavily in the largest strategic accounts. The transition has at times aroused user resentment due to the loss of direct sales involvement and to gaps in account control, which HP appears to be sincerely trying to minimize.



**Sun Microsystems will focus on delivering leading price/performance for downsizing to client/server, and it will improve its ability to deliver enterprise server platform functionality during the next two years (0.8 probability).**

**Key Issue during the next 12 months:**  
How will Sun earn credentials in the commercial server market while addressing the market's perception of Sun as a workstation company?

**Key event expected during the next 12 months:**  
New UltraSPARC-based servers (1H96), which will address Sun's current processor-related performance deficiencies and provide an opportunity for renewed price/performance aggressiveness.

**Key event during the past 12 months:**  
Significant strides forward in addressing the requirements of the commercial market, with delivery of clustered and failover products, as well as a more comprehensive systems management story.

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**Key Issue: Which vendors will lead, which will follow and which will falter?**

We believe that Sun made initial design choices in MicroSPARC and SuperSPARC that have hindered its ability to drive performance at industry RISC growth rates, and this will be further affected by Intel's recent Pentium performance improvements. While Sun has made up for some of the deficiency by pricing aggressively (e.g., Classic), its desktop systems have been outperformed by the competition. However, recent benchmarks have indicated that Sun's servers (i.e., SS1000 and SC2000) have made significant headway in scalability to position Sun for much more upstream enterprise business. We do not believe that Sun will abandon SPARC (0.85 probability of continued development through 1997), as some industry rumors suggest. We do believe that Sun's success is intimately tied to SPARC during the next three to five years. Sun's opportunities for exploiting the commercial desktop with Unix workstations have been muted, although we believe that Sun will price aggressively to stimulate low-end volume sales to counter Intel's moves with Pentium.



Inviting Sun to bid on Unix procurements can effectively increase discounts by between 5 percent and 10 percent.

Execution: 72 Percent ▲ Vision: 52 Percent ▲

### Strengths

- Price aggressiveness, lean business model
- SPARCstorage Array RAID technology
- Popular ISV platform

### Challenges

- Upgrade discontinuity to UltraSPARC
- Lackluster uniprocessor performance
- Incomplete systems management story
- Weak professional services and systems integration

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### Key Issue: Which vendors will lead, which will follow and which will falter?

Sun has made significant strides in earning its credentials as a commercial server provider during the past 12 months. Competitive wins (such as that at Fingerhut) and expansion of Sun-delivered systems management products (Solstice) are important milestones in the expansion of Sun's credibility in the commercial market. Now that the fallout from the Unix wars is largely inert, Sun must focus on improving the breadth and quality of its "whole product" offering. Most in need of improvement are professional services and systems integration.

Having Sun as one of the bidders will typically force other vendors to grant greater discounts, especially if the configuration calls for more than 10 Gbytes of disk storage (due to Sun's aggressive pricing, especially on disks). Even if a user is likely to choose the incumbent Unix vendor for the next procurement (e.g., to avoid the incremental costs of managing multiple Unix platforms), contestability is still the key to higher discounts.



**AT&T GIS will focus on historical strengths in the telecommunications, retail and financial services industries, as it employs price cutting and more-aggressive marketing in an effort to gain a larger share of the overall Unix server market (0.6 probability).**

**Key Issue during the next 12 months:**

Can AT&T emerge from its historical “stealth marketing” by employing aggressive pricing and marketing to gain market share and ISV “mind share”?

**Key events expected during the next 12 months:**

Rollout and implementation of the new “common node” system architecture.

**Key events during the past 12 months:**

Increasing company focus on Windows NT support and on porting of AT&T middleware (e.g., LifeKeeper and Top End) to Windows NT.

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**Key Issue: Which vendors will lead, which will follow and which will falter?**

The impediments to the emergence of AT&T GIS from relative obscurity (as measured by Gartner Group user-client short lists and ISV porting support) include “stealth marketing” of its technologies, a perception of premium pricing, excessive reliance on internally developed software technologies (such as Cooperation and Top End), and the 3600’s scalability problems.



**AT&T GIS will increasingly focus on Windows NT sales, support and integration (0.75 probability) — a market where it can be a leader.**

Reader Notes

Execution: 43 Percent ↓ Vision: 60 Percent =

### Strengths

- Windows NT expertise
- Strong vertical solutions (e.g., banking, retail)
- Expertise with data-centric environments
- High-stability Unix implementation

### Challenges

- Poor financial results in 1H95
- Lack of ISV attention
- Confusing 3600 and 3700 product strategy (addressed somewhat by the common-node products)
- Painfully slow evolution of marketing messages

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### Key Issue: Which vendors will lead, which will follow and which will falter?

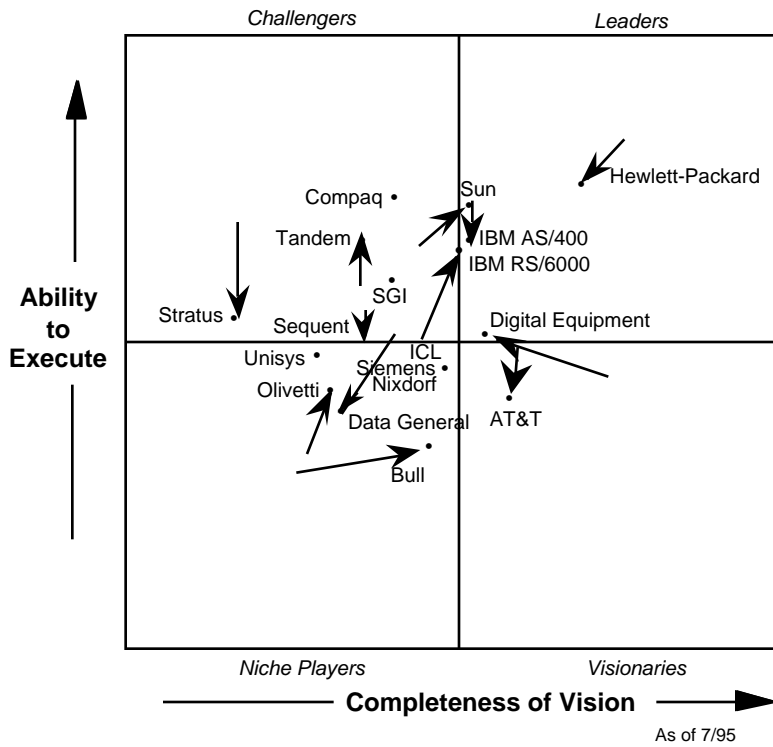
Beyond basic hardware and operating systems, AT&T has enjoyed little success in software. The two most prominent products are Top End, a “heads down” transaction-processing monitor, and Cooperation, an office information system built on a distributed-object computing infrastructure. The first of many challenges, therefore, is to develop a clear and distinctive software product strategy that: 1) delivers exciting, synergistic products, 2) enables the broad recruitment of independent software vendors, and 3) makes it possible to deliver more-sophisticated, multivendor service.

The next major challenge is to develop a rich set of multivendor services that go well beyond the respected but limited set of maintenance and support services currently offered. Such services would include multivendor systems design, systems integration, product configuration and interoperability testing, and consulting.



In 1995, several “tried and true” vendors are facing severe challenges, as shrinking margins and bottom-up competition take their toll.

**Prospects for Midrange Leadership**



Source: Gartner Group

**Key Issue: Which vendors will lead, which will follow and which will falter?**

All vendors will continue to struggle with managing the breadth of vision in a volatile market, where no single vendor can address every user need alone. Successful vendors will be the ones that learn how to maintain focus, to develop and utilize strategic partnerships, and to manage technology migrations smoothly.





- AS/400 stability problems will cause the majority of users to delay production use of new version 3 client/server software until 1H96, and RISC processors until 1H97 (0.8 probability).
- IBM's murky positioning of the RS/6000 SMP and SP systems will impede IBM's sales efforts vs. HP, despite the increasing scalability of the RS/6000 SMP and the availability of commercial software for the SP (0.8 probability).
- HP's current midrange server market dominance and "safe choice" status will decline by YE97 (0.6 probability).
- Sun Microsystems will focus on delivering leading price/performance for downsizing to client/server, and it will improve its ability to deliver enterprise server platform functionality during the next two years (0.8 probability).
- AT&T GIS will increasingly focus on Windows NT sales, support and integration (0.75 probability) — a market where it can be a leader.

