Sequent Computer Systems

Mike Green
Manager of Public Relations
Sequent Computer Systems, Inc.
15450 S.W. Koll Parkway
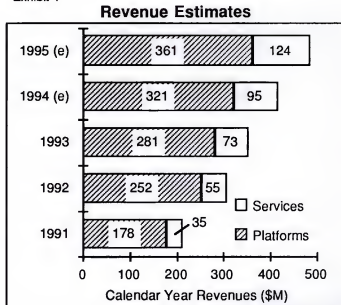**Beaverton, OR 97006-6063**
1-800-854-0428

SEQUENT

Sequent provides client/server (C/S) consulting services and a range of scalable servers. Its organization, products, services, strategy and market positioning are analyzed in this profile.
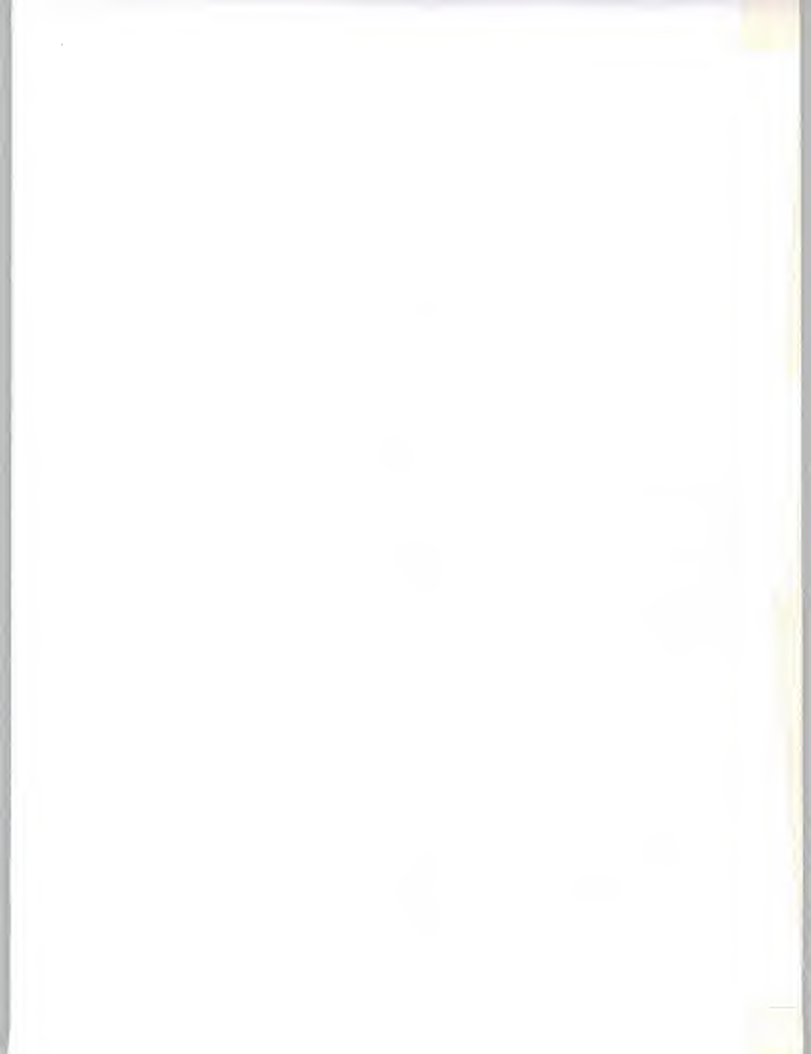
1. Principal Business

Sequent sells solutions for online transaction processing (OLTP), decision support (DSS), messaging, electronic commerce, workflow and executive education. With expertise in project management and enterprise architectures, Sequent handles system implementation from design to support.

Driven by its motto, "our business is your success", Sequent works closely with system integrators, resellers and users. Revenues, with INPUT projections, are shown in Exhibit 1.

Exhibit 1

Revenue Estimates

Year	Platforms	Services
1995 (e)	361	124
1994 (e)	321	95
1993	281	73
1992	252	55
1991	178	35

Calendar Year Revenues ($M)

Source: INPUT estimates, Sequent Reports

CLVP

2. Organization

The company's core business of manufacturing and marketing computers takes place in the *Platform Division*. This division also enhances operating systems. The *Enterprise Division*, formed in 1993, focuses on enhancing the basic platforms for OLTP, DSS and messaging. *Worldwide Field Operations* provides worldwide sales, customer support and professional services.

Karl (Casey) Powell, Chairman, CEO and President, co-founded Sequent with other ex-Intel employees and has been the chief executive since 1983. Prior to founding Sequent he was Intel's general manager for microprocessor operations. Lary Evans, Vice President and General Manager Platform Division, was formerly Vice President of Engineering. Mark Miller is Vice President of Worldwide Marketing.

Sequent has transformed its business from selling hardware platforms to selling architectural solutions based on industry standard operating systems such as Windows NT and UNIX.

3. Products

Sequent's goal is to help customers migrate smoothly from legacy systems to Sequent platforms. It increasingly achieves this through pre-sales consulting which leads to long term platform sales and ongoing service revenues. Sequent's main business comes from selling hardware platforms optimized for OLTP; but increasingly these sales will include platforms for DSS and messaging.

Sequent's servers are based on Intel processors. They provide a scalable platform for workgroup, departmental and enterprise applications, providing availability and clusterwide load balancing to optimize performance.

Exhibit 2 gives typical configuration pricing for the Symmetry 5000 series, which all run 66MHz Pentium processors. It shows the number of processors, main memory size, typical magnetic disk storage capacity and the number of users supported under DYNIX/ptx.

Sequent provides packages that allow customers with unclustered Symmetry platforms to convert their machines to a clustered configuration as computing needs grow. The Symmetry 5000 SE90 is a cluster configuration of SE 5000 machines starting at $446,000.

The Symmetry 5000 series is binary-compatible with the earlier Symmetry 2000 series, enabling customers to upgrade systems without recompiling software. Sequent provides a consulting program to help customers move their software from the 2000 series to the 5000 series. In the Symmetry 5000 series the bus speed is increased three-fold over the 2000 series, from 80Mbps to 240Mbps. Customers can mix 2000 series machines with 5000 series machines in clusters. Clustered systems will become more prevalent in the future as customers increase capacity and require high availability. The strategy of providing scalable clusters is not unlike that successfully pioneered by Digital with the VAX line of computers in the 1980s.
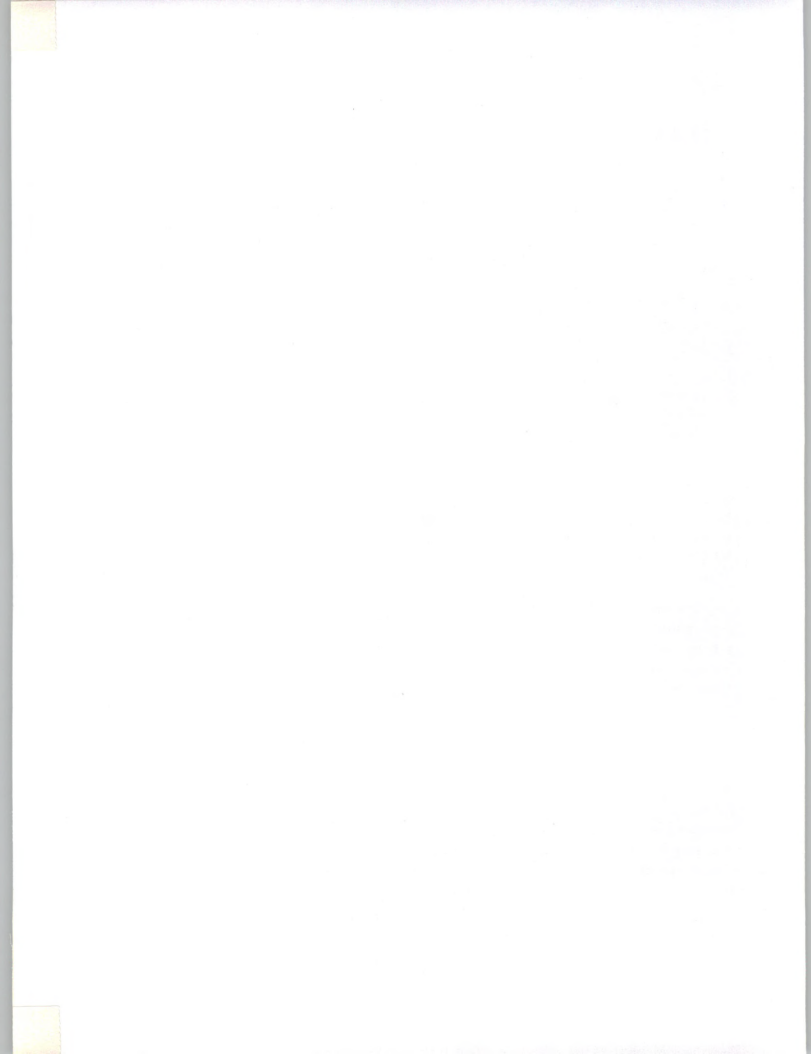
Symmetry 5000 Model Sample Prices

Symmetry 5000 SE20

Entry Level Configuration—$171,100
- 2 Pentiums
- 8.4GB Disk
- 64MB Memory
- 25 users

Average Configuration—$480,500
- 6 Pentiums
- 18.9GB Disk
- 256MB Memory
- 125 users

High-end Configuration—$1,030,400
- 8 Pentiums
- 111GB Disk•
- 768MB Memory
- 1,000 users

Symmetry 5000 SE60

Entry Level Configuration—$469,800
- 2 Pentiums
- 31.5GB Disk
- 256MB Memory
- 100 users

Average Configuration—$1,020,900
- 10 Pentiums
- 359GB Disk
- 512MB Memory
- 800 users

High-end Configuration—$2,625,700
- 24 Pentiums
- 236GB Disk
- 1,500MB Memory
- 2,100 users

Source: Sequent

Sequent includes consulting services for configuration and integration in its purchase price. In addition to its UNIX line, Sequent is taking a leadership position in Windows NT servers. At the low-end Sequent resells Tricord servers. Dubbed WinServer, these computers are shipped with the Windows NT Advanced Server operating system and include:

- *The WinServer 500* is an entry-level Windows NT Advanced Server platform. It has been designed for use at the departmental level, or for use in NT development projects. The 500 can support up to two Intel Pentium processors, 384 MB memory, and 18.9 GB of disk storage. Pricing begins at $13,297 for a single processor system.

- *The WinServer 5000* - the largest of the line is aimed at mainframe-class computing needs while maintaining a high level of PC-based software compatibility. Sequent's top-of-the-line platform offers 30 Pentium 60 MHz processors, 192 disks, 1.5 GB memory and 32 SCSI channels. The 5000 also offers parallel-processing communications facilities for very high band width to support enterprise-level LAN computing environments. Pricing for this platform starts at $336,000.

To support its hardware development Sequent has made a major investment in operating system expertise. Sequent works closely with Novell and Microsoft on UNIX, NetWare and Windows NT.

Sequent has invested heavily in supporting databases and software interfaces. Data warehousing organizes data for decision support. Sequent's Data Store product includes data warehouse code licensed from Red Brick Software. Decision support and transaction processing applications take advantage of Sequent's SMP architecture.
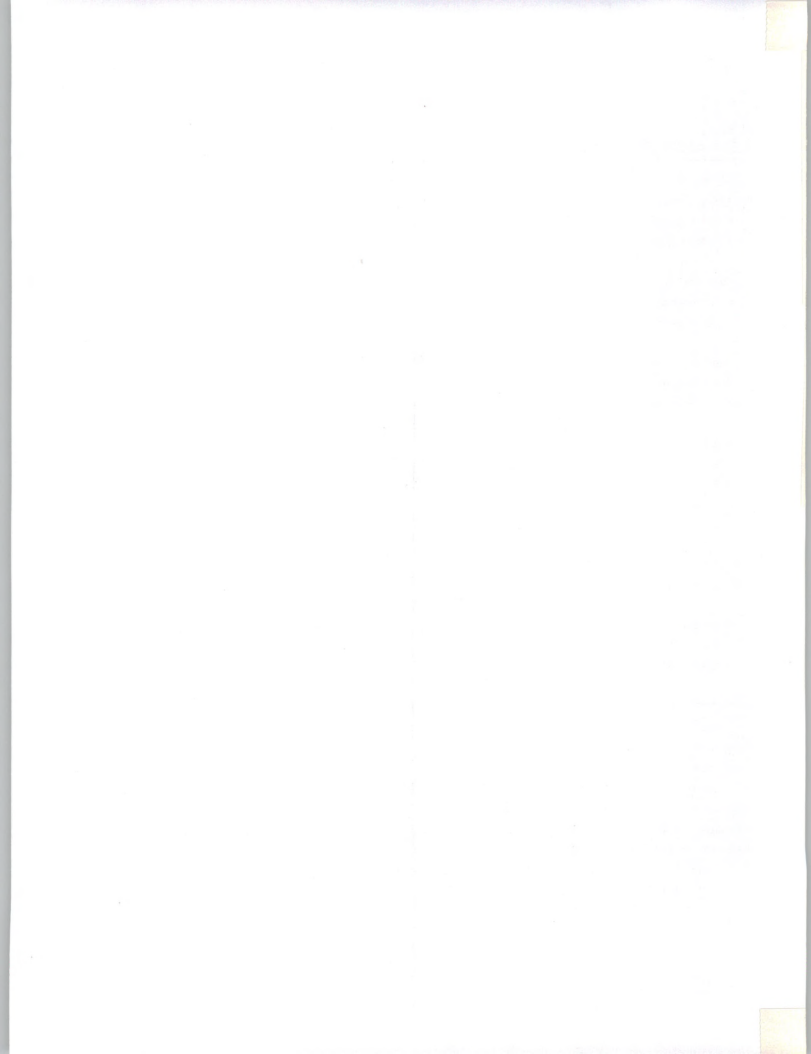
Object-oriented technology will increasingly become a key area of expertise, particularly using Microsoft's Object Linking and Embedding. Sequent will support Microsoft's Windows Open Systems Architecture (WOSA) that addresses enterprise computing.

4. Services

Sequent aims to transform the way companies use technology by moving customers' hierarchical operations to cross-functional ones. Sequent links business process re-engineering, undertaken by partners, to its IT strategy and architectural planning services. Consulting services provided by Sequent include those shown in Exhibit 3.

Enterprise architecture planning means taking strategic imperatives and defining how they are implemented in systems. Sequent identifies the key areas in which a business adds value, using value chain analysis. This is used to develop business models with Sequent's Cost/Benefit 2000 to calculate return-on-investment analysis.

Project management focuses on identifying business objectives, selecting technology and products and tracking project implementation.

Network and communications consulting defines how information flows through an organization, where bottlenecks are likely to occur and how the load can be handled efficiently. It also includes integration with existing environments and network management strategies.

Exhibit 3
Consulting Services

- Enterprise architecture planning
  - Business process re-engineering
  - Business problem analysis and goal setting
  - Cross-functional process design
  - Analysis of alternative technologies
  - Legacy system migration strategy
  - IT implementation plan

- Project management
  - Project planning and management
  - Third party software and system integrator support
  - System installation and support

- Network and communications consulting
  - Operating system selection and tuning
  - Network and peripheral support
  - Application program interface design and coding
  - Security, installation and configuration planning

- Education
  - Courses for technical managers, system administrators, technical support personnel, application developers, database administrators and system programmers
  - Topics covered include Windows NT, UNIX, Open Client/Server, Symmetry support, Oracle, Netware, performance tuning

Source: INPUT, Sequent

In addition, Sequent provides decision support consulting. This involves analyzing information requirements of knowledge workers who need to retrieve corporate data, developing data models and implementing database architectures. This results in a
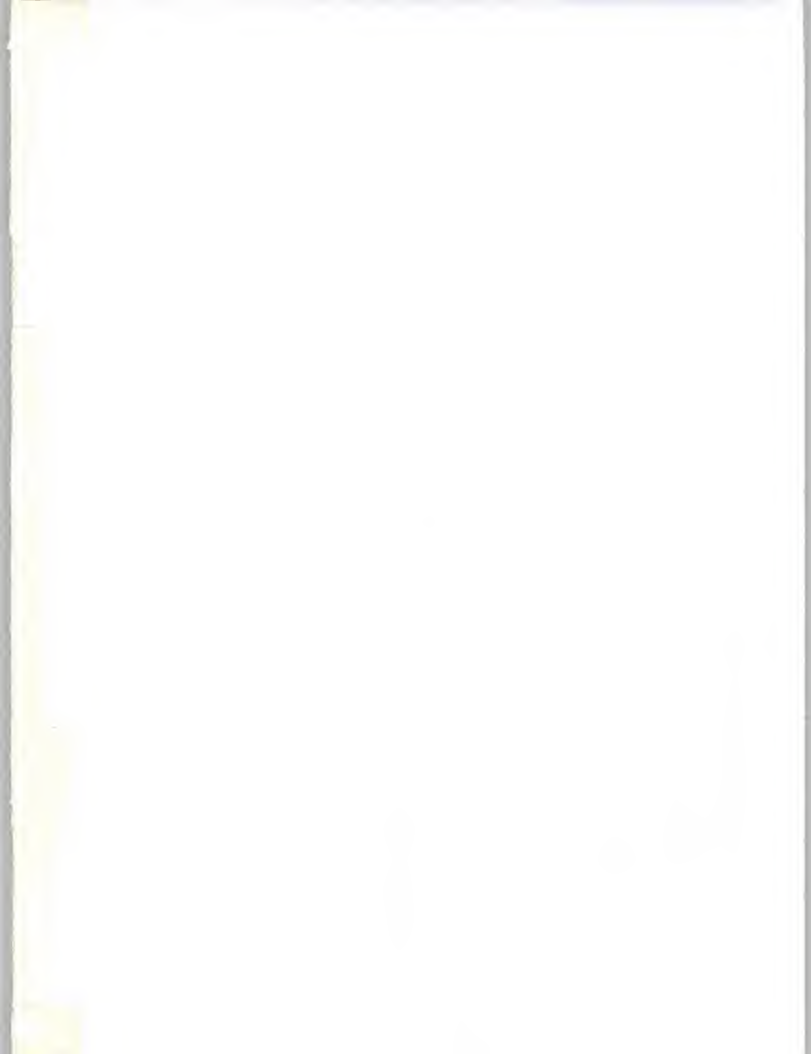
client/server system with visual displays, a decision support data store and connections to corporate data. Sequent provides expertise in OLTP and enterprise messaging. Electronic commerce and workflow are also growth areas that Sequent is addressing.

Sequent usually does not undertake applications coding, preferring to leave that to system integrators, contract programming firms and customers.

An extensive education curriculum is provided both at customer sites and at Sequent education centers located in Portland, Los Angeles, Dallas, Chicago and Washington D.C.. Course prices vary, but are typically $300-$700 per day and $1000 to $2000 per week, depending on the topic.

5. Strategy

Sequent wants to provide its customers with system solutions rather than a single hardware product. Services are a critical element in migrating customers away from legacy infrastructures. Sequent's focus is on moving customers from proprietary software architectures, such as IBM's MVS or Digital's VMS, to UNIX or Windows NT.

Client/server computing is at the heart of Sequent's two core businesses, hardware server manufacturing and enterprise systems consulting. Sequent's pre-sales consulting services have helped it to win major accounts. Its strategy is to guarantee its customers a short-term return with quick payback.

6. Marketing & Distribution

Sequent's leading markets are telecommunications, manufacturing and services. Service markets include financial services, health services and the public sector.

Sequent sells most of its products directly through 56 sales offices worldwide, including 35 in North America. European offices, located in the UK, France and Germany, account for almost 50% of revenues. Sequent has a strong presence in the Pacific Rim, with sales offices in Australia, Japan, Hong Kong and Singapore. It uses distributors in other parts of the world such as the Middle East, China and Latin America.

Increasingly, Sequent is moving to direct distribution for its high-end systems. It also partners with value-added resellers and system integrators. Since the company shipped its first symmetric multiprocessing (SMP) systems, it has directly installed more than 5,500 large-scale systems worldwide. As a full service platform provider to major corporations, Sequent's strategy is to manage user accounts on behalf of third party software suppliers and contract programmers. In the OEM market Sequent relies less on Unisys than it has in the past. Unisys teams with Sequent in areas where both companies have a direct sales force. Overseas, where Sequent lacks a presence, Unisys may distribute Sequent platforms.
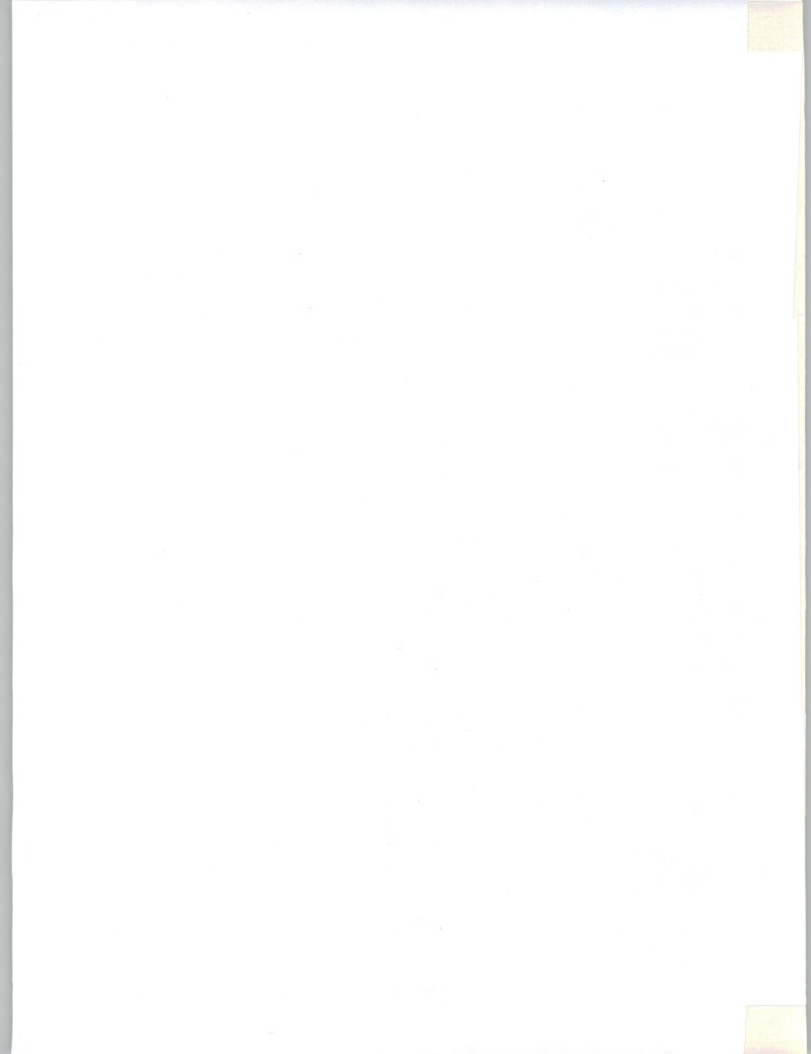
7. Customers

Sequent's customers are in commercial data processing across virtually every industrial sector. Its key accounts, with their industry and applications, are shown in Exhibit 4.

Recent Sequent sales have typically been preceded by activities in decision support consulting, professional services and architectural planning. Sequent frequently supplies systems that integrate several applications.

Details of selected projects are given below:

- *Thrift Drug, Inc.* - In October 1993, this company awarded Sequent a contract to provide a large client/server decision support system aimed at reducing response time for sales and distribution queries.

  Under the contract, Sequent provided Thrift with professional consulting services for system design, integration and training, in addition to a Symmetry 2000/750 platform. Other components of the system include Lightship, a query tool from Pilot Software Co. that runs under Windows and interfaces with an Oracle 7 database.

  When the system is fully implemented, Thrift executives and managers will be able to receive query responses more quickly by accessing the company's database, which contains sales information from 500 retail stores and several mail order operations.

Major Customers

- Mervyn's - retail - prof. services, managing inventory
- Thrift Drug - retail - DSS for sales support
- NASD - financial services - operations support
- Standard & Poor's - financial services - trading info
- AT&T - communications - 911 dispatcher support
- Teleflex - communications - cellular phone billing
- AlliedSignal - manufacturing - financial DSS
- LA Times - press - DSS for advertising support
- Microsoft - software - finance, HR, support services
- Reece Australia - distributor - POS, inventory
- BP - oil - integrated regional information systems
- European Passenger Services - rail system support

Source: INPUT, Sequent

- *National Association of Securities Dealers (NASD)* - Announced in September 1993, this is a five-year contract where Sequent will provide NASD with client/server systems and professional services for corporate operations. The hardware purchase was preceded by a professional services contract that helped clinch the sale.

  During the first year of the contract, Sequent will provide NASD with consulting and education services related to the installation of two clustered Symmetry 2000/750 systems that will provide high availability for more than 1,000 users. With Sequent's assistance, NASD's goal is to expand and improve the services it offers to members, affiliates and listed
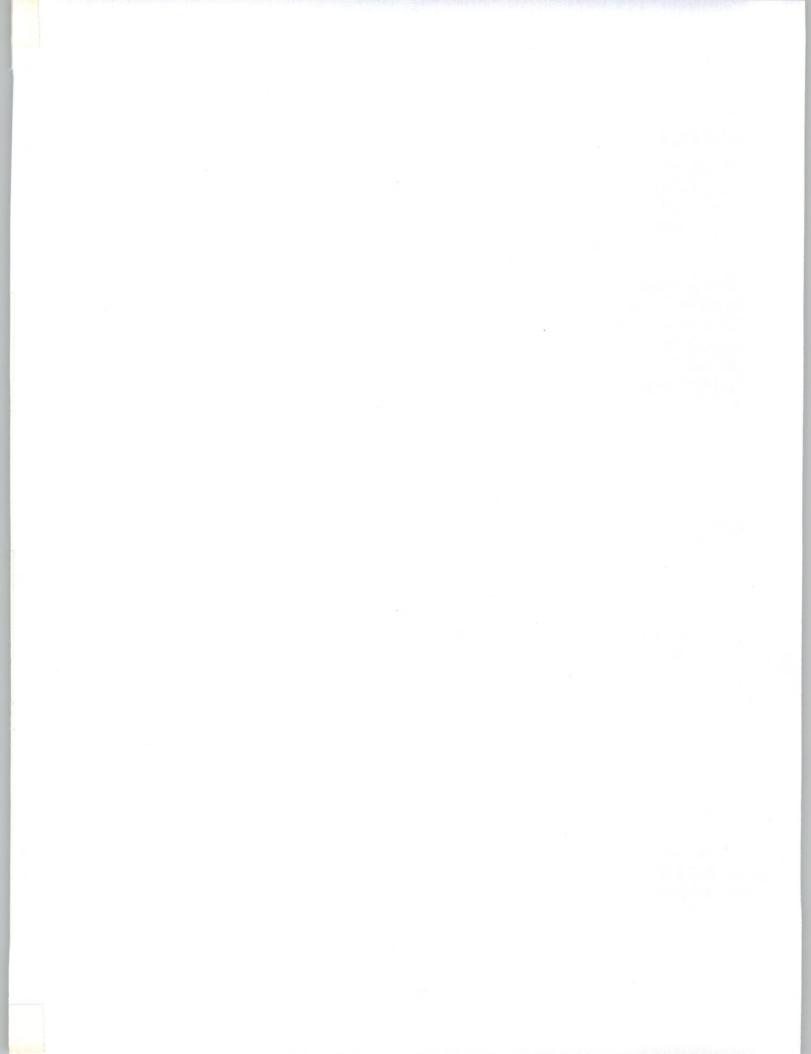
companies of the NASDAQ stock market.

- *Kenny Standard and Poor's* - In 1991, this company reassessed its technology strategy in order to continue competing in a rapidly changing market. S&P decided that a distributed, client/server model with enterprise-wide networks and data access would increase individual responsiveness. A centrally controlled database would ensure easily accessible, incorruptible data with which to do business.

  S&P enlisted the aid of Sequent to provide the hardware and the integration experience necessary to create a client/server system. Currently, the company competes using Symmetry 2000 platforms, NetWare for Sequent Information Servers and Oracle RDBMS software to supply its employees and agents with current, accurate trading information.

- *AT&T* - E9-1-1 is AT&T's enhanced emergency calling service that routes emergency calls to positions known as Public Safety Answering Points (PSAPs). After receiving a call, a PSAP automatically captures the caller's address and related data from either a local or remote Automatic Location Identification (ALI) database.

  Due to the increased need for higher transaction processing speeds and more storage capacity, AT&T developed the E9-1-1 Database Management System, which is capable of providing critical

data to dispatchers in cities with customer bases ranging from 500,000 to 30 million users. The system consists of a Sequent Symmetry 2000 system running Informix relational database management software and AT&T custom software. AT&T chose Sequent after rigorous testing that indicated that Symmetry systems had the reliability and the speed to manage a mission-critical, fault-resistant RDBMS. The Sequent-based system supports up to 30 million possible callers and multiple ALI retrieval systems to supply E9-1-1 operators with easily accessed, current information.

- *Teleflex Information Systems, Inc.* - In order to more accurately issue monthly bills and protect itself against delinquent customers, this company devised FLEXCELL, a billing and reporting system designed to streamline its cellular telephone subscription business.

  Developed on the Oracle Cooperative Server product, FLEXCELL resides on a Sequent Symmetry 2000 platform, which provides the application and parallel and scalable technology Teleflex requires to run its billing system smoothly and cost effectively.

- *Reece Australia Limited* - A growing distributor of plumbing products such as spas, baths, plumbing hardware and insulation, this company had outgrown its Wang-based batch processing system.
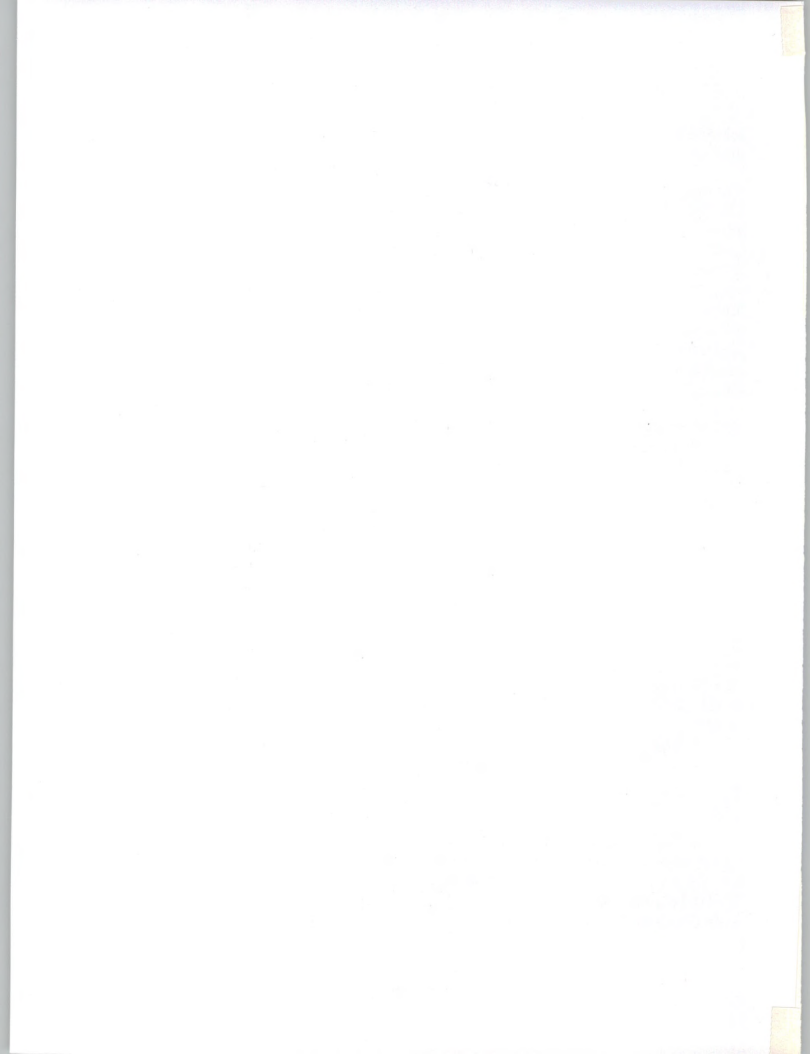
Used Informix as a database to improve customer service by giving store personnel access to inventory data. The system was selected for its scalability and online transaction processing capabilities. It is accessed by over 400 users and has over 30,000 product lines on a 12-processor Symmetry 2000/790 processor for production and a Symmetry 2000/750 for development and disaster recovery.

Architectural consulting clients include Federated Investors, US West, Central Point Software (now Symantec) and Tenneco. Other customers include British Petroleum, Ford Motor Company, Korea Telecom, Nedlloyd Lines, Oracle, UniHealth America and USAir.

8. Partners, Alliances, Ventures

Rather than develop its own databases, Sequent works closely with Synergy Partners, Sybase, Oracle, Informix and ASK/Ingres (now Computer Associates) to optimize their code for OLTP on Sequent platforms. Parallel database queries are the focus of the company's current efforts as these are essential for large DSS systems. OLTP focuses on data entry. DSSs focus on data retrieval. This requires parallel query processing for fast response times.

Sequent announced in June 1994 that it ran the Transaction Processing Council's TPC-B benchmark on a Symmetry 5000 SE60 with *Oracle*'s Oracle7 Release 7.1 parallel database server at 1827.30 transactions per second (tpsB). This sets a new record of $1499 per tpsB. The

Symmetry 5000 ran the DYNIX/ptx operating system and had 22 66MHz Pentium processors, 1GB of memory and 326GB of disk storage. This represents a highly cost-effective solution for organizations requiring a scalable solution that is sure to be challenged by leading vendors.

With *Informix*, Sequent is working on its Parallel Data Query project. Sequent is working with *Sybase* on its Cougar project to provide a high-availability, high-end version of Sybase, enabling more reliable support for larger installations.

Sequent is a partner in *Microsoft's* Solutions Channel program, under which the two companies' sales forces collaborate on potential contracts and sales. In addition, the service engineers for both companies provide support to customers using Sequent systems running Microsoft products.

With *Intel*, Sequent has partnered on the design its microprocessors for SMP computing. *Tricord* supplies the low-end WinServer line of products. With Intel, Tricord and Microsoft as partners Sequent is poised to lead the market for scalable Windows NT servers.

SAP AG and Sequent announced in October 1993 that the two companies will make SAP's R/3 applications software available on Sequent WinServer systems. Sequent will be one of the first vendors to make SAP's software package available on systems running Windows NT. Both SAP and Sequent have close relationships with
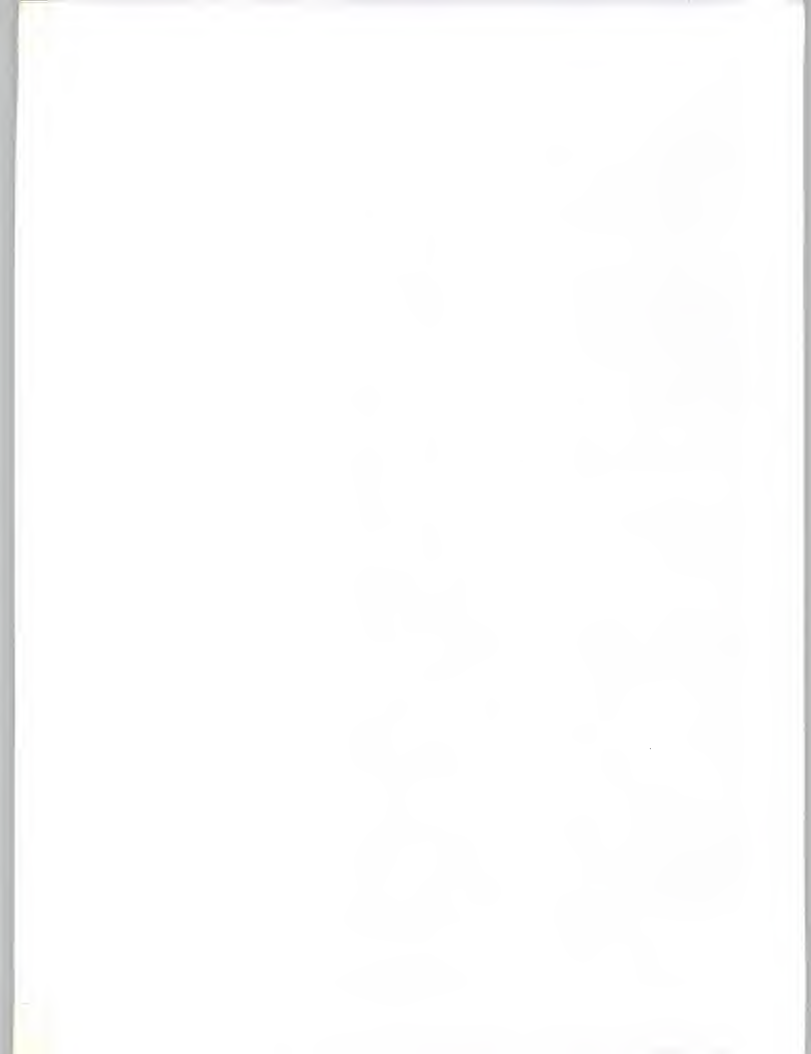
database vendors, and this brings Sequent into the forefront of client/server applications.

In November 1992, *Forté Software* of Oakland, CA announced a strategic partnership with Sequent. Forté's client/server applications development product is particularly suited for database applications that require interaction between users. This will fit well with Sequent's combined messaging and database thrust.

Unisys Corporation is currently Sequent's primary OEM. Under the terms of an agreement made in January 1989, Sequent provides systems to Unisys, which integrates software and peripherals for sale to its own customers. The focus of Sequent's relationship with Unisys is on international distribution and on joint sales teams. Unisys also markets Sun and HP workstations in its vertical market businesses.

Sequent expects the first in a series of messaging software products, OSIAM X.400, from *Marben* of Los Gatos, CA, a subsidiary of French parent Marben Produit, to be available on its UNIX and Windows NT servers in late 1994. It is a scalable high-end product for major corporations to convey files and data between systems using the X.400 messaging architecture. It will also be used for electronic commerce and in public electronic mail networks. Future products that Marben will make available on Sequent's platforms include X.400 message stores, X.500 directories and clustered messaging systems.

In addition, to connect disparate office mail systems Sequent is working with the *Boston Software Works* (BSW) to port BSW's InterOFFICE Message Exchange family of products to the WinServer line. This software enables mail messages and files to be exchanged between legacy, PC-LAN and public e-mail services.

9. Financial Estimates

Sequent's 1993 revenues of $353.8M represent a 15% increase over 1992 revenues of $307.3M. The revenue estimates shown in Exhibit 1 are tabulated in Exhibit 5.

Exhibit 5
Revenue Estimates

	1991	1992	1993	1994 (e)	1995 (e)
Platforms	178	252	281	321	361
Services	35	55	73	95	124
Total	213	307	354	416	485

Source: INPUT estimate

Sequent has had volatile profitability over the last five years, posting losses in 1991 and 1993. The 1993 loss of $7.5M reflected a major restructuring. This resulted in focusing the company on enterprise services and architectural design.

First quarter 1994 revenues were $93.9M, up 21% from $77.6M for the corresponding quarter in 1993. Income for the first quarter of 1994 rose 38% from $3.4M to $4.7M. Therefore, it appears that the results of the restructuring are producing improved results. Major accounts
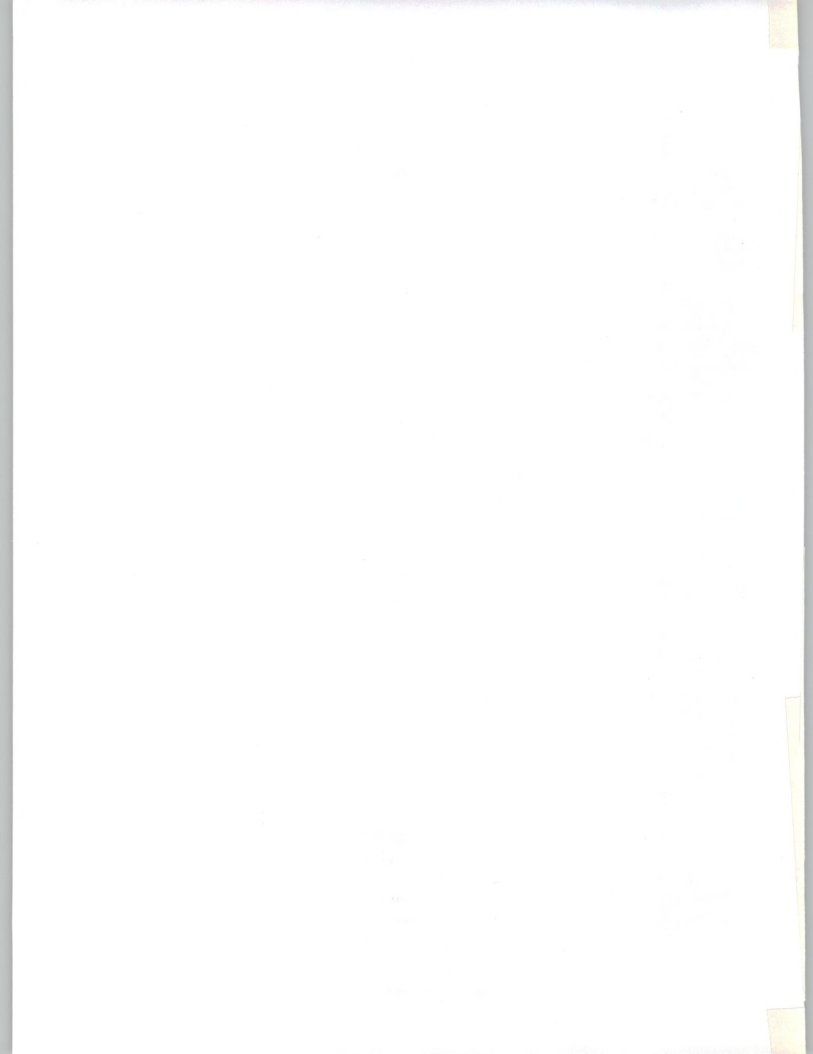
(Fortune 1000 and Global 1000 companies) accounted for over half of first quarter systems sales. More than 75% of revenues during that time represented sales of over $500,000.

Sequent offers good price/performance now, but will increasingly be under pressure to reduce hardware prices. It remains to be seen whether Sequent can continue adding value to its platforms so that it can command high dollar amounts per sale transaction. Customers may not be prepared to increase their spending with Sequent on computing platforms, given the proliferation of smaller networked computers and increased competition from larger computer manufacturers.

In February 1993, Sequent raised $60M in equity capital. Manufacturing computers with specialized architectures like Sequent's requires significant development resources. It is unclear with Sequent's profit levels and size that it can remain competitive as a hardware manufacturer in the long term.

Revenue per employee has been increased to $246,000 in 1993. This is higher than traditional mainframe and minicomputer vendors, but not has high as Sun or Silicon Graphics which generate over $300,000 per head. At the low-end using an indirect distribution model, Compaq has revenues of over $700,000 per employee.

Accounts receivable have been increasing as Sequent places more demonstration

systems in customer sites. This is offset by increased revenues from consulting and helps increase sales long term.

10. Competitive Position

Sequent has managed to keep ahead of its competitors by astute development partnerships and a robust, scalable product line. Agility and rapid product creation help Sequent grow in an increasingly competitive environment.

Sequent's platform competitors include Hewlett-Packard (HP), Pyramid, AT&T Global Information Systems (formerly NCR), Sun Microsystems, Silicon Graphics, Data General, Digital Equipment and IBM. At the low-end, Intel-based vendors like Compaq are encroaching on Sequent's business, forcing Sequent to focus on enterprise solutions and to resell Tricord machines for workgroup and departmental servers. Amdahl and ICL, both Fujitsu companies, and Fujitsu are also competitors in high performance UNIX systems.

Hewlett-Packard is making significant inroads into corporate data centers and is a formidable competitor in the UNIX market. IBM's DB2 database has been ported to HP machines and this gives HP a strategic advantage in penetrating IBM accounts. HP is also a larger, more stable company that is an attractive supplier for risk-averse accounts. Given HP's recent announcement that it will develop follow-on products to the xxx86 series of processors with Intel is both good news and bad news for Sequent. On the one
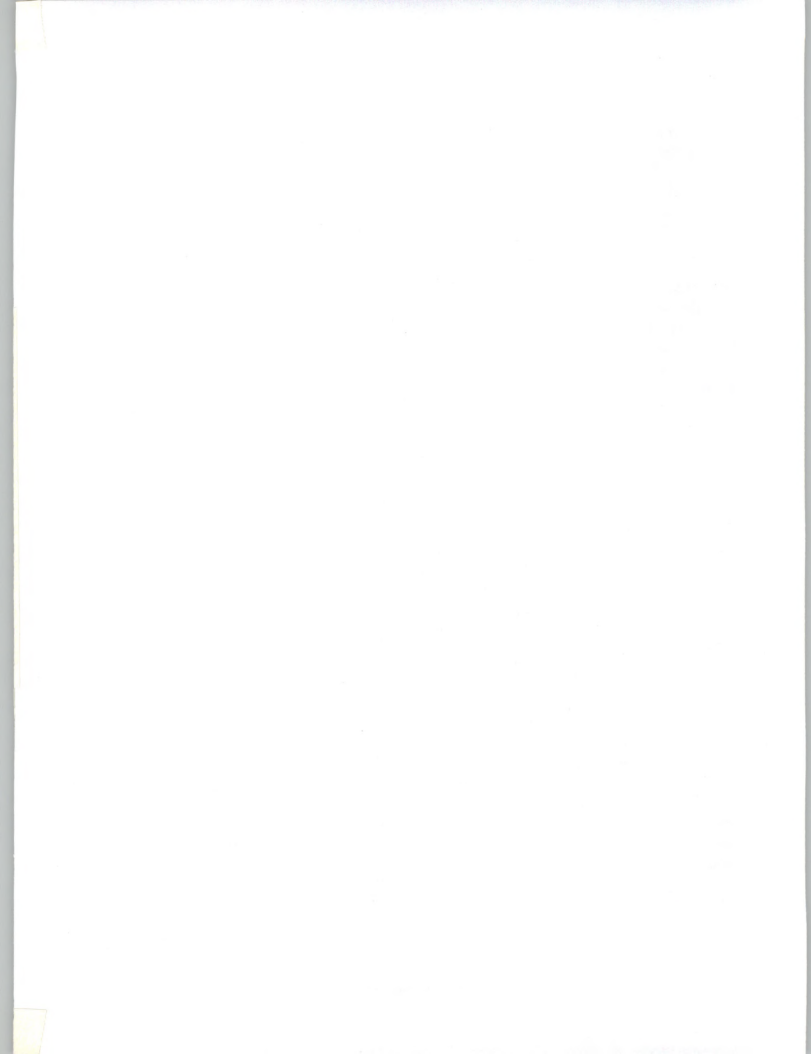
hand it provides an upward migration path for the Intel processors currently supported by Sequent that otherwise may have been limited in performance. On the other hand it enables HP to increase its product strength in the enterprise server market with an Intel solution that is likely to compete with Sequent in the long term. However, Sequent successfully competes against HP on price/performance and scalability.

Pyramid is traditionally Sequent's competitor as a leader in SMP UNIX machines. Pyramid has a greater percentage of revenues from OEMs than Sequent, with customers like Siemens-Nixdorf and ICL. Pyramid's servers are based on MIPS microprocessors. A customer requiring an Intel-based architecture will prefer Sequent. Pyramid tends to focus more on vertical market software vendors than Sequent, which works closely with cross-industry database vendors.

AT&T GIS sells Intel-based servers that compete with Sequent. The high-end AT&T 3600 machines are parallel processing commercial machines that have a different architecture from the lower end machines. In the past, AT&T Federal Systems has sold Pyramid's MIPS-based UNIX machines.

Sun Microsystems sells servers mainly as an adjunct to its workstations. In reality they do not address the same markets as Sequent, which is more likely to sell to an IS department.

Silicon Graphics, with its Challenge servers based on MIPS processors, is a recent entrant into the UNIX SMP market. Silicon Graphics markets to the multimedia and scientific markets directly, where it does not compete with Sequent. It competes with Sequent in commercial channels through its resellers EDS and Tandem. Even though Sequent upgraded the backplane of its servers to 240MB/sec, this is not as fast as that of Silicon Graphics' Challenge servers, which have backplanes of 1200MB/sec to support multimedia. However, Sequent has undertaken excellent software engineering to make its bus perform competitively for its current customers who are mainly using text-based data.

Data General's AViiON servers compete with Sequent, but they have a limited growth path because they are built on Motorola 88000 processors. Data General is selling largely into its installed base and through resellers.

Digital Equipment's Alpha machines compete with Sequent in the downsizing market, mainly running VMS. The SMP servers running OSF (Digital's version of UNIX) are expected to ship in the third quarter of 1994. Again Digital's machines are not Intel-based.

IBM has favored parallel processing architectures over SMP machines. Its line of AIX products, starting with the low-end RS/6000 line of workstation servers does not scale up to enterprise computers seamlessly. Recently IBM
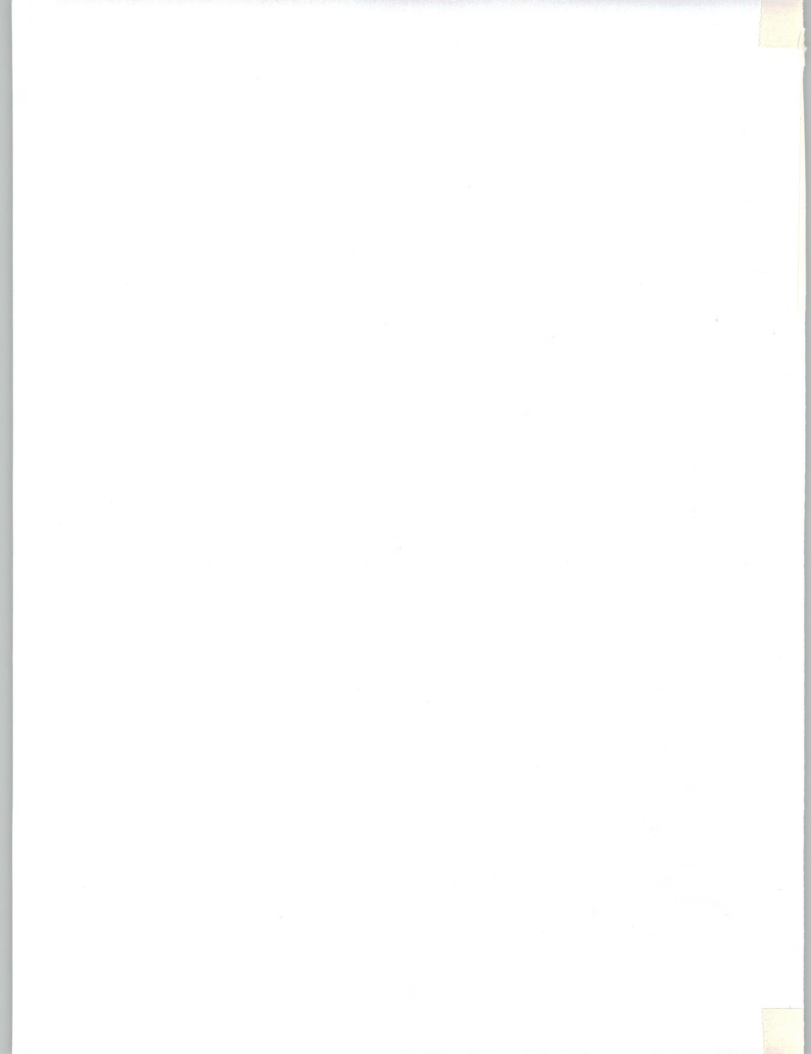
announced the Power Parallel series of computers that run Oracle Parallel Server. To date most of these machines have been sold for scientific computing. IBM's SMP machines are expected towards the end of 1994 and will run the PowerPC. This will be incompatible with IBM's installed base of RS/6000 workstations that run AIX. Until IBM has a full range of PowerPC machines it will not be able to offer the scalability of Sequent's solutions.

Compaq has an indirect distribution model, higher volumes than Sequent and low-end Intel-based servers. Compaq is increasingly moving to higher-end systems. The real competition from Compaq and other Intel-based server vendors that are moving up from the PC market is from customers who choose to run many small databases, rather than coordinate their data on central hosts. Customers that want low-cost hardware may choose a vendor like Compaq and run databases like SQL Server. Customers that want a powerful, mission-critical system in a sizable enterprise will prefer Sequent.

11. INPUT Assessment

By melding business objectives with technical implementation, systems architecture and distributed computing, Sequent has successfully focused on its core competencies. It has successfully identified databases and messaging as areas in which it can add value to basic hardware.

Sequent has successfully maintained its market leadership in enterprise UNIX-based SMP servers. It has also leveraged its sales through partners. Management, financial, marketing and product strengths and challenges are shown in Exhibits 6 to 13.

Exhibit 6

Management Strengths

- Agility
- Clear vision
- Technical expertise
- Relatively stable management team
- Ability to focus on core competencies
- Uses 100% of customers as reference accounts
- Emphasis on customer satisfaction

Source: INPUT

Sequent has shown in its early adoption of Windows NT an ability to define a direction and follow it with conviction. Sequent focuses on hardware assembly, rather than complete manufacturing. Sequent made a wise choice in choosing not to manufacture its low-end Windows NT servers. Sequent's diversification from hardware manufacturing to component assembly positions it well to withstand hardware pricing wars.

Exhibit 7

Management Challenges

- To attract top talent for systems architecture
- To be prepared to drop hardware assembly if it becomes uneconomic
- To identify workstation and PC partners

Source: INPUT
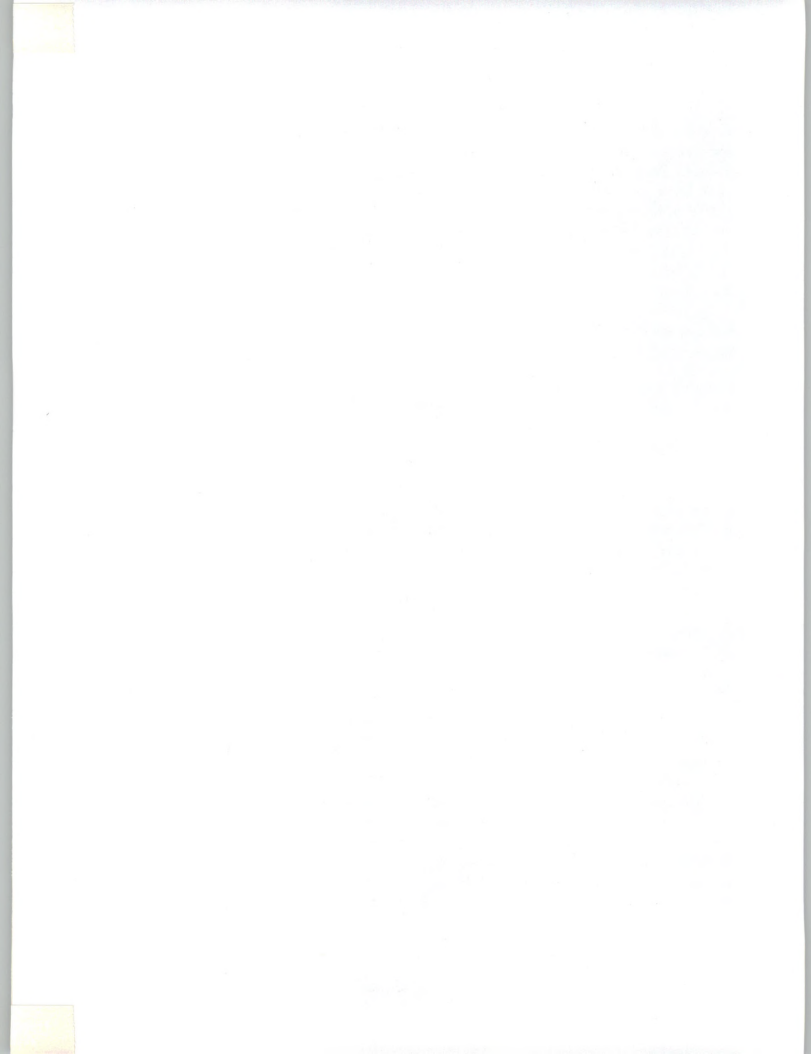
As a company matures it becomes harder to attract top talent. Sequent so far has managed to hire a balance of marketing, engineering and consulting personnel. As the business moves into services it may be harder to attract high quality systems software engineers.

Exhibit 8

Financial Strengths

- Has increased revenue per employee
- Profits are growing
- High-margin direct sales
- Profitable consulting business

Source: INPUT

Sequent uses its consulting business effectively to build relationships with customers and increase the value of each sale. Direct sales provide strong margins. In the first quarter of 1994 it increased profits over the previous year and this trend is likely to continue.

The r&d investment required to stay ahead technologically in the computer business is increasing. Working closely with Intel on processors reduces the hardware design costs. Similarly Sequent's relationship with Microsoft will reduce its long-term Windows NT r&d costs. Sequent must continue to partner with software and hardware vendors, otherwise it will not be able to afford the r&d required to be competitive.

In the server market Sequent needs to finance its market expansion rapidly so that it can command a leadership position. This will require partnerships with key distributors of client workstations and PCs. In particular, Sequent may consider a joint-marketing agreement with a PC vendor like Compaq or a major retailer like CompUSA to reduce its cost of sales. As hardware prices fall it is essential that Sequent increase indirect distribution for workgroup and departmental machines.

Exhibit 9

Financial Challenges

- Financing r&d competitively
- Ability to finance growth needed to be a leader
- Ability to withstand server platform price reductions
- Resource allocation between services and product

Source: INPUT

In the services market, Sequent is choosing the high margin architectural areas where it can command premium prices. As expertise becomes more widespread, prices for services Sequent offers may be provided at lower cost by larger system integrators and hardware manufacturers. Sequent must constantly add services that can sustain high margins.

Sequent has excellent customers and partners. Its focus on architectural consulting is well designed. However, it may have difficulty sustaining its architecture consulting business in the long term as system integrators increase their skill levels. This is because Sequent will have difficulty being perceived as a platform-neutral vendor, which

customers sometimes require in a consulting firm.

Marketing Strengths

> - Strong vendor relationships with Intel, Oracle, Sybase, Informix and Microsoft
> - Pre- and post-sales consulting to accelerate hardware sales
> - High-quality customers

Source: INPUT

Unlike Sequent which uses a widely available microprocessor, HP is the sole provider of PA-RISC platforms. HP needs Intel to proliferate its microprocessor architecture. Sequent must ensure that it gets early access to the processors resulting from HP-Intel joint efforts so that it can continue to keep ahead in server technology. Should this prove impossible, then Sequent may do better adding value to another hardware manufacturer's platform.

Exhibit 11

Marketing Challenges

> - To articulate the enterprise architecture strategy effectively and shed the market perception as a "hot box" vendor.
> - To maintain ownership of accounts where system integrators are partnering with Sequent
> - To ensure that the HP-Intel relationship does not give HP a lead over Sequent in the design of Intel-based enterprise servers
> - To sell into non-IS organizations
> - To develop clear channel strategies for its low-end machines
> - To price profitably, given falling hardware prices

Source: INPUT

Sequent needs to work more with major vertical market software vendors in areas of interest. SAP AG is an example of the type of vendor that must be attracted to Sequent's hardware. Many UNIX applications vendors, think of IBM, Sun, HP or Digital as their primary platform choices. Sequent's relationship as an OEM hardware supplier to Unisys is changing. Unisys adds value to Sequent's solutions by selling them internationally in countries where Sequent cannot provide support.

The reliance on IS organizations for server sales is appropriate for the high-end servers. INPUT surveys show that there is less reliance on IS for departmental applications than in the past. Sequent needs to find regional distributors for its low-end systems that can add applications software for departmental systems.

Exhibit 12

Product and Service Strengths

> - Software technology is strong
> - Early adoption of Windows NT
> - WinServer product selected by Microsoft
> - OS, networking, database and messaging skills
> - Scalable systems
> - Wide range of services that lead to product sales
> - Networking and client/server architecture skills

Source: INPUT

Sequent's strengths lie in optimizing system performance and anticipating market trends. To date Sequent has successfully balanced its service and
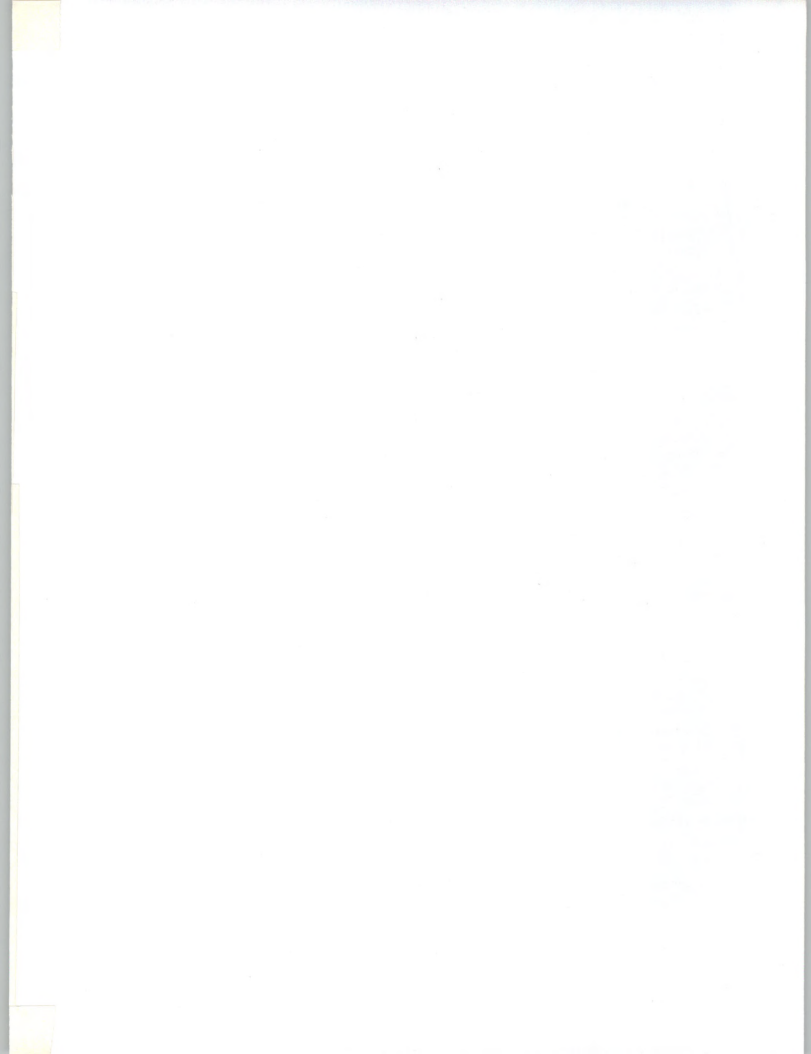
product businesses. When a company runs a product and service business the two entities can compete for resources. There may be a temptation to ship incomplete products, knowing that the service business can fix them with upgrades and maintenance after they have been shipped. Sequent is guarding against this by having strong project management.

Sequent has successfully provided technical leadership in server technology. It must continue to upgrade systems, increase performance and build on its cluster expertise. As Sequent's market penetration increases, more drivers, software components and hardware interfaces will be required. Increased cooperation from third parties will be essential.

Exhibit 13
Product and Service Challenges

- To maintain computer architecture leadership
- To be able to support interfaces profitably
- No workstation or PCs in product line
- Bus bandwidth is relatively low for multimedia

Source: INPUT

Given Microsoft's commitment to the enterprise messaging market, Sequent's communications servers for electronic
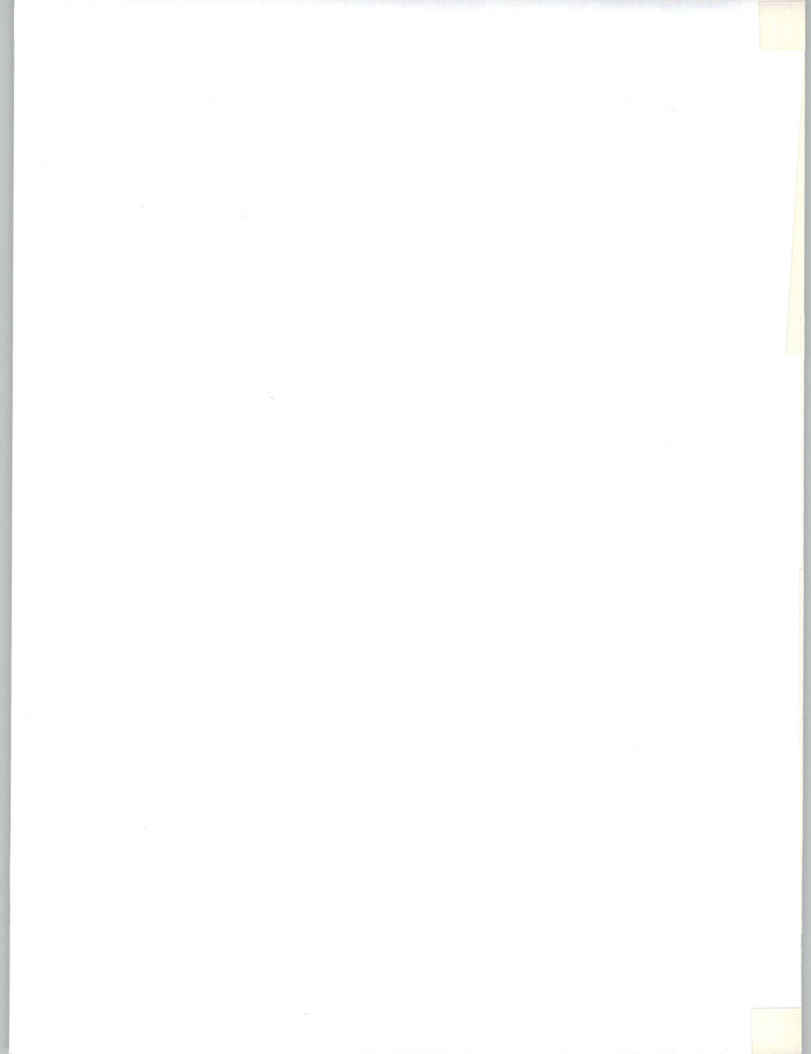
mail and workflow should be increasingly successful. Sequent's non-Microsoft messaging solutions will enhance its ability to provide integrated mail and workflow applications.

By concentrating on services and software, Sequent can become a system architect, integrator and reseller of third party hardware should the capital requirements for hardware assembly become too great. Investment in systems software and object technology provides Sequent with additional assets.

In summary, Sequent's traditional "hot UNIX box" business has become extremely competitive. Sequent has responded well to the competition by diversifying from OLTP into DSS, messaging and executive education. Early diversification from UNIX to Windows NT positions Sequent well for becoming a leading high-end Windows NT server vendor.

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  - Forecasts
  - Awards (FAIT)
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Custom Projects

For Vendors—analyze:

- **Market strategies and tactics**
- **Product/service opportunities**
- **Customer satisfaction levels**
- **Competitive positioning**
- **Acquisition targets**

For Buyers—evaluate:

- **Specific vendor capabilities**
- **Outsourcing options**
- **Systems plans**
- **Peer position**

Other Services

Acquisition/partnership searches

INPUT Worldwide

Frankfurt
Sudetenstraße 9
D-35428 Langgöns-
Niederkleen
Germany
Tel. +49 (0) 6447-7229
Fax +49 (0) 6447-7327

London
17 Hill Street
London W1X 7FB
England
Tel. +44 (0) 71 493-9335
Fax +44 (0) 71 629-0179

New York
400 Frank W. Burr Blvd.
Teaneck, NJ 07666
U.S.A.
Tel. 1 (201) 801-0050
Fax 1 (201) 801-0441

Paris
24, avenue du Recteur
Poincaré
75016 Paris
France
Tel. +33 (1) 46 47 65 65
Fax +33 (1) 46 47 69 50

San Francisco
1881 Landings Drive
Mountain View
CA 94043-0848
U.S.A.
Tel. 1 (415) 961-3300
Fax 1 (415) 961-3966

Tokyo
Saida Building, 4-6,
Kanda Sakuma-cho
Chiyoda-ku, Tokyo 101
Japan
Tel. +81 3 3864-0531
Fax +81 3 3864-4114

Washington, D.C.
1953 Gallows Road
Suite 560
Vienna, VA 22182
U.S.A.
Tel. 1 (703) 847-6870
Fax 1 (703) 847-6872