

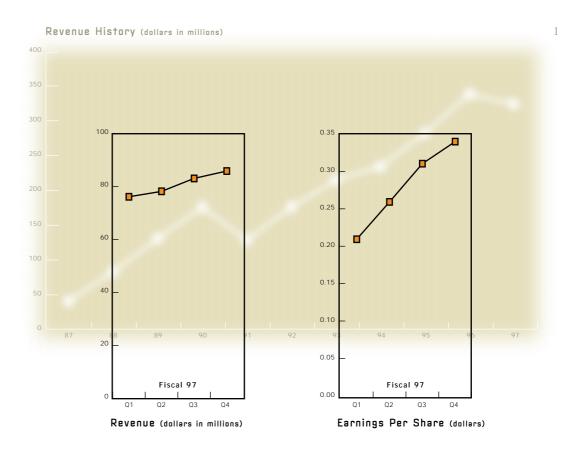


			1997	1996
Revenue			\$324,438	\$338,899
Income before taxes			35,817	48,231
Net income			23,992	31,350
Primary earnings per share			1.12	1.50
Working capital			195,535	174,425
Total assets			301,653	281,957
71/4% convertible				
subordinated debentures			25,821	33,526
Stockholders' equity			212,900	184,430
Number of employees			1,367	1,318
(DOLLARS IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)				
	FIRST	SECOND	THIRD	FOURTH
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Revenue	\$ 76,469	\$ 78,398	\$ 83,302	\$ 86,269
Net income	4,478	5,589	6,620	7,305
Primary and fully diluted earnings				
per share		.26	.31	.34

N.E.T. supplies wide area networks (WANs) to enterprises, government agencies, and carriers around the world. These organizations manage vast amounts of mission-critical information and require reliable, cost-effective networking solutions. Most of these organizations also need a combination of voice, video, and data capabilities which an N.E.T.™ multiservice backbone network provides. A network constructed of N.E.T. Multiservice Bandwidth Managers and our new ATM products frees our customers from being locked into a single technology or application.

Join us at our World Wide Web site at http://www.net.com for further information.

highlights



to our shareholders

Our financial results for FY97 were disappointing, but while revenue and earnings fell below those of the previous year, other financial indicators were encouraging. We generated solid profits, pretax income of \$36 million was 11 percent of revenue, and we grew our cash reserves to \$139 million. In fact, we significantly strengthened our balance sheet overall. Most importantly, our results allowed us to press on with the funding necessary for our strategic product programs, for strengthening our infrastructure, and for expansion of our global sales and support capabilities. We demonstrated substantial progress in each of these areas.

Perhaps the most significant milestone for N.E.T. this past year was the announcement of our new Promina™ product family. In keeping with our core competencies, this family is designed for mission-critical wide area networks, both public and private. It begins the realization of our Vista architecture and delivers on our promise to evolve our customers to Asynchronous Transfer Mode (ATM). This family includes two ATM switches, the Promina 4000 and 2000, and the CellXpress™ ATM module designed to facilitate access to ATM services and networks from our IDNX® family of Multiservice Bandwidth Managers. Announcements this year will extend the Promina family to include a series of multiservice access platforms. The delivery of these products into the emerg-

We continued to expand the opportunities for our IDNX multiservice product family with new products already delivered to the market. We reasserted our voice leadership by introducing our PrimeVoice™ compression module — doubling toll-quality voice capacity on wide area networks — and PrimeVoice switching to increase interoperability for global voice networking. We also enhanced our FrameXpress™ frame relay products with new hardware and software to improve performance and cost per port.

ing ATM WAN market is expected to enable the growth phase of our multiyear plan to transform N.E.T.

These new products are being delivered by a rejuve-

nated development organization, which, along with other major functions in the company, has been reengineered and strengthened to achieve not only competitive productivity, but also the capacity to grow as N.E.T.'s business grows. Advances in manufacturing have already contributed to margins and decreased inventory, and the international expansion of our field operation is providing better support to our customers and partners. In particular, a new office in Beijing and new technology centers in Singapore and Mexico have enhanced our Asia/Pacific and Latin America presence and capabilities. These and other restructuring efforts contributed to the positive financial results we attained.

Performance this year is best viewed in the context of the progress of the past three years. We used the words "momentum" and "value" on the covers of our Annual Reports for FY95 and FY96, respectively, to describe the focus of our efforts in those years. In FY95, we concentrated on our core competence of multiservice wide area networks and began to expand our presence in growing international and carrier markets. This strategy built momentum both internally and in the marketplace and returned the company to profitability. Building on that success, in FY96 we began the reengineering of the internal processes of the company and announced our Vista architecture, the roadmap to our next-generation product line. Together, these increased our value to both customers and investors and further improved our results.

Thus, the accomplishments of FY97 provided both a summary to the efforts of the previous years, and a transition to the opportunities of the next. Our announcements revitalized our product line, and we completed major efforts to prepare the company



Joseph J. Francesconi

President and Chief Executive Officer

for growth. In FY98 and beyond, our challenge is to deliver and support these new products to make faster growth a reality.

The ingredients are in place that fuel our belief in the future growth of our company. We are a company that our customers can rely on to build and support mission-critical networks, with products, expertise, and services that make us a strategic partner. Also, we are now participating in larger, faster growing markets, whether segmented by geography or by customer. And we have a much broader product line, allowing us to provide more of the total network solution, backed by a development capability to evolve our products and keep pace with advancements in technology.

Completing the recipe is the dedication of our employees, who have already achieved a great deal, and are working tirelessly to produce a bright future for our company. You'll hear their words in the next few pages.

Sincerely,

Joseph J. Francesconi

President and Chief Executive Officer

As a prospective employee,

explains the balance among N.E.T.'s revenue sources . . .

I am keen to know what makes N.E.T. tick.

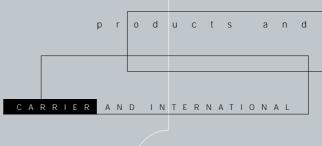
After my interviews earlier in the week,
I arranged some follow-up meetings to discover more.

At the first of these meetings, Kim, an experienced member of the corporate strategy group, describes the company's business and



There is a fascinating diversity of standards around the world and in specific carrier environments. So there are many good ways to design communications networks

— but at N.E.T., we never stop trying to do it better.



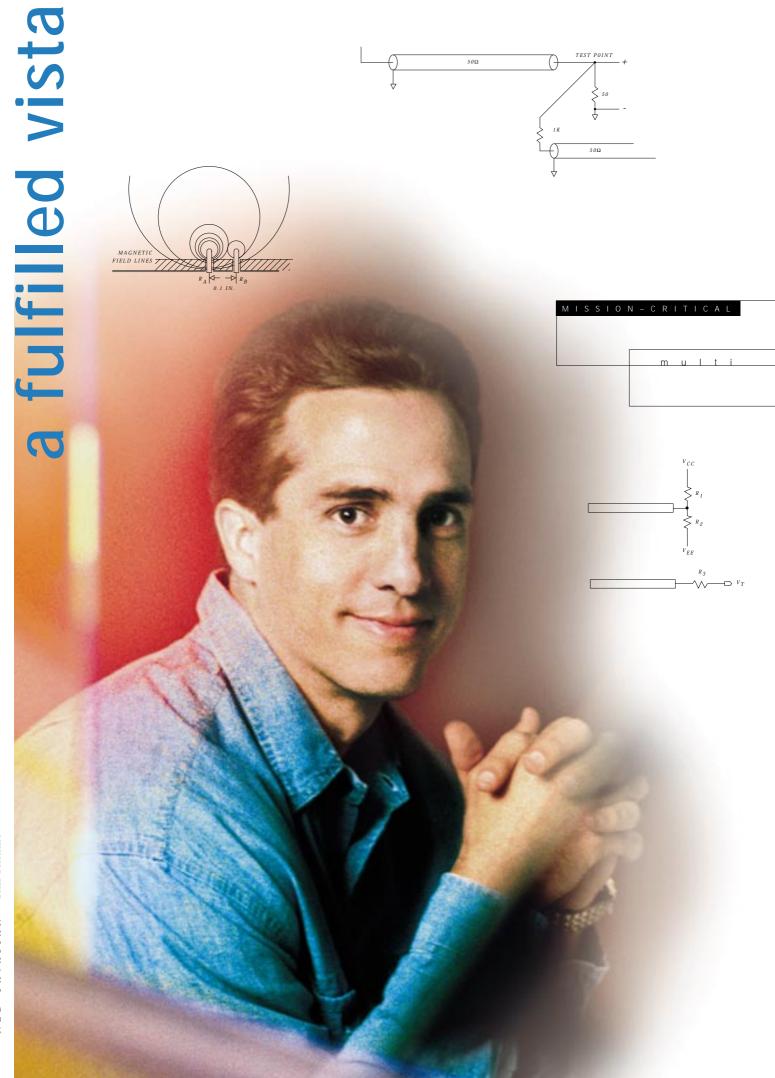
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"Products and services both make significant contributions to N.E.T.'s revenue," Kim begins. "The split is two-thirds products and one-third services."

"How does that compare with your competitors?" I ask. "Most equipment vendors rely heavily on product revenue. Our differentiator, since the early 'eighties, is our customer service organization, well known for its technical expertise and responsiveness. Now we are raising the bar further by expanding our professional services to offer even greater choice to customers." "What about your customer base?" "We benefit from its variety. It comprises three main groups: carriers, government agencies, and enterprises. This year, each group contributed about a third of our revenue."

"Do you expect your revenue distribution to stay that way?" "No. We track the growth segments of our markets. As a result, we expect our carrier revenue to become a greater percentage of our overall business. Furthermore, our recent ATM product family announcements should reinforce our efforts to grow share in the carrier market. Also, our international business is growing faster than our domestic business — we are driving to make their contributions approximately equal."

"It sounds like you have your work cut out!" "Certainly. But we have a unique set of core competencies and believe we can win with them." "So, what are your next steps?" "There are a number of things we need to do this year related to our new Promina ATM switches. For example, we need to work on gaining market acceptance, and we need to successfully roll out products that implement our Vista architecture and prove our technology leadership. Now let's go and find Chris, who can provide more details."



The big issue is multiservice traffic management.

N.E.T.'s solution provides
sophisticated isolation and
control of individual traffic
streams. This eliminates
the need for costly overprovisioning of networks
by service providers,
and it allows them to
offer consistent levels of
service. Above all, this
capability has to be
designed in from the start.



DESIGN CRITERIA

Service ATM switch

After meeting Kim, I join Chris, an engineering manager. As we walk across campus to one of N.E.T.'s ATM laboratories, I recall what I've heard about the company's Vista architecture. The vision: a multiservice ATM product line for enterprises and carriers.

- "Vista is quite an accomplishment. It sounds like you've taken it to the limit with your broad network solution."
 "That's right," answers Chris, "you could summarize Vista simply as a multiservice ATM switch with loosely coupled ASIs and SAMs...."
- "Can you remind me what they stand for?" "ATM Service Interfaces and (a special case) Service Access Multiplexers. They enable different types of traffic to feed into and take advantage of an ATM switching core. In brief, Vista consists of elements that provide standard interfaces, low-cost ports, and high-performance switching. But it goes further than that. A lot further. The mission-critical design criteria for our new ATM switch include 'six-nines' availability. We are striving to keep networks and businesses running better than ever before."
- "Six-nines?" "That's our target: ninety-nine point *nine nine nine nine* percent availability. Our design criteria are up to ten times higher than the competition's!" "Is that your main differentiator?" "It's significant, but we have others. For example, we have unique features such as 'fair cell' traffic management in our new Promina 4000 ATM Switch. Our goal is to help customers control costs through more efficient use of ATM network resources. Definitely worth waiting for!"
- "So it's all about cost control?" "Yes total network-related costs. Our superior availability criteria and traffic management capabilities can bring down the cost of ownership considerably. And scalability minimizes equipment costs. Did you know we designed a switch on a card? That gives *great* scalability." Breaking into a smile, Chris adds, "And our PanaVue™ Management Platform ties it all together."

It wasn't easy implementing an entire ATM switch on a card. We had to build our own silicon, and we spent nearly a year in simulation. But it's given us something unique: a distributed, contentionless switch fabric. With better traffic management, it's a more flexible, scalable, cost-effective solution — definitely worth the extra effort.

real technology

HIGHLY SOPHISTICATED SOLUTION

Blue beams pierce the darkened lab with astonishing precision. "Here's our new ATM switch you're so keen to see," exclaims Chris, as the blue "Power On" LED captures my attention. "The Promina 4000 ATM Switch.

Announced this year. Destined to take ATM to the next generation."

"The *next* generation?" I ask. "Yes, that involves a real technology leap. This is classed as a third-generation device offering third-generation traffic management. We call it fair cell; it's *required* in order to solve ATM's hard problem." "Which is?" "A set of competing requirements. You need a high statistical gain — to take full advantage of ATM's ability to handle multiple mixed traffic types. And you need high end-to-end service integrity supporting many different levels of service. It's really difficult to satisfy both requirements at the same time."

"So, what's going to happen to all the first- and second-generation switches that can't do this — can they be easily upgraded?" "Most can't, so they will probably have to be replaced. A third-generation switch like the Promina 4000 is needed to manage traffic to maximize resource utilization, minimize interference between users, and maintain quality of service levels end-to-end. Reliably. Our fair cell traffic management is a highly sophisticated solution, operating in real time and implemented in hardware for each ATM virtual circuit. It supports multiple priorities for each class of service and flexible allocation of our large cell buffers."

"Do big buffers in any ATM switch guarantee good traffic management?" "No. Size is an issue, but more important is how effectively the buffers are used. Our switch with fair cell traffic management provides policing, shaping, and sophisticated discard of cells to minimize and manage the inevitable congestion in ATM networks."

"Policing," I repeat. "At least I should remember that," as my eyes are drawn closer to the penetrating, reassuring blue light.



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We're in a highly competitive industry with exciting technology advances — placing tough demands on engineers. Consistent performance requires stamina, and good execution requires the ability to sprint to the finish. At N.E.T., our team has those skills:

we believe we can win-



CORE COMPETENCIES

un paralle led expertise



After my lab tour, I return to Kim's office. There's one last point I'd like to explore. "I can see that the ATM market presents great opportunities for many high-tech companies. But you're operating in an intensely competitive telecom environment. What's your game plan?" "Let's look at the trends," replies Kim. "Deregulation and competition make carrier-centric WANs more popular. And data traffic is migrating from constant, low-speed applications to bursty, high-speed ones. That's forcing an evolution of technologies; as a result, frame relay and ATM services are beginning to replace leased lines. Over the next decade, we can expect to witness a steady migration to switched services."

"So what does that mean to N.E.T.'s product plans?" "The carrier and enterprise market models are similar: both require ATM switches. Those, in turn, need to be supplemented by SAMs and ASIs — exactly as anticipated by our Vista architecture. So we are extending our product portfolio beyond established TDM, frame relay, and SONET markets to include new, growing ATM opportunities. That expands our market opportunity from around \$1.5 billion to over \$4 billion in 1999."

"But there are a lot of folks chasing that same market!" "Yes. And you asked about our game plan. In our industry, our keys to winning include dedication to: a unique set of core competencies; the best wide-area ATM switch; the best multiservice bandwidth manager; the best service organization; outstanding distribution partners; and last, but not least, unparalleled expertise in mission-critical wide-area networking!" These convincing words from an enthusiastic networking veteran roll off Kim's tongue with aplomb.

"Sounds great! No wonder you believe you can win." I leave N.E.T.'s headquarters, glad that I arranged these one-on-one appointments after my interview earlier in the week. As I arrive home, the phone is ringing. "Good news — you're hired!" Chris announces. "Great!" I reply, and we eagerly discuss my start date. After hanging up, I reflect on my eventful day. "A winning strategy." I conclude.

Promina 4000

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The striking "Power On" LED signals the debut of a new era for N.E.T. Appearing on our Promina 4000 ATM Switch, blue LEDs are now energy-efficient and cost-effective, thanks to recent advances in technology. This inspiring icon symbolizes N.E.T.'s role in guiding the way to next-generation networking, a course made possible by unique features such as our fair cell traffic management. Furthermore, the blue LED indicates N.E.T.'s commitment to technology leadership.



Blue Power On" LED

FINANCIAIS

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