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After 20 years running GE, Jack Welch  
decides how to spend his retirement



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their transitions

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Here at the Exchange, at the center of global business, I've had the honor of working with many great leaders throughout the past 30 years. But no one has personified leadership more than John F. Welch, Jr. And perhaps no other leader has made a more significant impact on commerce and industry.

As CEO and chairman of General Electric, one of the world's most admired and respected companies—one we've been privileged to trade since 1892 and the only Dow component that was also part of the index's original list in 1896—Jack taught us what it means to innovate, motivate and inspire. The celebrated leader, coach, teacher and mentor has been, and remains, a model for us all.

Jack was also the driving force behind the world's most renowned leadership-development center, which now bears his name. Beginning on page 12, you'll read about how GE and many other listed companies harness the power of bringing together employees to share knowledge through corporate universities.

At the NYSE, we too see the value in bringing together peers to exchange ideas. Excerpts from *nyse magazine's* first live CEO roundtable discussion, held during Brazil Day at the Exchange this fall, begin on page 18.

This issue also raises the important issue of succession. We explore the recent transition of leadership at several listed companies, including GE, on page 34. At the Exchange, we recently announced that our president and COO William R. Johnston, upon completion of his term on Jan. 2, 2002, will be succeeded by group executive vice presidents Catherine R. Kinney and Robert G. Britz. Cathy and Bob will share the title of co-chief operating officer, president and executive vice chairman, and both will become members of the NYSE board. We are delighted Bill will continue as senior adviser. Bob and Cathy have risen through our ranks as outstanding leaders and managers who are now ready to take on even greater responsibilities. They and their respective teams in our equities and client groups have built a platform of value for our customers, and their expanded roles will result in continuing, enormous benefits for all.

Warmest regards,

Did

# UPFRONT

WINTER 2002 NYSE@timeinc.com

NEWS AND TRENDS FROM THE  
GLOBAL BUSINESS COMMUNITY

BY ERIC LAURSEN



## BELL CEREMONIES

### RESCUE WORKERS HONORED

During opening- and closing-bell ceremonies in the weeks following the September 11 attacks, the NYSE honored the rescue workers and those lost in the World Trade Center disaster. The opening ceremony on September 21 included N.Y./N.J. Port Authority Police Chief Tommy Farrell; Captain and Commanding Officer of the World Trade Center Anthony Whitaker; corrections officer Phil Rizzo; New York City firefighters Tom Piggott and Jerry Hall; as well as brothers Bob Gullickson, volunteer employee of Turner Construction, Ralph Gullickson, New York City police officer, and Tom Gullickson of the U.S. Postal Service, whose brother Joey is missing from Brooklyn's Ladder 101 in Red Hook.

Support for the Exchange's Fallen Heroes Fund also followed. As of October 31, listed companies, members and member firms, employees and others had donated or pledged about \$6.5 million to benefit family members of lost firemen and police officers. This is in addition to the Exchange's pledge of as much as \$10 million.

*To learn more about the fund, visit [nyse.com](http://nyse.com).*

Rescue workers being honored by the NYSE gather on the bell podium.

## E-CHARITIES

### MATCHING DONORS AND CHARITIES ONLINE

Following the events of September 11, ResourceLink.org, a free online service developed and operated by **Hewlett-Packard Co. (HWP)**, was helping relief organizations such as America's Second Harvest and Habitat for Humanity International replenish their stock of food and beverages.

Hewlett-Packard created ResourceLink two years ago, working closely with America's Second Harvest and **Kraft Foods Inc. (KFT)**. "It's really helped us streamline our donation process," says Stacey Furey, logistics services manager at Kraft. **General Mills Inc. (GIS)** and the **Diageo plc (DEO)** Pillsbury unit are also donors. As of October 31, almost \$43 million worth of donated food had moved through the portal.

Hewlett-Packard developed ResourceLink partly as a way to promote its e-services program, demonstrating its capability to develop Web-based business solutions, says Lynda Welch, ResourceLink program manager. "It's a great example of how we can pull from different parts of the company to provide a comprehensive solution," she says.



As of October 31, some \$43 million worth of donated food had moved through the ResourceLink.org portal.

FIVE-WAY SPIN-OFF

**CANADIAN STAR SHOOTS FOR AN INTERNATIONAL MIX**

In 1883 Canadian Pacific became the first non-U.S. company to list on the New York Stock Exchange. Since then, parent company Canadian Pacific Ltd. has developed interests in half a dozen businesses, from hotels to mining and shipping, that would make its stock virtually a proxy for the Canadian economy. In October the company broke itself up into five separate companies, each with its own Big Board listing, including **Canadian Pacific Railway Ltd. (CP)**.

"The world is changing. Our focus was to make each unit more competitive internationally and more profitable," says David O'Brien, chairman, president and CEO, who became CP's first nonrailroading CEO in 1996 after serving with the company's petroleum unit, which also operates in the North Sea and the Gulf of Mexico. That unit is now **PanCanadian Energy Corp. (PCX)**.

Other units include **CP Ships Ltd. (TEU)**, which ran one line from Montreal to Europe five years ago and today plies the shipping lanes between Canada and some 50 other countries; **Fairmont Hotels & Resorts Inc. (FHR)**, which has 77 hotels and resorts in the U.S., Mexico and the Caribbean; and **Fording Inc. (FDG)**, a Canadian coal exporter.



CATALOGUE VENTURE

**WHEN THE GUEST WANTS TO KEEP THE BED**

When **Starwood Hotels & Resorts Worldwide Inc. (HOT)** began putting its new, custom-made Heavenly Beds in guest rooms of its 115 Westin hotels two years ago, the item attracted such an unprecedented number of purchase inquiries—along with praise from professional basketball players—that the company decided to launch a catalogue.

"Our industry is very competitive, and if you can provide products that guests like so much that they want to take them home, that builds brand loyalty," says Sue Brush, vice president of Westin brand operations in North America.

Starwood says it plans to research its 5 million-member Starwood Frequent Guests list next year as a possible first step in building a regular catalogue distribution list.

The company has already advertised smaller items like pillows in a flyer it placed in guest rooms, and that effort alone was bringing in about \$10,000 per month in sales, the company reports. When the hotel placed a full-length catalogue in all of its guest rooms, sales reportedly rose more than \$100,000 per month within six months.



Another Starwood hotel group, the trendy W Hotels, with 14 locations, launched a similar catalogue in 2000.

(TOP) COURTESY OF STARWOOD, (BOTTOM) COURTESY OF CPL

SUPPLY-CHAIN MANAGEMENT

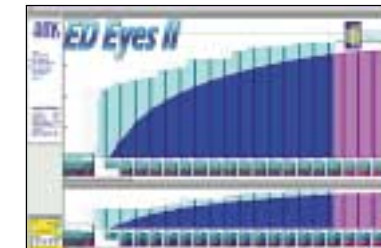
**BRINGING BESTSELLERS TO THE BEST BUYERS**

**Advanced Marketing Services Inc.'s (MKT)** Vendor Managed Inventory software (VMI) analyzes the accumulated sales of book titles, authors and categories at individual warehouse club locations. VMI not only provides highly accurate forecasts for high volume book sales, but also allows Advanced Marketing Services and its clients to react to situations where numbers need to be adjusted, "for something out of the ordinary that will change the rate of sales," explains president and CEO Michael Nicita.

This year Advanced Marketing Services has implemented a new version of VMI that monitors sales data on a daily basis. The version allows publishers to see how their titles are performing at booksellers such as **Office Depot Inc. (ODP)** and **Sam's Club, a unit of Wal-Mart Stores Inc. (WMT)**.

"Since its inception in 1997, VMI has reduced the number of book returns by 30% on average, and by as much as half in some cases," Nicita says.

The Electronic Data Interchange (a.k.a. ED Eyes) program contained within the VMI system analyzes book data for AMS clients.



(TOP) COURTESY OF AMS, (BOTTOM) COURTESY OF TUPPERWARE

WEB PORTAL

**FROM CARS TO CREDIT: TARGETING JAPAN'S YOUNGER BUYERS**

**Toyota Motor Corp. (TM)**, which reports a 40% share of the Japanese auto market, says it wanted to cement that position with the next generation and saw its **Gazoo.com** Website as a way to attract the 20- to 40-year-old crowd to Toyota's cars.

Gazoo turned into a surprise hit, says Toyota spokesperson Shigeru Hayakawa, thanks partly to the Website's lifestyle-oriented sections. Along with bikes, books and CDs available for purchase, one subsection informs viewers about 7,000 parking spaces available along the Tokyo-Osaka-Kobe corridor; a leasing page lists 30,000 rooms for rent in the Kantou region.

More than 430,000 Gazoo members signed up in its first two years, a figure Toyota says it expects will near 4 million by 2003. In 2000 Toyota announced it would continue to operate Gazoo independently rather than affiliate with a major portal, as other auto dealers have.

"The site is being accepted gradually," says Hayakawa, "and we've created a closer relationship with our customers."



DIRECT RETAILING

**BEYOND THE TUPPERWARE PARTY**

**Tupperware Corp. (TUP)** is developing new ways to reach shoppers by venturing into a retail chain for the first time. In a partnership with **Target Corp. (TGT)**, Tupperware says it is offering a special selection of 40 to 50 products through all 62 U.S. SuperTarget stores, which add a full-service grocery section to the usual Target retail sites. In the coming decade SuperTarget says it hopes to expand to at least 200 U.S. locations.

Each SuperTarget food section includes a demonstration table where Tupperware consultants, who will earn commissions on their sales, can personally introduce shoppers to new products, "a nugget of the traditional Tupperware party," says Tupperware chairman and CEO Rick Goings. "We'll be concentrating on showing products with demonstrable value added, those where I can show you how it's better in less than five minutes," he explains.

Tupperware expects to benefit from the exposure to SuperTarget shoppers' critiques and product requests. "We'll be on the tips of our toes getting this constant feedback," says Goings.

Tupperware product displays are located in Target food aisles rather than the housewares section.





# CORPORATE

COMPANIES NOW VIEW EMPLOYEE EDUCATION AS A MISSION-CRITICAL ACTIVITY, MEASURING ITS CONTRIBUTION TO THE BOTTOM LINE.

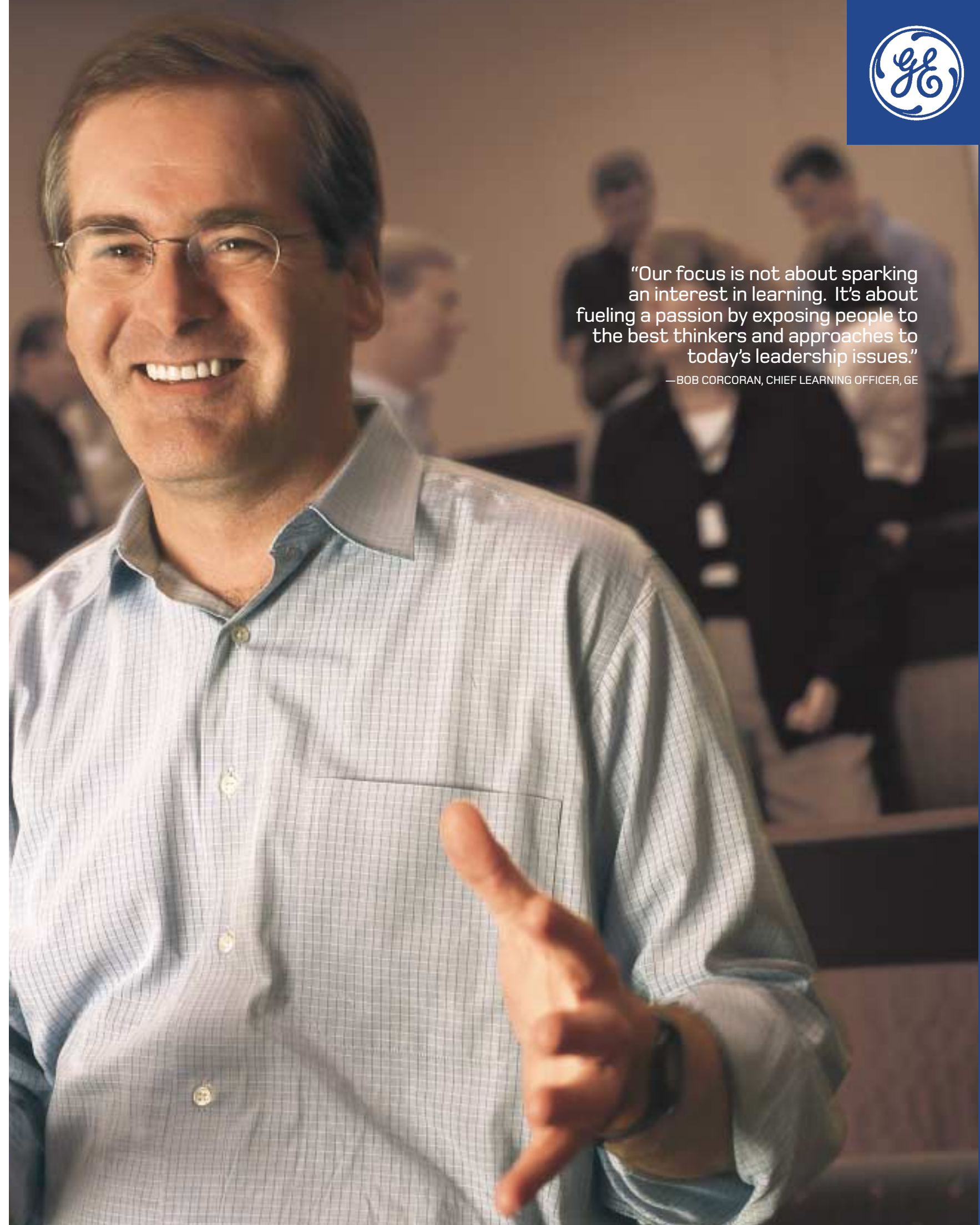
Corporate education has graduated with honors. Instead of training for entry-level employees or occasional enrichment programs, companies are concentrating on graduate-level courses that sharpen leadership, technical and administrative skills.

The proliferation of such universities suggests that many corporations no longer assume that a college education, an entry-level training program or even an M.B.A. gives employees all the tools they need. While each company has its own definition of what makes a corporate university, the term reflects a commitment to the educational process beyond mere training programs. Generally, a corporate university offers multiple courses on a wide range of subjects.

Ongoing education has always been the mantra, however, for **General Electric Co.'s (GE)** longstanding corporate university. "When you stop learning, it's over," says Bob Corcoran, GE's chief learning officer. "We want people to grow more capable every day. Our focus is not on sparking an interest in learning. It's about fueling a passion by exposing people to the best thinkers and approaches to today's leadership issues."

The phenomenon is spreading beyond the U.S., with such companies as **Suez (SZE)** and **AXA (AXA)**, both based in Paris, operating corporate universities. New York City research firm Corporate University Xchange Inc. reports that the number of corporate universities worldwide has risen from 400 in 1988 to 2,000 today. Corporate University Xchange president Jeanne Meister attributes the growth to "an increasingly knowledge-based economy and the need to attract and retain top talent."

BY KATHRYN A. SOLLMANN PHOTOGRAPHS BY JAMES LEYNSE/SABA



"Our focus is not about sparking an interest in learning. It's about fueling a passion by exposing people to the best thinkers and approaches to today's leadership issues."

—BOB CORCORAN, CHIEF LEARNING OFFICER, GE

Meister notes that many companies have cultivated a new breed of “chief learning officers” who often report to the CEO. “In today’s competitive environment, corporate educators are earning a spot at the executive table,” she says.

Corporate University Xchange, in conjunction with **Pearson plc’s (PSO)** *Financial Times*, has awarded 10 corporate university honors for excellence yearly since 1999. Winners in 2001 include **Electronic Data Systems Corp. (EDS)**, **EMC Corp. (EMC)**, **FirstEnergy Corp. (FE)**, **McDonald’s Corp. (MCD)**, **NCR Corp. (NCR)** and **Royal Dutch Petroleum Co.’s (RD)** Shell Group. Criteria include alignment of corporate learning with the organization’s business strategy and use of technology to accelerate education throughout the organization.

Many organizations include customers, suppliers and the general public in their educational programs. The Home Depot University, run by **The Home Depot Inc. (HD)**, offers in-store “how-to” courses to teach customers about installing ceramic tiles, for example.

Research firm International Data Corp. predicts U.S. corporate spending on e-learning alone will reach \$14.5 billion by 2004. But David Nelson, head of the learning arm of **Conoco Inc. (COC)**, warns against measuring program quality just in dollars. “Many corporate universities are still one-shot training departments in disguise,” he says. “True educators are making a sustainable commitment to learning over time.”

### Crotonville: The Granddaddy of Them All

Bob Corcoran heads the corporate university most educators consider the benchmark. Commonly called Crotonville, the 53-acre Hudson Valley, N.Y., facility was recently renamed the John F. Welch Leadership Development Center. General Electric created the program in 1956 as a leadership development institute for aspiring general managers. Today 8,500 of GE’s 313,000 employees pass through Crotonville each year.

The campus includes an education building with three amphitheaters and multiple breakout rooms, another learning center with a 150-person-capacity great room, 146 guest rooms, a dining room and a recreation center. The faculty is a mix of GE professionals and full-time trainers with organizational development and academic credentials.

Corcoran notes that the facility has fans throughout GE. Says one attendee: “The course was the most impactful professional and personal leadership course in my career. Not only did it impact my business gameplan, the experience has also refined my leadership approach and provided a lasting network of friends across our business.”

The three-week manager-development course for managers with five to seven years of experience defines GE’s leadership culture, says Corcoran. Seven times a year, a different group of 60 managers attends each course and interacts with top brass. Former CEO Jack Welch was once a regular at the podium. “Jack wanted to teach our young people the principles of leadership,” says Corcoran. “Until his retirement, he taught at every session except one since 1981.”

The three-week business manager course is for managers of large functions or businesses. Three times a year different groups of 40 high-potential managers, who represent a mix of manufacturing, sales and marketing, operations and staff functions, dive into an actual GE challenge. During “travel week,” managers roam the world to gather information from a dozen or so customers, business partners or government officials. Teams regroup to analyze results, then present recommendations to GE’s chairman and business-unit presidents.

Several years ago, for example, a team focused on Russia’s business potential. Attendees helped management conclude that Russia’s economic system was not stable enough for GE’s market expansion. Recent attendees generated insights on how GE customers want to do business online.




Conoco’s training aims to give 20,000 employees “the baseline information they need to hit the ground running.”

—DAVID NELSON, MANAGER OF ORGANIZATIONAL LEARNING

The executive-development course is held annually for 35 senior executives slated for appointments to the officer level. The faculty includes GE’s chairman, vice chairman, CFO, chief legal counsel and human resources head. Each executive leads a three-hour module that addresses qualities of leadership, and each shares personal experiences. “The course deals with the cultural part of leadership that’s most important but hardest to teach,” says Corcoran.

Crotonville also hosts 10 to 15 programs a week for customers and partners, events that teach Six Sigma quality control or provide opportunities for sharing best practices.

“Crotonville brings together people who might not otherwise interact,” says Corcoran. “Crotonville is perceived as a place where GE initiatives are born. Employees treat it like mom’s kitchen. It’s like coming home to a relaxed setting to get clarity of purpose and reinforce values.”

### Conoco U: Think Big, Move Fast

Just as Crotonville focuses on what Corcoran calls “active, engaged learning,” Conoco University, run by Houston-based Conoco since 1996, rejects the lecture style of days gone by. Coined a “virtual learning organization,” the university says that 20% of programs are offered through the Internet. The rest are delivered interactively in classrooms in more than 40 countries around the globe, it reports.

David Nelson, manager of organizational learning, says the university is the vehicle that drives the oil company’s corporate slogan, “Think big, move fast.” He explains that the training “gives 20,000 employees the baseline information they need to hit the ground running.” Conoco University says it aims to provide every employee with the material and experiences to assure a rapid assimilation into the oil company’s environment and a clear sense of direction for his or her career.

Personal leadership courses are designed to give all employees the opportunity to demonstrate leadership. Then

star employees move toward “world-class executive development” through Conoco’s Trailblazer program. Middle- to senior-level managers attend three weeklong programs over an eight-month period. The first week is held at The London Business School, and the remaining lessons are delivered in Houston by a faculty of training consultants, according to Nelson.

Nelson notes that the 25 attendees represent several continents and disciplines, such as exploration, business development, production, refining, transportation and marketing. By 2001’s end, 150 employees will have completed the Trailblazer “critical learning exercise,” and the goal is to train 50 more by year-end 2002, the company says.

“Employees bring real challenges and work to find solutions,” Nelson says. In 1999 one employee’s mission, for example, was to help Conoco “become a top-quartile exploration performer and improve the exploration decision process.”

Program results are measured in several ways, including leadership behavioral changes. “It’s great to find a solution to a problem, but unless the solution is executed well, it’s of little value,” Nelson says. “Our tenet is to combine learning and action to ensure impactful and sustainable learning experiences.”

Crotonville teams gather information from customers and government officials. They then present recommendations to GE’s chairman.



## GM University is moving toward “blended solutions” that integrate e-learning and classroom-based tools.

—DONNEE RAMELLI, GM UNIVERSITY PRESIDENT

“The program gave me a new lens to view my leadership capabilities and approach,” says Trailblazer graduate Jennie Baker, manager of finished lubricants. “I now have the tools to make a huge difference in my business.”

### GM University’s Faster Learning

**General Motors Corp. (GM)** formed its university in 1997 as a global network designed to help executive, management, technical and professional employees improve their competitive performance. The program is divided into 16 functional colleges, from engineering and finance to safety and brand management. Like Conoco U, GM University emphasizes e-learning and broadcasts training modules to employees throughout the world. Through a performance-management process, all employees are eligible to participate in more than 1,300 courses delivered in classrooms or learning labs, or by satellite and electronic applications, the company reports.

GM University says it provided some 230,000 student days of learning in 2000. All 88,000 GM professional and technical employees have access to online executive and management development courses and resources.

GM University president Donnee Ramelli says that the company is moving toward “blended solutions” that integrate e-learning and classroom-based tools. “Eventually the system will know each employee and say, ‘Here’s some new information you need,’” he says.

For example, design steps were previously completed sequentially in various locations. Universal training and ongoing, Web-based support that keep designers current with upgraded tools and techniques helped GM streamline the design process from 26 steps to just a single application, says Ramelli. “We’ve also given more efficient learning opportunities to today’s ‘knowledge workers,’” adds Joe Joseph, director of the GMU Knowledge Center.

Ramelli notes that the improved design process has generated an estimated \$1 billion in savings and spurred faster car production: four- to five-year development cycles have been whittled down to between 18 and 24 months.

### Sprint’s Blended Learning

Sprint’s University of Excellence began to move away from the more traditional classroom-training model in the mid-1990s. Much of Sprint’s training embraces what Sandy Price, vice president of human resources development, calls blended learning. The university combines assessments, on-the-job coaching, performance support technology and Web-based learning with classroom time.

Twenty-five of the 500 Sprint University of Excellence employees help company executives determine strategically important performance gaps and develop interventions that create intellectual capital and competitive advantage. What makes the program unique is an effort to keep employees of holding company Sprint Corp., and those of **Sprint FON Group (FON)** and **Sprint PCS Group (PCS)**, out of the classroom and learning on the job. Employees receive training through online virtual classrooms or from learning-lab training coaches located in business divisions.

“The concept is for employees to move easily in and out of the lab to keep up with their jobs,” Price notes. Topics include information systems, customer service, sales, finance, marketing, leadership development and quality control. Task-specific performance support tools embed the learning process in day-to-day operations. One hand-held tool walks employees through an equipment installation. “It’s so detailed and accurate it’s like having a training coach on your shoulder,” she says. “And because the training is server-based, we can change the content in a matter of hours.”

Blended learning could shorten Sprint’s classroom time by 20% to 30%, Price estimates. By blurring lines between learning and work, “we’ve removed barriers of time and location and created a better learning partnership between management and trainers,” she says.

### Beyond the U.S.: SCOR and STMicroelectronics

Outside the U.S., **SCOR (SCO)**, the French reinsurance concern, targets about 10% of its 1,500 global employees, or 150 top managers, for its SCOR Université programs. Three sessions are held each year for small groups of 15 managers.

Since 1998, SCOR’s programs have been held in cooperation with the Ecole des Hautes Etudes Business School, a European leader in management training. No SCOR training center exists; programs are held at an offsite location in the Loire Valley. Yvan Besnard, director of development, says the company’s objective is “to give our top managers a clear view of the global marketplace and an opportunity to share expertise and to create a common professional culture.” During weeklong sessions, managers from various disciplines team up to tackle problems related to marketing, organization, client relations and human resources. Presentations are delivered to management, and formal papers are broadcast to employees on the company’s Intranet. Besnard notes that the program not only improves communication among managers but also sharpens the content of SCOR’s business plan.

Geneva-based **STMicroelectronics N.V. (STM)** has held university programs near its factories since 1994. “We train employees during the day and check in with their work progress in the evening,” says Jean-Philippe Dauvin, group vice president and director of education and knowledge for ST University.

In 2000 the company trained more than 12% of its 40,000 employees. High-potential managers participate in courses that develop the skills they’ll need to understand finance, technology and human resources, while learning to delegate effectively. Technical staff can brush up in courses that cover product evolution and user needs. Employees can select from a variety of personal-development courses. A Newcomer’s Seminar is a mandatory introduction to ST business and culture for new employees. The semiconductor maker’s 38 courses run for an average of three days each.

The major corporate initiative in 2001 was to reduce the operating budget. When Dauvin got the nod to teach employees how to do the same work with fewer resources, he had a head start—total quality management (TQM) training had already been on the university’s curriculum for three years. So his team of 320 internal employee trainers, representing sales and marketing, fabrication and production, R&D and other areas, refreshed employees on TQM principles. The company says that in less than one quarter it reduced budget expenses by 25% to 30%.

“This feat might have been expected in a good economy,” Dauvin says. “The fact that we could reduce expenses so quickly in less favorable times means that our training can increase productivity.” □

STMicroelectronics and SCOR tackle practical job-related issues such as marketing, leadership and TQM techniques.

Four Brazilian business leaders highlight opportunities and pitfalls

on Brazil's route to the world stage.

# BRAZIL STEPS UP

PHOTOGRAPHS BY EVAN KAFKA



Latin America has many virtues, not least of which is a growing presence in global capital markets. And among the region's more prominent countries is Brazil, home to 28 NYSE-listed companies that represent more than \$70 billion in global market capitalization.

To celebrate this vital partnership, the New York Stock Exchange recently hosted its first Brazil Day, which brought these companies together with the investment community and top government officials. The agenda included an exclusive *nyse magazine* roundtable, where four chief executives shared their thoughts on Brazil's future: Luiz Fernando Furlan, chairman, **Sadia S.A. (SDA)**, a global food distributor; Henrique Sutton de Sousa Neves, president, **Brasil Telecom Participações S.A. (BRP)**; Mauricio Novis Botelho, president and CEO, commercial jet maker **Embraer-Empresa Brasileira de Aeronáutica S.A. (ERJ)**; and Alvaro Pereira de Moraes Filho, CEO, **Tele Celular Sul Participações S.A. (TSU)**.

**nyse magazine** *It is great to see evidence of Brazil's long-awaited arrival on the world economic stage. What challenges lie ahead?*

**Furlan** The biggest challenge of the 21st century is going to be reducing the social gap. Forty million people in Brazil are nonconsumers because of low income—that number is about the population of Argentina. If education, health care and social aid can bring these people into the market, we'll have the equivalent of a country the size of Argentina added to the consumer base in Brazil.

Brazil wants to harvest a new generation of workers that is much better prepared. Brazil already has one of the fastest-growing populations of Internet users worldwide. Right now our 5 to 6 million users don't compare with the number of users in the U.S., but the rate of growth in Brazil is much higher than that in many other countries.

**Moraes Filho** Companies in Brazil are much more conscious today of the fact that markets depend on education. In the past 18 years, Brazilian companies have been growing at such

a fast pace. The country will need continued investments in infrastructure to sustain that growth.

**Sousa Neves** We have achieved a degree of harmony that is uncommon for a country of our size. We are tremendously diverse, and that has required a lot of tradeoffs.

Resources are available. But it is an issue of allocation and management. As companies move into this area and share their experiences, we have seen a much more intelligent way of allocating resources, such as giving monetary incentives to parents to keep children in school. An indication of productivity is the percentage of school-age population enrolled. It is the highest ever today, at 98%.

**Furlan** Our critical challenge is the ability to export. We can overcome, as the finance minister said this morning, barriers to North American markets. Brazilian companies must stimulate our economy. If we trust stimulation to government forces, the economy will not move.

**nyse magazine** *How are your companies investing in the current workforce through worker training?*

**Furlan** My company is one of the largest employers in Brazil. We have 30,000 employees, and we work with 10,000 small farmers. We are training not only our own people but also the contractors' people to adapt technology and to manage more effectively.

In the early 1990s Sadia adopted Total Quality Management. We sent all our top executives to be trained in Japan, and today we have about 9,500 employees dedicated to quality improvements. The resulting productivity is very high, and that has enabled us to compete in any part of the world.



"TEN YEARS AGO THE AVERAGE BRAZILIAN IMPORT DUTY WAS 85%. TODAY IT IS 12%. SO WE THINK EVERYTHING CAN BE IMPORTED TO BRAZIL."  
—MAURICIO NOVIS BOTELHO



**Botelho** More than two-thirds of our workforce has worked for Embraer for less than three years. The average worker is very young. We have taken newly graduated technicians from graduate schools, and we are investing in training them for the work they will perform. In the past three years we hired 7,000 people; the productivity level is improving.

We have also adopted an initiative that created the Embraer Institute for Research and Education, with three goals: education for engineers who specialize in aeronautical technology, an M.B.A. program in conjunction with one of the most respected teaching institutions in Brazil, and sponsorship of local high schools, which is aimed at upgrading the educational levels of their communities.

Embraer understands that to raise the level of Brazil's development we must invest in the country's education. This is absolutely essential.

**nyse magazine** *What obstacles hinder Brazil's future?*

**Botelho** A structural problem exists today in Brazil's economy. The country is highly dependent on foreign direct investment to balance our current accounts.

For the past five years we have shown a negative trade balance, but this is countered by strong direct investment. We became vulnerable to what happens in other countries. If disasters occur in the Philippines, Thailand, Korea, Russia, Mexico or any other emerging market, then foreign investors are afraid to invest. The only way to grow out of that is to provide positive trade balances.

**Sousa Neves** I think Mauricio has a strong point on exports. From our point of view, as a telecom company that generates all of its revenues in Brazil, taxation is one of the critical issues. Telecommunications is taxed at a 40% rate as a luxury product.

We truly believe that more rational taxation would increase demand in the market.

**Moraes Filho** It is easy to understand that a 40% tax rate will slow down the development of a country. That number speaks for itself.

**nyse magazine** *Is the United States a good trading partner today?*

**Botelho** In my view we have a good relationship, but for sure it can improve a lot. If you look at Brazilian exports, we face very strong trade protection in the United States. This shocks us because we have opened our economy. Ten years ago the average import duty in Brazil was 85%; today it is 12%. So we think everything can be imported to Brazil. There are no barriers.

We hear about trade liberalization from the United States and the European Union. However, the actual practice is different, and this is a burden on us.

It is impossible to sustain our growth with only the controlling shareholders able to invest. You have to tap the global capital market. One looks at the U.S.; that's the biggest market.

**Sousa Neves** Because we have had the necessary cash generation and the ability to raise loans in Brazil, we have so far relied less on accessing international capital markets. However, telecommunications is entering a phase of mergers and acquisitions. What happened in the United States is likely to occur in Brazil, and we believe it will be extended further in Latin American countries.

Certainly, capital markets can and should be tapped. Access to these markets also imposes higher requirements of financial discipline, which are good for companies.

**nyse magazine** *Speaking of discipline, corporate governance is the new mantra in Brazil. Earlier this year, the Novo Mercado*

On Brazil Day at the New York Stock Exchange, participants at a roundtable discussion on Brazil's future included (left to right): Henrique Sutton de Sousa Neves, Brasil Telecom; Mauricio Novis Botelho (pictured with CFO, executive vice president Antonio Luiz Pizarro Manso), Embraer-Empresa; Alvaro Pereira de Moraes Filho, Tele Celular; and Luiz Fernando Furlan, Sadia.

*opened its doors as a market for Brazilian companies that elect voluntarily to abide by stricter corporate governance standards, among them a prohibition against nonvoting shares and annual balance sheets consistent with U.S. or International GAAP. What has been the impact so far?*

**Furlan** Sadia was one of the first companies to join Novo Mercado Level 1. We joined last June. And we believe we're ready for Level 2.

In the past five years we have adopted several changes in our company's administration. Today we have four outside directors and four minority shareholders, in addition to four members of the controlling family. We also have invested a lot in the training of our investor-relations people. Transparency and accountability on our performance numbers certainly improve our corporate image by advancing investors' understanding of our business. Moreover, in Brazil we are permitted to have voting and nonvoting shares. Corporate law needs to protect nonvoting shares.

**Sousa Neves** I agree. It is going to be an evolutionary process. Novo Mercado is a first step.

Owing to the role played by family- and state-owned companies, there is not a long history of strong corporate governance in Brazil. Governance is increasingly important. New laws and regulations have been passed; meanwhile, non-controlling shareholders have established their own association to protect their interests.

## BRAZIL DAY 2001

National days are rare occasions for the New York Stock Exchange. Brazil's Finance Minister Pedro Malan launched Brazil Day 2001 with a speech extolling the robust Brazilian economy. Malan correctly predicted that the third quarter of 2001 would mark the country's 12th consecutive quarter of solid fiscal performance. The finance minister also highlighted effective budgetary restraints, stronger governance rules, increased transparency of financial results and a flourishing capital market. "We have changed Brazil's fiscal regime," Malan declared.

Today 28 Brazilian companies, with a combined market capitalization of \$70.2 billion, are listed on the NYSE. Malan predicted increasing ties between the Big Board and Brazil's leading stock exchange, Bovespa.

One factor that will promote that tighter relationship, Malan said, is the growing number of Brazilian companies that are solid candidates for NYSE listings. In saying so, the finance minister underscored a central theme: Every country that achieves full membership in the developed world

must have an efficient capital market, and Brazil fits this historical pattern.

Malan expressed confidence in Brazil's economic future so long as the country maintains access to capital. Following his speech, the finance minister rang the opening bell.

The day continued with seven panel discussions, which included executives of many of Brazil's listed firms.

The featured speaker at lunch was Francisco Gros, one of Brazil's leading economists and president of BNDES, Brazil's national development bank. With more than \$49 billion in assets, it is a driving force behind the economic growth of Brazil, Latin America's largest economy and the ninth largest in the world.

Gros said that consolidation among Brazil's leading commercial enterprises is crucial if they are to achieve the scale necessary to compete in global markets. He also stressed that as consolidation proceeds, the NYSE will serve as a continuing source of capital for surviving companies.

—Joseph Radigan



Consolidation is crucial to global competition.  
—Francisco Gros

**Moraes Filho** Minority shareholders are the most important source of capital for listed companies and, in the case of global markets, a source of foreign currency for the country.

Brazilian companies in this case can achieve a double benefit from good treatment of minority shareholders.

**nyse magazine** *Brazil will elect a new president in 2002. What are the implications?*

**Furlan** We have plenty of candidates. Brazilian democracy is much more mature now than it was 10 years ago. We have experienced governors and mayors from all parties. So I think Brazilian democracy can continue, regardless of the outcome of the election.

**nyse magazine** *The World Trade Organization has been the focus of a lot of attention. What's your take?*

**Furlan** According to a presentation I attended at the World Economic Forum last winter in Davos, Switzerland, the world population will gain 1.8 billion people in the next 25 years. Most of them will be in the so-called Third World. As long as people in less developed countries will drive a taxi in New York to escape poverty, there will be an immigration problem that must be mitigated by allowing less-developed economies to grow.

The WTO is the right place to discuss the issues of poverty and immigration.

**Botelho** The WTO is a good thing indeed. However, there are imbalances in the WTO that must be faced honestly. It is impossible to keep the WTO as a tool to maintain privileges. This is what we see today. We have regulations that were established by the richest countries in the world to preserve their markets. If the regulations do not change, I think there will be a movement backward for local agreements that forget about world trade.

**Sousa Neves** I have a less optimistic view. I think there are indications that globalization may be coming to a standstill.

There was an assumption in the early 1990s that the liquidity of international markets and their growth rates would determine dramatic changes. What I see today is recession and less liquidity in international markets. When you look at globalization, you begin to see an initial form of resistance. It is still a fringe movement, but it reflects some bitter international anxiety about barriers that have been erected in Europe and the United States.

**Botelho** I believe that globalization is absolutely irreversible.

I don't see how it can go backward. But I don't see it necessarily as a good thing. It would be a good thing if globalization guaranteed equal access to all markets. Otherwise the law of the jungle will prevail: The stronger will impose rules, and it will be impossible to resist them.

**Moraes Filho** Globalization must not mean that only rich countries have open markets in poor countries. Rich countries must also open their markets.

**Furlan** Being a listed company, we understand very well that communication with the market is very important. As a country, Brazil needs to improve communication. Most of the news

about Brazil is related to problems in the Amazon region.

**nyse magazine** *What singular competitive advantage does Brazil enjoy nowadays?*

**Botelho** Brazil has unique strengths. Look at the way the country is integrated and compare this with Spanish-speaking Latin America. When Spanish-speaking countries became independent, they grew into some 30 different countries in Latin America, some even hostile to each other. Brazil was kept as only one nation. From north to south, it is still one nation. You have minorities but the same language, Portuguese; the same national attitude; and racial integration.

That's what we are, and I think that this is a marvelous base of strength. □

*Roundtable moderated by S.L. Mintz.*



# medical spare parts

With 7.5 million Americans receiving medical implants annually, the medical devices market is thriving.

**T**he *Six Million Dollar Man* and *The Bionic Woman* might have been television sci-fi nearly 30 years ago, but the idea of high-tech spare parts is today's reality. Because of technological advances and better surgical techniques, the medical devices and implantables market is healthy and growing: In 2000 the \$60.2 billion medical devices market in the U.S. increased 7% over sales of the previous year, according to the Advanced Medical Technology Association, which also reports that 7.5 million Americans receive temporary or permanent medical implants annually.

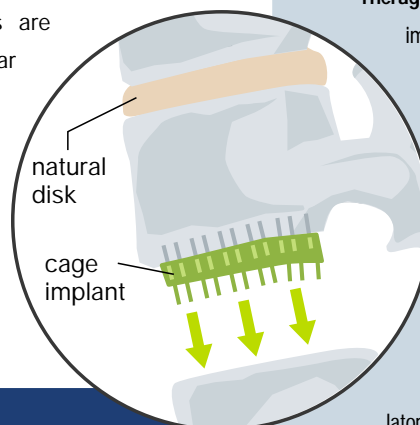
Companies fueling the implantables market are working on cross-over benefits. **Theragenics Corp. (TGX)**, the manufacturer of TheraSeed® for treating prostate cancer, says it is exploring the use of Palladium 103, the active ingredient in TheraSeed, for the treatment of other cancers, vessel reocclusion after balloon angioplasty and macular degeneration. **Medtronic Inc. (MDT)** says it is testing neurostimulation products to help with epilepsy, obsessive-compulsive disorder and dystonia.

**Boston Scientific Corp. (BSX)** and **Guidant Corp. (GDT)** are bringing to market stents—flexible metal tubes that prop open arteries, reducing plaque re-blockage—coated with antibiotics and cancer-combating drugs that could fight disease at the same time. The current \$1.5 billion U.S. market could leap to \$3.3 billion within five years as coated stents take off, says John Capek, president of Guidant's Vascular Intervention Unit.

"Demand for innovative, effective medical technologies that enable people to live longer, better and with less pain will continue to grow at an accelerating pace as baby boomers get these procedures," says Scott R. Davidson, principal and senior research analyst at U.S. Bancorp Piper Jaffray. According to the U.S. Census Bureau, by 2010 more than 16 million baby boomers will be between ages 60 and 64, many of whom will be candidates for replacement parts, in addition to nearly 40 million Americans who will be older than 65. And greater longevity means artificial parts will need replacing. The average pacemaker lasts only 10 years, artificial hips and knees 12 to 15 years, say analysts.

To position themselves for the future, companies are merging and forming partnerships. (Acquisitions this year include the \$10.2 billion purchase by **Johnson & Johnson (JNJ)** of ALZA Corp. and **Tyco International Ltd.'s (TYC)** planned \$3.2 billion buyout of C.R. Bard Inc.) Such commitment, say analysts, has already led to a plethora of new products.

See the graphic on the following pages for an illustration of some medical implants currently on the market.



## companies and their products

**Bausch & Lomb Inc. (BOL)** Contact lenses

**Boston Scientific Corp. (BSX)** Flexible metal tubes used to prop open arteries after angioplasty

**C.R. Bard Inc. (BCR)** (purchase expected by Tyco International) Implantable fabrics and meshes, brachytherapy seeds (radioactive seeds placed at tumor sites), catheters

**Edwards Lifesciences Corp. (EW)** Heart valves, hemodynamic monitoring devices

**Guidant Corp. (GDT)** Pacemakers and defibrillators, cardiac rhythm devices

**Hanger Orthopedic Group Inc. (HGR)** Orthotics and prosthetics

**Johnson & Johnson (JNJ)** Orthopedics treating musculoskeletal injuries, shoulder and knee implants (subsidiary DePuy Orthopaedics Inc.); spinal implants (subsidiary DePuy AcroMed Inc.); drug-delivery systems, including electrotransport skin patches that use electricity to push drugs through the skin (subsidiary ALZA Corp.); disposable contact lenses

**Medtronic Inc. (MDT)** Drug-delivery devices (subsidiary Medtronic MiniMed); implantable devices for cardiovascular and neurological functions and to treat Parkinson's disease, spinal trauma and urinary incontinence; mechanical and tissue heart valves, defibrillators, spinal implants

**Siemens A.G. (SI)** Hearing aids

**Smith & Nephew plc (SNN)** Tissue-repair products, primarily in the areas of bone, joints, skin and other soft tissue

**St. Jude Medical Inc. (STJ)** Mechanical heart valves, rings, tissue-replacement valves, pacemakers, implantable defibrillators

**Stryker Corp. (SYK)** Orthopedic implants, bone cement  
**Theragenics Corp. (TGX)** TheraSeed radioactive implant to kill cells that cause prostate cancer

**Tyco International Ltd. (TYC)** Sutures, meniscal stapler for knee surgery (subsidiary U.S. Surgical Corp.); spinal implants (subsidiary Tyco Healthcare)

**VISX Inc. (EYE)** LASIK laser vision correction machines

**Wilson Greatbatch Technologies Inc. (GB)** Power sources for implantable medical devices, specifically pacemakers and defibrillator applications, implantable lithium batteries

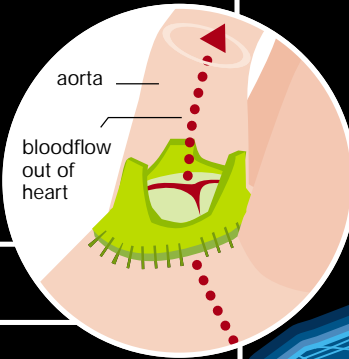
**Zimmer Holdings Inc. (ZMH)** Orthopedic reconstructive implants, including artificial knees, hips and shoulders

# IMPLANTABLE TECHNOLOGIES

Medical devices companies report that they are developing and making products that span the spectrum of technological sophistication today, with an eye toward the possibilities of tomorrow.

## HEART VALVES

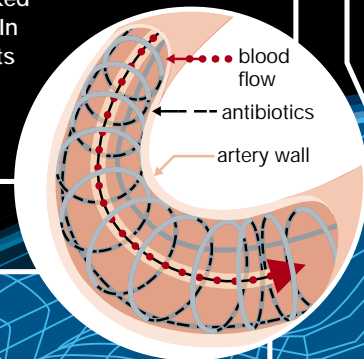
Diseased or damaged valves can be replaced with mechanical or tissue valves. Two leaflets made of pyrolytic carbon generally make up a mechanical valve. Younger patients are more likely to receive mechanical valves, while older patients are more frequent candidates for tissue valves, according to Edwards Lifesciences. Unsupported, or stentless, valves use the patient's own valve root for support.



Edwards Lifesciences Corp., Medtronic Inc., St. Jude Medical Inc.

## DRUG-ELUTING STENTS

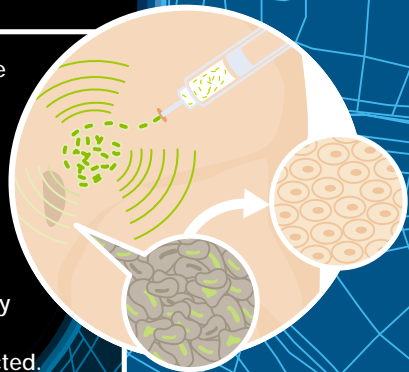
Cardiologists keep clogged arteries open through balloon angioplasty and stents. When these devices press back the plaque, using a catheter with a balloon on its tip, the artery stretches, scars and may become blocked again, a condition known as restenosis. In development are new drug-eluting stents to help combat this. The stents will be available in Europe next year and in the U.S. in 2003, says Johnson & Johnson.



Johnson & Johnson, Boston Scientific Corp., Guidant Corp.

## RADIATION THERAPY

Cancerous tissue undergoes a barrage of radiation from brachytherapy—implanted, radioactive seeds that kill tumor cells and enable patients to avoid surgery. Depending on the prostate cancer's stage, as many as 100 seeds are injected into the gland through a long, hollow needle, destroying the cells' nuclear chromatin so they reproduce as noncancerous cells. Surrounding healthy tissue is not affected.

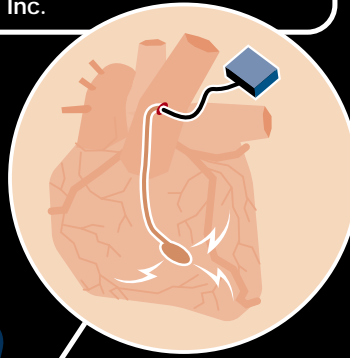


Theragenics Corp.

## PACEMAKERS

Introduced in the 1950s, pacemakers are used to regulate a heartbeat when it is too slow, by sending less than one volt of electricity through a lead. Pacemakers are now a \$2.8 billion market in total sales, expected to grow 7% annually, says Fred McCoy, Guidant's president of Cardiac Rhythm Management.

Guidant Corp., Medtronic Inc., St. Jude Medical Inc.

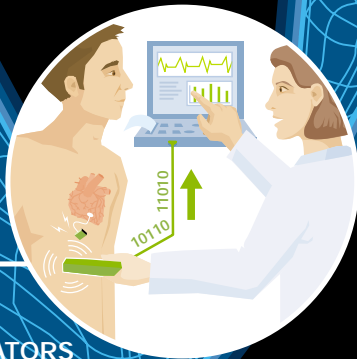


## DEFIBRILLATORS

Introduced 15 years ago, defibrillators restore a normal rhythm to a potentially fatal fast, erratic heartbeat by shocking the heart with 700 volts of electricity. The defibrillator market grosses \$1.7 billion annually, with yearly growth of 20% generally expected, says Guidant's McCoy.

Defibrillators now process data that medical specialists can use to monitor the heart and regulate therapy. During a follow-up visit a magnetic wand placed over the device downloads data indicating how the implant is working. If therapy must change, new instructions can be sent to the device without surgery.

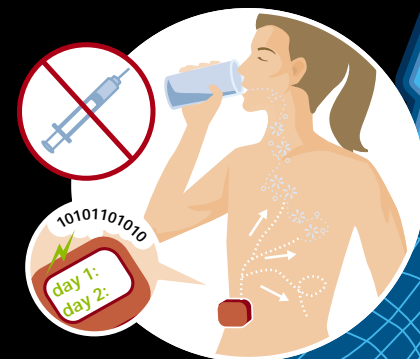
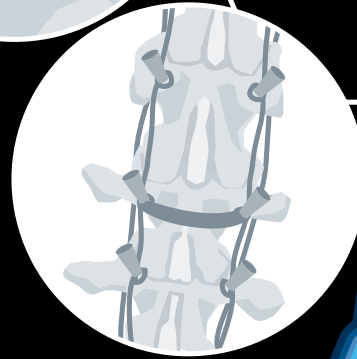
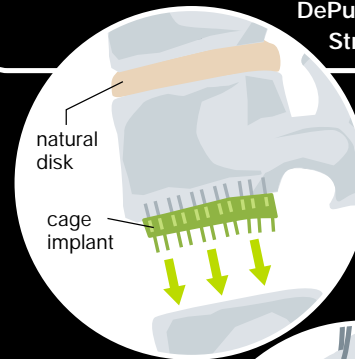
Guidant Corp., Medtronic Inc., St. Jude Medical Inc.



## SPINAL IMPLANTS

Rod, screw, hook and plate components stabilize loads on injured vertebrae from the neck to the tailbone. Spine implants also include lattice work: Tyco Healthcare and DePuy AcroMed offer a cage implant that, with bone growth stimulator, helps fuse vertebrae when a damaged disk has been removed. And artificial disks are on the way as companies vie for the new market to treat degenerative disk disease, a market which is estimated to soar from \$28 million in sales in 2004 to \$1 billion by 2007, according to the May *MedTech Insight Report*.

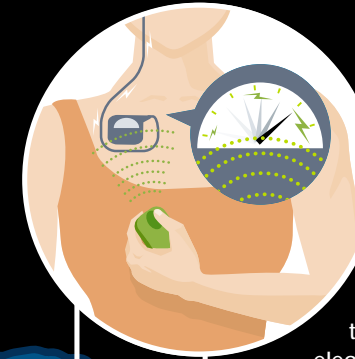
DePuy AcroMed Inc., Medtronic Inc., Stryker Corp., Tyco Healthcare



## INSULIN PUMPS

Medtronic MiniMed's insulin pump allows people with Type 1 diabetes to substitute multiple daily injections of insulin by installing a wearable pump that mimics some actions of the pancreas. The pump continuously releases tiny doses of fast-acting insulin to keep blood-sugar levels on target. A push of a button delivers extra insulin at meal-times. Insulin is delivered through a tiny, flexible tube inserted just under the skin of the abdomen. A disposable patch pump is being developed for people with Type 2 diabetes.

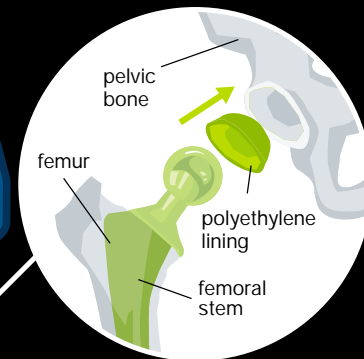
Medtronic MiniMed



## BRAIN PACEMAKERS

Deep brain stimulation technology delivers mild electrical impulses to precisely targeted areas deep within the brain to reduce tremors associated with Parkinson's disease or Essential Tremor. Medtronic's Activa Therapy neurostimulator is implanted in the collarbone, and four electrodes at the end of a thin, insulated wire stimulate the brain.

Medtronic Inc.



## ORTHOPEDIC IMPLANTS

In hip replacements, the head of the natural femur is removed and a new ball is fitted into the femoral stem, which is put into the femur. The seat prepared for a new socket in the hipbone may be lined with polyethylene, an elastic material similar to that used in car bumpers, or metal, and a stem is secured to the bone with cement or a porous coating that the surrounding bone can grow into.

DePuy Orthopaedics Inc., Medtronic Inc., Stryker Corp., Zimmer Holdings

# Jack

## MOVES ON

How will retirement suit a man driven his whole career to constantly energize his company?

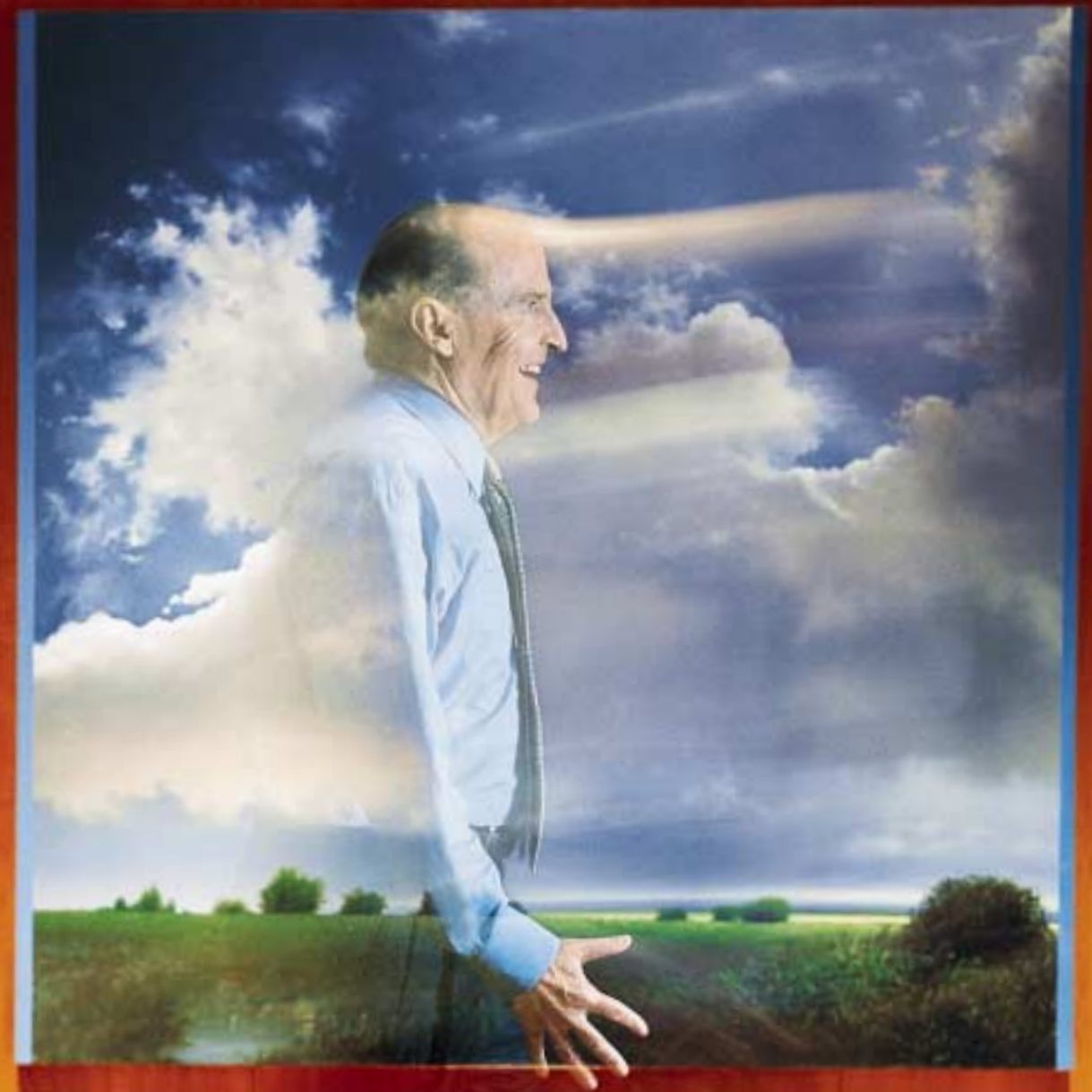
BY JULIE CONNELLY PHOTOGRAPHS BY DARRYL ESTRINE

In life, few things can cause more trouble than a superabundance of energy without a superabundance of outlets for it. The reason Jack Welch is revered today as a great business leader is that, in running **General Electric Co. (GE)**, this intelligent, restless man found a challenge that consumed even his ferocious energies.

Now, still giving off heat despite a quintuple bypass in 1995, Welch takes on retirement with plans to write a syndicated column and become a coach to CEOs of other companies who have signed him up. In October he disclosed his first new client, the leveraged buyout firm Clayton, Dubilier & Rice, which wants his counsel on management best practices, corporate governance, performance-improvement initiatives and changing the culture in some of its portfolio companies. He followed that by signing on to work with senior management at **J.P. Morgan Chase & Co. (JPM)**.

Declining to disclose his other "protégés," Welch is similarly vague about what he will teach them. "I'm not there to give advice about their cost structure," he said in his hoarse, slightly raspy voice, as he sat last September in GE's enormous boardroom in New York's Rockefeller Center. "I'm there to help them build leadership," he continued, popping pretzels into his mouth. "These people hire consultants all the time. In me they get someone who's actually done it."

He'll also be publicizing his book, *Jack: Straight From the Gut*. A first print run of 1.2 million copies is the largest ever ordered by publisher Warner Books



Leaving the corporate home where he spent his whole career, Jack Welch plans to write a syndicated column and coach other CEOs.

# GE's executive bench

Robert Nardelli, president and CEO of The Home Depot Inc. (HD), and W. James McNerney Jr., chief of Minnesota Mining & Manufacturing Co. (MMM), will tell you: A stint at General Electric looks great on a résumé. Both landed their jobs less than two weeks after Jeff Immelt was named head of GE.

The two are examples of recent, high-profile CEOs who came up through GE's ranks to lead other companies. Noel Tichy, co-author of *Control Your Destiny or Someone Else Will*, an account of how Jack Welch transformed GE, believes that executive search committees like GE alums because of the strong leadership training they get at the company. "There's no business organization in the world that focuses as much on leadership as GE," says Tichy. Welch made people development, through his active involvement in the company's Crotonville management course (see related article on page 12) and his personal evaluations of top executives, a priority.

Search committees also like GE's tendency to move its executives among its widely diverse businesses. Employees "learn what you can take from one industry to another," says Tichy. "Most people grow up in an industry ghetto and don't have an appreciation of what works in one setting and what doesn't."

CEOs who came up through GE's ranks include Lawrence Bossidy of Honeywell International Inc. (HON); David Cote of TRW Inc. (TRW); Paolo Fresco, chairman of Fiat SpA (FIA); Larry Johnston of Albertson's Inc. (ABS); Tom Tiller, president and CEO of Polaris Industries Inc. (PII); and Gary Wendt of Conesco Inc. (CNC).

But how can GE afford to cede so many of its top players? "The company produces more leaders than opportunities for them," says Tichy. At GE, "it's not a star system—it's a constellation of bright lights," adds Clarke Murphy, managing director of executive recruiting firm Russell Reynolds Associates.

In fact, losing people could be a positive for GE, argues 27-year GE veteran Albert F. Barber, now chairman and CEO of privately owned e-Media LLC, a provider of integrated streaming solutions. "It gives other people the chance to move up," says Barber, whose last position at GE was the presidency of the CNBC cable network. "It also tells people [looking to join] GE that they'll be able to move up."

—Mark Yarm

Top to bottom: James McNerney, Robert Nardelli, Lawrence Bossidy, Paolo Fresco



for a nonfiction work, according to Emi Battaglia, vice president for publicity.

But then what? How will retirement sit with a man who was driven to energize his company with constant upheaval? One thing is sure: "He'll never call it 'retirement,'" says William J. Conaty, GE's senior vice president for human resources.

Lawrence A. Bossidy, chairman and CEO of **Honeywell International Inc. (HON)** and a vice chairman of GE until 1991, observed that "Jack thrives on change. He was not that enthusiastic about global businesses originally; now he's become a leading proponent. He did not think much of [GE's] turbine business initially; now he's changed his view. You can't have a successful 20-year run if you can't reinvent yourself."

## the beginning

Born in 1935, Welch grew up in what he describes as a lower-middle-class household in Salem, Mass., across the street from a factory. Welch says he was astounded when he discovered that the elegant, English-born Reginald Jones, his predecessor as GE's CEO, grew up in even more deprived circumstances with several families sharing one toilet. "I mean, we were poor," Welch says, "but not like that."

Welch was the only child of an extremely strong-willed mother and a self-effacing father who was a train conductor on the Boston & Maine railroad. Neither of Welch's parents finished high school, but, pushed by his redoubtable mother, Welch got an undergraduate degree in chemical engineering from the University of Massachusetts, then his chemical engineering Ph.D. from the University of Illinois.

Upon graduation, Welch joined GE's plastics division as an engineer. By the time he was 32, Welch was the company's youngest general manager. A young recruit in GE's appliance division named Dennis D. Dammerman, now vice chairman of GE and chairman of GE Capital Services, recalls reading about Welch in the company newsletter. "I thought, Holy cow! This guy must be something. He was 10 years older than me, and in my whole career I didn't even aspire to do what he did at 32."

A decade later, Welch was one of six candidates to succeed Jones. Most reports considered Welch the darkest horse of the group.

Welch realized the GE he inherited was a complacent organization and felt that incremental change was doomed to fail. "If your change isn't big enough, revolutionary enough, the bureaucracy can get you," he told Noel Tichy and Stratford Sherman, co-authors of *Control Your Destiny or Someone Else Will*, a recently reissued inside account of how Welch transformed GE.

Welch's first directive was his famous command that every GE business be first or second in its market. Operations that weren't would be fixed, sold or closed. "I want a revolution," he insisted after he'd been named CEO.

The huge employee layoffs that followed earned Welch the "Neutron Jack" nickname, a moniker that still rankles. "Only satisfied customers can provide job security," he says. "Think about the last 18 months of the dot-coms. They are auctioning off the furniture now because their CEOs didn't have a business model to satisfy customers."

Meanwhile, GE managers were directed to divide subordinates into the top 20%, the middle 70% and the bottom 10%, with the bottom group slated every year for demolition. When asked whether this practice is "cruel or brutal," Welch comments in his autobiography: "It's just the opposite. What I think is brutal and 'false kindness' is keeping people around who aren't going to grow and prosper."

Conaty quotes a favorite saying of Welch's: You have to be tough before you can be soft. "Once you've got credibility for results, you can deal with softer issues, such as people development and training," Conaty says. "Jack was always a people person, but most of his first decade was spent positioning the portfolio."

## the softer side of welch

By the second decade of his tenure, Welch's credibility had shot up with the company's profitability and stock price. So he began unleashing his formidable energy on building leadership.

GE was down from 420,000 employees when Welch took over to 285,000 in 1991; even today it is made up of only 21 primary business units, as opposed to 150 in 1980. So the only way to increase performance was to inspire employees to be more productive, say Tichy and Sherman. "It's not unusual to hear CEOs talk about people development," says Conaty. "But the action, the intensity and the time that Jack spent on them—that was highly unusual."

For example, Welch always showed up at the three-week management course for young GE executives given at Crotonville, the company's Hudson Valley, N.Y., training center recently renamed the John F. Welch Leadership Development Center (see related article on page 12). For three-plus hours he would lecture and answer questions, pacing back and forth in the well of a large lecture hall. Then the class would adjourn for a beer and a few more hours of face time with the CEO. John A. Byrne, the co-author of Welch's autobiography, has estimated that by 1998, Welch had appeared more than 250 times in the classroom to exhort 15,000 GE managers to stretch themselves.

Because he believed passionately in differentiating among his A, B and C players, and rewarding outsize performance with outsize bonuses and option grants, Welch personally evaluated GE's top 500 executives, filling pages with his bold, slanting handwriting. Every year, he attended marathon review sessions at every division so he could judge the company's top 3,000 executives. Even when a phone call might do, he seemed to prefer dealing face-to-face. Dammerman remembers how Welch promoted him from a spot "running one-third of GE Capital," as he put it, to be GE's chief financial officer in 1984. "I was in my office at 7 one morning when the phone rang, and Jack said, 'I want you to meet me at 5 o'clock today at Gates [a restaurant not far from GE's corporate headquarters in Fairfield, Conn.]. And don't tell anyone about this.'"

THINK ABOUT THE LAST 18 MONTHS OF THE DOT-COMS. THEY ARE AUCTIONING OFF THE FURNITURE NOW BECAUSE THEY DIDN'T HAVE A business model TO SATISFY CUSTOMERS. —JACK WELCH

FROM TOP: GE/GETTY IMAGES; GE/GETTY IMAGES; SHEPHERD SHERBELL/SABA; DELLUC-XPW/SABA

# wisdom FROM JACK WELCH

Jack Welch management perspectives:

**On what customers want:** Customers no longer want to buy just hardware; they want solutions and they want suppliers who can enhance their competitiveness, who can make them winners in their own marketplaces.

**On the nature of GE:** We have changed the very nature of what we do for a living. Today services account for two-thirds of our revenues—soon to be 70% or more. We have become a services company that also makes high-quality products.

**The ultimate competitive advantage:** The desire and the ability of an organization to continuously learn from any source, anywhere—and to rapidly convert this learning into action—is the ultimate competitive advantage.

**The differentiator:** Speed. From decision-making to deal-making to communications to product introduction, speed, more often than not, ends up being the competitive differentiator.

**Stretch:** A stretch atmosphere replaces a grim, heads-down determination to be as good as you have to be, and asks, instead, how good can you be?

**Simplicity:** We are going to de-complicate everything we do and make at GE.

**On small-company soul:** What we are trying relentlessly to do is get that small-company soul—and small-company speed—inside our big-company body.

**On the end of “Not Invented Here”:** Parochialism—“not invented here”—is dead at

GE. We don't claim to be the global fountainhead of management thought, but we may be the world's thirstiest pursuer of big ideas—from whatever the source—and we're not shy about adopting and adapting them.

Source: GE

Dammerman says he figured he was about to receive very good or very bad news, so he got to the restaurant in time for a calming shot of Dutch courage before Welch hurried in promptly at 5. Welch greeted him, saying, “I'm meeting my wife for dinner, but I want to go to the board tomorrow and have them elect you CFO. Is that okay?” An astounded Dammerman, who was only 38 at the time, nodded and then Welch turned to hustle out of the restaurant, leaving the younger man to call after him: “Wait! I need to know more.”

Gertrude G. Michelson, a boardmember who helped pick Jeffrey Immelt, CEO of GE Medical Systems, as Welch's successor (see Q&A on page 34), recalls how over Thanksgiving weekend 2000, Welch flew to Cincinnati in terrible weather to tell W. James McNerney Jr.—then CEO of GE Aircraft Engines and now chairman and CEO of **Minnesota Mining and Manufacturing Co. (MMM)**—that he would not get the job. Welch then headed to Albany, N.Y., to notify Robert Nardelli, then CEO of GE Power Systems and now president and CEO of **The Home Depot Inc. (HD)**. Given that those were the others considered for the CEO slot, “Jack wouldn't think of not telling them in person,” she says.

When asked about the most important lesson Welch taught him, Immelt doesn't hesitate: “The importance of people,” he says, “attracting them, inspiring them. I spend at least 50% of my time on people. I teach, I develop, I encourage, I reward, I challenge—I do those things to motivate people.”

But Immelt recognizes that his style and priorities will differ from his mentor's. “My background is totally different from Jack's. Jack started in engineering; I started in sales. And I'm 20 years younger. My style is based on technology, from growing up at a different time.”

## the welch magic

During his 20-year span as CEO, Welch acknowledges he has had only four big initiatives: globalization, a priority shift from making products to servicing customers, the Six Sigma quality program and e-commerce.

Says Immelt: “The consistency of the message was as important as any one thing Jack ever did. His message was consistent, it was accountable, it was repetitive. Those were the things that were part of the magic.”

As a former senior vice president for R.H. Macy (now a division of **Federated Department Stores Inc. (FD)**), Michelson knows “how difficult it is to get everybody in a company going in the same direction. Jack made his objectives clear, and then he drummed them home.”

Nonetheless, Welch never hesitated to reverse course. He used to guffaw with Bossidy about total quality management as a fad, according to his old colleague. “Both of us had seen these hula-hoop programs before, and they were lacking in substance,” Bossidy says. “GE had a zero-tolerance program, but it was just a slogan.”

But at Allied Signal, Bossidy was introduced to Six Sigma, a quality-control process that aims to reduce defects in manufacturing or services to 3.4 per million opportunities, and became a convert. When Welch asked him to speak at a gathering of GE's top executives in 1995, Bossidy said, “Okay,

but I'm going to talk about Six Sigma.” Welch was unable to attend the meeting because of his bypass surgery. “But Jack later called and said, ‘Hey, people are bothering me about your presentation,’” Bossidy says.

The quality scoffer Welch soon implemented Six Sigma throughout the company. Author Tichy estimates that by 2000, Six Sigma produced \$7 billion of returns on GE's \$2.1 billion investment.

Another concept he once derided is digitization. For years Welch, who couldn't even type, thought e-business was “nonsense.” Then in 1998 he saw his wife trading stocks online and observed that everyone in his office was Christmas shopping on the Net. Soon he became known as “e-Jack,” checking out chat rooms to see what people were saying about GE.

Welch quickly became convinced that “e-commerce is a game we can win.” According to the 2000 annual report, the company expects to achieve 5% to 10% savings on the \$14 billion worth of total items it will buy this year by purchasing goods and services online; GE expects another \$1 billion in 2001 savings from digitizing paperwork in its back-office operations. Because it can fulfill customer orders faster over the Net, GE reports that it has watched its online sales double from \$7 billion in 2000 to \$14 billion in 2001.

GE also has been a powerful acquisition machine, buying businesses worth \$127.5 billion over Welch's 20-year tenure. While he didn't win every company he sought, Welch says the only painful rejection involved Honeywell, whose sale was met with opposition from the European Commission. But when asked the obvious question, he replies defiantly: “There's not a thing I would have done differently.”

There's probably not much that GE shareholders would have had him do differently either. The company Welch took over reported revenues of \$25 billion and profits of \$1.5 billion in 1980; GE reported revenues of \$129.9 billion in 2000, up a record 16.3% from 1999, and profits of \$12.7 billion, up 18.8%, another record.

## the fifth initiative

While transforming GE into a 21<sup>st</sup>-century machine, Welch was also working on a fifth initiative, although he never called it that. In the spring of 1994, he began the four-year process of choosing his successor, whittling an original list of 23 candidates down to three. “Succession is the most important decision you make in your job,” he says. “People grow and change. It takes time to judge people. And some of my earlier judgments weren't up to snuff.”

Welch wrote in his autobiography that picking from among his final trio “was the most difficult and agonizing [decision] I ever had to make. It damn near drove me crazy, causing many sleepless nights.... Any one of the three could have run GE.... And I knew I had to disappoint two of them.”

Moreover, Welch made it clear to each of them that he didn't expect the two that couldn't become CEO to remain at the company. On Nov. 27, 2000, Welch announced that Jeff Immelt would succeed him. Within 10 days McNerney was tapped by 3M and Nardelli joined Home Depot.

Welch has carefully avoided explaining his choice of CEO. According to his book, he told McNerney: “I can't even tell you why. It's my nose and

MY BACKGROUND IS  
DIFFERENT FROM JACK'S.  
MY STYLE IS BASED ON  
technology,  
FROM GROWING UP AT A  
DIFFERENT TIME.

—JEFFREY IMMELT



my gut.” Nardelli asked him, “What more could I have done?” Welch noted that, “I wasn’t able to satisfy his need for more information.”

But Conaty offers a hint about why Welch picked the tall and handsome Immelt, an Ivy Leaguer with the ability to make himself liked. “People think this legend is leaving and a mere mortal is coming in,” Conaty says. “But the leadership that Jack put in is behind Jeff. We need a partnership across the top to substitute for Jack’s experience.”

Immelt is reluctant to become too specific about his plans except to reiterate that GE will produce double-digit earnings growth this year and next despite dual threats of recession and terrorism. News reports at the time of the handover were full of speculation that he will eventually have to offload the lagging appliance and lighting divisions and NBC. But Immelt wasn’t tempted to comment. And in mid-October NBC announced it would spend nearly \$2 billion for Telemundo Communications Group Inc., a Spanish-language broadcaster.

Immelt says he wants GE to get even more than its current 70% of revenues from services. And just as Welch used Crotonville to disseminate his managerial ideas, Immelt is thinking about using the corporate R&D center in Schenectady, N.Y., as a sort of Digitalville to spread the best practices in technology.

## from power to influence

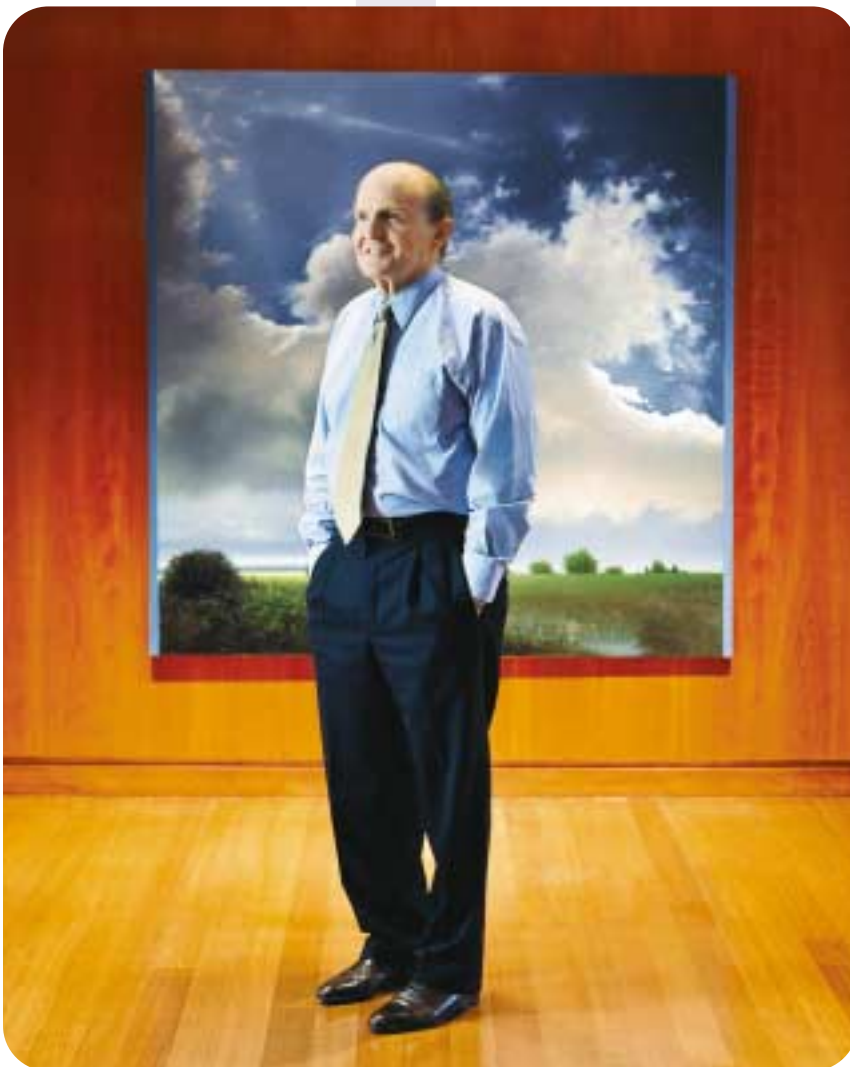
In retirement, Welch has embarked on the difficult path that leads from power to influence, reinventing himself again. At 66, he is concerned with a handful of important issues that he wants to write about, perhaps as a newspaper columnist.

For example, he has suggested that China’s economic rise will have an impact on U.S. businesses equal to Japan’s in the 1970s and 1980s. Unlike the Japanese, who threatened U.S. car and TV makers, the Chinese will compete in the computer peripheral equipment field, he says.

He is also reinventing himself as Jack the Coach, a new career that seems murky even to Welch right now, he admits. He expects to help his clients build a culture with better managers, create their own versions of Crotonville and share best practices. “We’ll get into succession planning as they see fit,” he says. Annoyed by a question about how much he would charge, he refuses to answer—“that’s between me and them, but it will be a meaningful amount.” Donald J. Gogel, Clayton Dubilier’s president and CEO, says: “We are treating him like all the other partners. He’ll share in some percent of the carried interest.”

There won’t be another book—the autobiography was “agony, but I love the product,” Welch says. And he does not plan to join any boards of directors, although Conaty says many are knocking on his door. “A director has a role to play in succession and in crises, but other than that it’s relatively limited,” Welch insists.

But superstars have a tough time not doing what they do best. Will Welch soon hanker for more opportunities to grab hold of a large, lumbering company and shake it until it becomes a fleet, nimble player? Gogel is not so sure. “I think Jack genuinely believes that he will be happiest at this stage playing the coach,” he says. And anyway, Welch’s consulting contract with Clayton Dubilier is only for a year. □





Jeffrey Immelt  
James Parker  
Charles Banks  
Henry Fiallo  
Hubertus Erlen  
Travis Engen



Even in orderly successions, new CEOs must cope with unexpected challenges

# New to the CEO Suite

Recently appointed CEOs face all kinds of challenges. If the company is troubled, the new CEO must find solutions to problems that hamstrung his or her predecessor. If the company is successful, the new CEO may face constant comparisons with the esteemed leader he or she has succeeded.

And execution is even harder than landing the CEO spot. Henry Fiallo, newly named head of **Enterasys Networks Inc. (ETS)**, says that no one particular career experience can prepare someone for the top job. “You need vision, focus and the ability to execute consistently,” he says. “That comes from many kinds of experiences—and from determination.”

James E. Boone, Americas president at Los Angeles-based executive search firm **Korn/Ferry International (KFY)**, says those who manage transitions best tend to possess keen industry insight, a willingness to delegate and collaborate—and lots of humility and patience. “If it’s a well-run company,” says Boone, “don’t do anything in the first 90 days to alter the course. Once you

figure out the intricacies of the ship, then firmly take the helm.”

*nyse magazine* recently interviewed six new CEOs. Both Jeffrey R. Immelt, at **General Electric Co. (GE)**, and James Parker, at **Southwest Airlines Co. (LUV)**, are following in the footsteps of charismatic leaders. Hubertus Erlen is working to transform the German pharmaceutical giant **Schering A.G. (SHR)** into a major U.S. player. Charles Banks is the first American to head the venerable British building and plumbing merchant **Wolseley plc (WOS)**. Fiallo is reinventing Enterasys as a startup while attempting to maintain its big-company roots. Travis Engen, the only one in our group who has been a CEO before, took the reins of the aluminum giant **Alcan Inc. (AL)**, although he has no background in the industry.

Each of these CEOs has different management philosophies and strategies for managing the transition, but each pays homage to the past while following his own vision for the future. —Russ Banham

## Filling the Legend’s Shoes

### Jeffrey Immelt, CEO, General Electric Co. (GE)

He’s been in the job only since September 7, but Jeffrey R. Immelt, 45, is already among the world’s best-known CEOs by dint of replacing the iconic Jack Welch, 66, at General Electric. A Harvard M.B.A., Immelt joined GE in 1982 and began showing up on Welch’s management radar screen as early as 1989, when Immelt, then vice president for consumer services, engineered a recall of faulty refrigerator compressors.

GE acknowledges that by 1994 Immelt was one of 23 candidates on the succession list. In 1997 Welch dispatched Immelt to GE Medical Systems, which Welch had also run, to be president and

while mastering additional skill sets.

CEO of the division. There he stayed until Thanksgiving weekend 2000, when Welch phoned to tell him that he was GE’s choice to become CEO.

**Now that you have the job, what are your challenges?** Job No. 1 is to accelerate growth. I’m looking at investments in technology, and I’ll continue to make new product development a key priority. I want to continue to extend the business globally. I want to grow our service businesses. I also want to be more customer-centric.

**But hasn’t that been GE’s approach for a long time?** When you have a 123-year-old company, everything has been done at some time. But I really do think the company is going to look different three to five years from now.

Businesses that I like are global. They have good service revenues; they have big markets, a chance to get intimate with the customer and a good chance to get returns. Not every GE business fits all those criteria today.

**Do you think you will be continually compared with Mr. Welch?** There will be a period of time, maybe 20 years, when I’m compared with Jack. What’s the indicated action for that? Performance. If you perform, other things take care of themselves.

I’ve never viewed my job as replacing Jack. My job is to run GE. It’s a different day. China is a factor—it wasn’t a factor 20 years ago. Japan is in disarray—Japan was booming 20 years ago. Reputation takes care of itself. It’s basically performance—and I’m very comfortable with that.

DARRYL ESTRINE

**What factors contribute to your ability to smoothly transition into your new role as CEO?** I’ve pretty much been running GE since last December. I’ve spent months talking to customers. I represented the company to security analysts and held meetings that Jack didn’t attend. In July I gathered about 40 of our top people so they could get to know me and we could all get clear on priorities. Jack left me to make key decisions, such as choosing Yoshiaki Fujimori to run GE Plastics.

**What is the most important thing you’ve learned from Jack Welch?** The importance of people—attracting them, getting the most out of them and inspiring them 24 hours a day, seven days a week. I spend at least 50% of my time on people issues. I teach, I develop, I encourage, I reward, I challenge—I do all those things to motivate people. —Julie Connelly



“There’s going to be a period, maybe 20 years, when I will be compared with Jack. What’s the indicated action for that? You perform.”

—JEFFREY IMMELT, CEO, GE

## Piloting in Turbulent Times

### James Parker, CEO, Southwest Airlines Co. (LUV)

Southwest Airlines began flying in 1971, with three planes serving three cities. Today the airline says it is the country's fourth largest, with 350 planes flying to 58 cities. Analysts attribute Southwest's success to an emphasis on customer service, inexpensive fares and quirky PR campaigns, including a company-famous stunt in which co-founder Herb Kelleher donned an Elvis costume. In June, Kelleher, 70, who remains chairman, turned over the CEO mantle to James Parker, 54, Southwest's general counsel for 15 years.

**You were on the job just a few months when the terrorists attacked the U.S. How have you been managing in this crisis?** Colleen Barrett, Southwest's president, and I have been in constant communication with employees. We've reassured people that the company is okay and we will get through this difficult time. I've also stressed my resolve to protect the job security of employees. We have never laid off employees—that has been one of our core values. Since Saturday, September 15, we've been the only airline that has elected to run its full schedule, with all of its employees.

#### Has it been tough to follow in Herb Kelleher's footsteps?

My goal is to build upon Herb's success. We have a simple value strategy: Get your passengers to their destinations on time and at the lowest possible fare, and make sure they have a good time. That worked when the company began, and it works today.

**How has your personal style, which differs considerably from Mr. Kelleher's, influenced the transition?** We share the same vision and understand the company's mission and what it takes to make us successful. Herb has set such a high standard of accessibility that employees are eager to meet me, although I often get the question: Will you ever wear the Elvis suit? I tell them it's doubtful.

**How closely do you work with Herb?** We have been friends for 20 years. And as chairman, Herb is still involved. He

**"Employees have volunteered to mow the lawn or give up profit sharing. Their response speaks volumes about Southwest's culture."**

—JAMES PARKER, CEO, SOUTHWEST AIRLINES

focuses on scheduling, selection of new cities and governmental issues. I'm responsible for everything else. His office is about 150 feet from mine. We talk every day, especially since September 11.

**How have your job skills changed since you left the legal department to become CEO?** Both jobs require the ability to communicate, analyze facts and anticipate the marketplace. Now I talk to the press and financial analysts. I also must focus on numbers, which, fortunately, is something I've always been pretty good at.

**What are your growth plans?** Before September 11, we were growing 10% to 13% a year. Our desire remains the same, but through 2002 our focus is on preserving cash and stabilizing our financial situation. We've put on hold our plans to expand our headquarters and have asked every department to eliminate nonessential spending.

Employees have volunteered to mow the lawn, donate their tax refunds to Southwest or give up profit sharing. We couldn't accept, but some people came up with a voluntary program, "Pledge to Luv," in which they forgo up to 32 hours of pay over four paychecks. I am humbled by their response. It speaks volumes about Southwest's culture. —RB





WOLSELEY

**“To leverage our size and take advantage of our international presence, we need an expanded management structure.”**

—CHARLES BANKS, CEO, WOLSELEY

think about retirement at that age. I wasn't ready to retire, I told them. They decided to poke around to see who was available outside the company. To get the job after such a thorough search meant quite a bit to me.

**As the first non-Brit to head Wolseley, did you experience culture shock?** Who isn't challenged by adjusting to different national cultures? But I can safely say that Wolseley is not an American company or even a British company per se—it is an international firm. And Ferguson and Wolseley actually have very similar cultures: They both like to train people and promote from within and grow through acquisitions, for example.

**What did you do to ensure a successful transition?** Because I had been focused on running U.S. operations, I really didn't have a clear understanding of what we were doing elsewhere. So I visited the many different companies we have in various countries. I

talked to the management teams about what opportunities and challenges they are facing. I needed to develop an understanding of what these individual companies are trying to achieve, and I needed to sort out what kind of management team I need.

What I found are very strong companies in all of the countries we're in. But if we are going to leverage our size and take advantage of our international presence, we need an expanded management structure. So I added three people to our management team in Europe, and I am looking to add another four or five.

**How different is being the CEO of a multinational company versus heading its largest subsidiary?** With Ferguson my job was to run this operating company, manage the buying and selling side of the business, and deal with customers and vendors and new acquisitions. At Wolseley, I focus on organizational strategy and structure as well as investors. The biggest similarity is that I'm still looking for good acquisitions, high-quality companies like Westburne. My challenge is to keep growing the business and make it even better. —RB

## From Division Head to CEO

### Charles Banks, CEO, Wolseley plc (WOS)

In May 2000 John Young, CEO of the Droitwich Spa, U.K.-based Wolseley plc, suddenly announced he would retire as a result of back surgery. With no succession strategy in place, the international building and plumbing merchant interviewed candidates outside the company. But a year later, Wolseley chose Charles Banks, the 60-year-old president of its largest U.S. unit, Ferguson Enterprises Inc.

Banks, a Ferguson employee for 34 years, helped grow the small residential plumbing product supply firm acquired by Wolseley in 1982 into a major distributor. Sales skyrocketed from \$600 million in 1989, when he became president, to a reported \$3.4 billion in 2000, thanks to some major acquisitions. Banks, a former U.S. Navy lieutenant, recently announced that Wolseley would buy the Canadian plumbing and building supply company The Westburne Group, which racked up more than \$1 billion in U.S. and Canadian sales last year.

**Despite your terrific track record at Ferguson, Wolseley's board took a year to offer you the CEO job. Did you feel shortchanged?** Not at all. I was 59 when John retired, and U.K. executives usually

## Heading an Experienced Startup

### Henry Fiallo, CEO, Enterasys Networks Inc. (ETS)

When Henry Fiallo was named chairman and CEO of Enterasys in March 2000, he inherited a challenge worthy of Solomon: selling the Rochester, N.H., company as a startup after it spun off from Cabletron Systems. In early 2000, Cabletron split itself into four companies, one of which is Enterasys.

This summer Enterasys took Cabletron's place on the NYSE. The company says it racked up successive 31% revenue gains in the first and second quarters of fiscal 2002. Fiallo's strategy is simple: Rather than be all things to all customers, he has focused on creating enterprise networking hardware for such niche markets as the automotive and pharmaceutical industries.

**You've headed major IT departments but have never been CEO. Has your background helped prepare you for this role?** Absolutely. Successful CIOs don't just treat projects; they look at the customer requirements and problems, then fashion solutions. Obviously there is much more complexity to running a major integrated business,

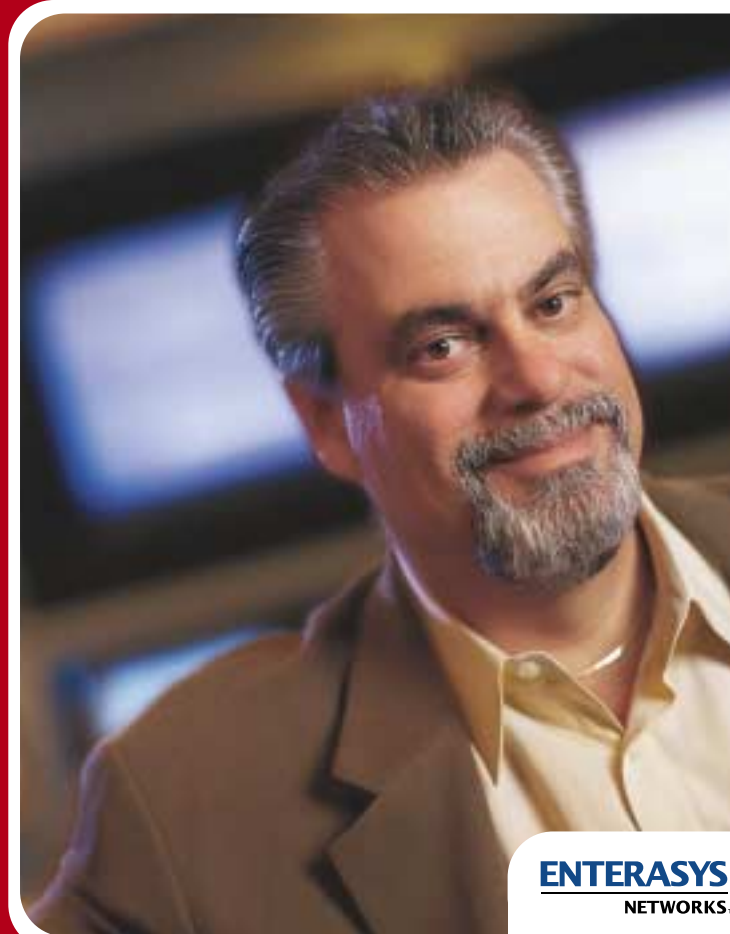
but the leadership skills are the same. My former role as a CIO also helps when talking to customers, who are typically corporate CIOs.

**What went wrong at Cabletron, and why won't it happen at Enterasys?** Cabletron continued to make lower-end networking devices in the mid-'90s while our competitors introduced more sophisticated routers and switchers. We also missed the Layer 3 switching phenomenon, a new technology that can quickly assess the kind of information being transported over a network. And we lost valuable human capital to competitors that offered lucrative stock options.

At Enterasys, we've put together a strong management team. All employees have pre-IPO stock options, giving them an incentive to help us grow while taking care of the retention issue. Enterasys also had acquired Yago Systems in 1998, which brought us new router technology and an entrepreneurial spirit. And we focused on niche markets. Today Enterasys is a much nimbler company.

**Can you talk about your management team?** We've had the same core team since Enterasys was formed in March 2000, with a few additions. In the past few months I hired our first chief financial officer and added a new chief marketing officer. Each team member now leads his or her respective functional area, but their roles have been customized according to their skills. For example, we've taken advantage of our CIO's customer-relationship skills by having him work with marketing and sales. And we've utilized other members of the team in areas outside of their functions.

**Are you running Enterasys as a startup or as a spin-off of an established firm?** It's a bit of old and new. Cabletron gave us global resources with offices in more than 30 countries, a legacy for being customer-oriented and a strong technology portfolio with 700 patents in enterprise networking. But Enterasys is re-energized, with a fresh outlook on how to go to the market. That is the main reason we decided to change the name and rebrand our products. We're lucky to be able to learn from Cabletron's experience. —RB



ENTERASYS NETWORKS

**“Enterasys is re-energized, with a fresh outlook on how to go to the market. We're lucky to be able to learn from Cabletron's experience.”**

—HENRY FIALLO, CEO, ENTERASYS



**“To double U.S. sales within the next five years, I must create a culture of speed and develop an entrepreneurial spirit.”**

—HUBERTUS ERLLEN, CHAIRMAN AND CEO, SCHERING

without causing any internal dissension or incurring shareholder losses.

Today our goal is very different. We have set a very demanding goal of doubling our U.S. sales within the next five years. To attain that I believe I must create a culture of speed and develop an entrepreneurial spirit throughout the company.

**How are you doing this?** I’ve created multifunctional teams with clear goals and a commitment to achieve them. We are also strengthening communication across regional and functional borders by encouraging teams to work together from the early development phase to marketing.

**Have you made any changes in the top ranks?** Most everyone on our senior executive team has been with Schering for a long time. But to build our U.S. operations, we attracted industry leaders from major pharmaceutical or biotech firms. Their expertise is helping us strengthen our know-how and address this new market.

**Have there been surprises since you became CEO?** To a degree, yes. While I’ve been called upon to do things that I expected, such as talking to journalists, the financial community and shareholders, I have been surprised by how demanding this is. In the two weeks before and after I took over, for example, I spent more than three days just talking to reporters.

But I regard communication as one of my highest priorities. It ensures that our organization is responsive to shareholders, customers and employees. Schering AG always has held this view—we were one of the first German companies to release quarterly results. We did this not just for the benefit of the financial community but because we believe very much in the importance of transparency. □

—RB

## The Engineering Route

### **Hubertus Erlen, Chairman and CEO, Schering AG (SHR)**

During the 1990s Schering AG’s chairman and CEO, Giuseppe Vita, transformed the drug and chemical manufacturer into a pure pharmaceutical firm. Now, with Hubertus Erlen in charge, the German pharmaceutical giant is undergoing yet another metamorphosis, as Erlen, 58, aims to capture a larger share of the lucrative U.S. market.

An engineer who has worked at Schering since 1972 and has served on Schering’s executive board since 1985, Erlen became CEO in April 2000. Since then, he has closed six of Schering’s 20 manufacturing plants in Western Europe and Argentina and has overseen the successful launch of the Yasmin oral contraceptive in the U.S. And he moved an important research and development unit from Berlin to New Jersey.

#### **Are you managing Schering differently from your predecessor?**

Dr. Vita has a consensus-building style. He turned a multifaceted conglomerate into a pure pharmaceutical player

## A Board Member Moves Up Travis Engen, President and CEO, Alcan Inc. (AL)

When Travis Engen was named CEO of Alcan in March, some analysts wondered why the Montreal-based aluminum giant chose him. What did the 57-year-old Californian, who had spent his entire career at aerospace and defense contractors, most recently as chairman and CEO of **ITT Industries Inc. (ITT)**, know about running an aluminum company?

Although Engen had no direct industry experience, at ITT he had managed an array of businesses, including forest products, insurance, automotive and information services. He had also spent five years on Alcan's board. Aluminum remains the company's core business, but the company is expanding into engineered products, such as automobile components, and packaging businesses, thanks to last year's \$3 billion merger with Alusuisse Lonza Group (algroup), based in Switzerland. And Engen is experienced in growing new businesses and achieving economies of scale.

**When former CEO Jacques Bougie retired, you headed Alcan's board committee that interviewed CEO candidates. What made you become one of the interviewees?** After talking to several candidates, I realized I had a strong understanding of the challenges confronting the company, as well as the opportunities coming out of the [algroup] merger. I also saw this extremely talented cadre of executives within Alcan, and the prospect of managing them became irresistible.

**Has your lack of background in the aluminum business made your transition difficult?** I've held 14 different jobs at five different companies, and I've found that the underlying structure was the same. People and markets are key. You need a clear appreciation for what motivates people. And you must have a high comfort level with ambiguity. A CEO will forever make decisions based on less-than-perfect information. The key is to not let your focus on one challenge distract you from all the others.

**How have you dealt with the challenges of melding the cultures and operations of two different companies?** Alcan and algroup share the same values, the core of which is to do the right thing for



**"You can make brilliant decisions, but the real impact is determined by the thousands of people in the organization who make many decisions every day."**

—TRAVIS ENGEN, PRESIDENT AND CEO, ALCAN

customers, the community and shareholders. An important part of the corporate culture of both was to be value-driven in an economic sense, as well as in terms of ethics.

Once the merger was finalized, a task force was set up to examine synergies and set time frames for implementation. The task force identified \$200 million in cost savings, which we could bring in by 2003. Achieving these goals will require the work of many people throughout the company.

**What skills do you think a CEO must have?** Every CEO needs to have good interpersonal skills. You can make brilliant decisions at the top, but the real impact is determined by the thousands of people in the organization who make many decisions every day. Step one is reaching out to managers, who in turn reach out to their staff, about the need for maximizing value—taking the steps necessary to give you the best bang for the buck. You instill a sense of purpose, and you provide a framework. Then they can seize opportunities and move the company forward. —RB

LISTED COMPANIES DISCOVER A NEW BREED OF RELATIONSHIP MANAGERS WITH NYSE SPECIALISTS.

# Stand By Me

These initiators of trust focus on service.

It's hours before the opening bell, and the client-service teams at the nine NYSE specialist firms are abuzz, monitoring the latest financial news and overseas markets and keeping companies and specialists abreast of details that will affect the trading day. Before the 9:30 a.m. bell, hundreds of phone calls, e-mails and faxes are exchanged between the firms and their customers—the NYSE's nearly 3,000 companies—containing answers to market-related questions even before they are asked.

But these newsroom-like offices are relatively new to Wall Street. Before 1997, when the NYSE changed its rules so that newly listed companies could choose their specialist from a pool of as many as five firms, competition among them was limited: Each firm was assigned stocks to trade.

Today the firms have boosted their competitive efforts and are more focused than ever on long-term customer relationships, built by delivering the highest level of service. "When customers want accountability and answers, they get it from their specialists, an attentive group of individuals dedicated to promoting the

agency-auction market," says Chris Quick, CEO of Fleet Meehan Specialist, a **FleetBoston Financial Corp. (FBF)** company.

## Eyes and Ears of the Market

Specialists bring together buyers and sellers, provide brokers with the best bids and offers, negotiate prices and execute trades, and act as principals in about 25% of trades (only when no public buyers or sellers exist). They also provide a source of real-time information not available elsewhere. Since all order flow for a listed stock is centralized at their posts, specialists can gauge market sentiment, provide insight into the brokerage firms trading the stock and, with the help of their "upstairs" client-service teams, offer some likely explanations for market behavior. They can reveal whether short selling or program trading is affecting a stock, or whether a single large buy or sell order is lurking in the crowd.

"It used to be that when a company saw something unusual on the tape they'd call the specialist firm to find out what went on," says Robert Fagenson, vice chairman of Van der Moolen Specialists USA, a unit of **Van der Moolen Holding N.V. (VDM)**. "These days it's the companies' phones that ring first." Adds Jeff Benton, COO of Performance Specialist Group: "The only function specialists had 15 years ago was to trade stocks on the floor. Today we have to be communicators."

Fleet Meehan Specialist Dave Finnerty, who trades **General Electric Co. (GE)**, the NYSE's largest listed company and most active stock, clearly knows the job's

demands. "Not only do you have to be able to communicate information efficiently and effectively, you have to be able to provide deep, liquid markets, to be knowledgeable about the company's fundamentals and have a strong background in markets and how they react," he says. According to Rob Moores of GE Asset Management, "It takes a talented and forceful specialist to make a market in GE's stock that meets the chairman's high standards."

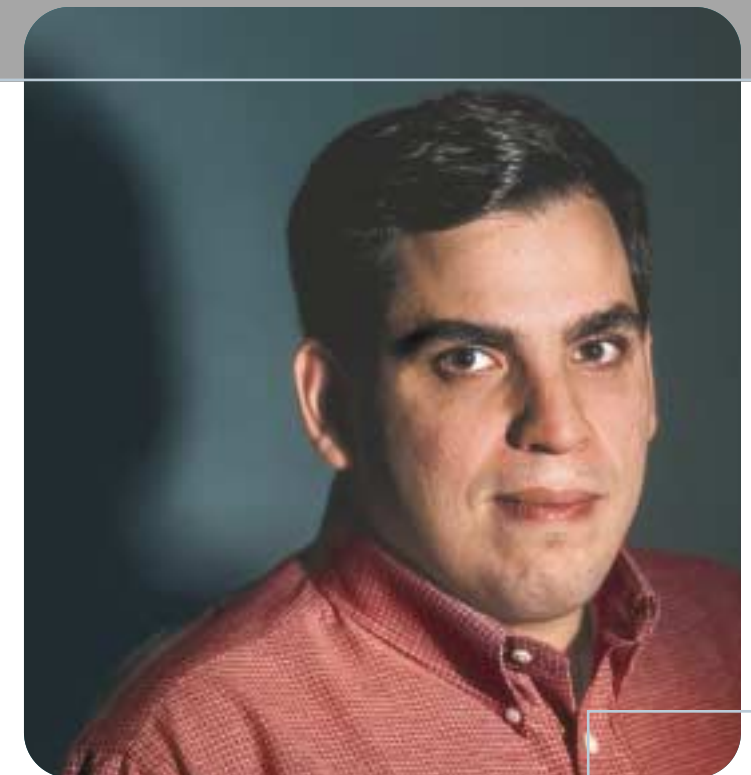
## Customized Communications

Most specialist firms communicate with clients based on how often they want to be contacted and with what types of information. "Whether our contact is twice a day or twice a week, our ultimate goal is to provide customers with the market intelligence they need to better manage their investor relations programs," says John S. Hess of Susquehanna Specialists.

Chris Durkin, group director of business development for **LaBranche & Co. Inc. (LAB)**, stresses that service goes beyond communicating who bought and sold stock. "Too many people treat service as a commodity," he says. "We view it as a customized personal relationship."

"Not only has our trading quality improved, but we are extremely pleased with how client-service-oriented LaBranche has been," says Neil Yekell, IR director at **BMC Software Inc. (BMC)**, who has spoken with his specialist every day since the company transferred to the NYSE in March.

This level of service differs from that of a dealer market, where order flow is fragmented and market makers have no



**bmc**software

"We looked at data pre- and post-listing and found that our trading quality has definitely improved."  
—Neil Yekell, director of investor relations, BMC Software Inc.


 COACH

When choosing a specialist, Andrea Shaw Resnick, divisional vice president, investor relations, Coach Inc., liked the fact that Van der Moolen also traded industry peer Tiffany & Co.

In fact, many firms help their customers, including a growing number from outside the U.S., expand their investor bases. “For international companies the question becomes, ‘How do we penetrate the U.S. marketplace?’ And that’s what we help them to do,” says William Hayes, a partner at Walter N. Frank & Co. For example, his firm helps arrange meetings between listed companies and the ADR banks and works with the companies’ investor-relations consultants and “stock watch” firms.

### Educated Customers

In addition to providing fundamental and technical analysis, the firms offer educational opportunities such as annual client conferences and mock-trading sessions on the NYSE floor. For example, specialists and members of the client-service team of Wagner Stott Bear Specialists regularly host events in Washington, D.C., Chicago, San Francisco and Los Angeles. “Through our educational programs, our customers gain a deep understanding of the specialist’s role, the marketplace dynamics and our service offerings,” says Lori Shupak, senior vice president of client services.

Companies can also invite their specialists to speak internally. Andrea Shaw Resnick, divisional vice president of investor relations for **Coach Inc. (COH)**, asked Van der Moolen’s Fagenson and specialist Steve Rubenstein to speak with senior management. “They were terrific at explaining the specialist’s role in keeping the market orderly and the factors that cause volatility,” she says. One of the reasons Coach chose Van der Moolen when the luxury goods company went public last year, she notes, was the fact that it also traded industry peer **Tiffany & Co. (TIF)**. “It was clear they understand the business.”

Ultimately, listed companies should “think of the specialist as a positive adjunct to the company,” says Fagenson. “Companies make a product or deliver a service that they feel is high quality, and their market maker is doing the same thing for their shareholders.” □

uptick for them upon listing.”

“When we were on Nasdaq, there was no human being we could call who was talking to people holding the orders,” says Ken Simril, vice president of investor relations for **Global Crossing Ltd. (GX)**, a Spear, Leeds & Kellogg stock. “Much of the volatility with technology issues is based on that information presented in the marketplace, which is distilled in a two-minute conversation with your specialist. That snapshot is really what you’re looking for at the end of the day.”

Bill Stewart, chairman and CEO of the global asset-management firm **W.P. Stewart & Co., Ltd. (WPL)**, finds the information from his Van der Moolen specialist “very valuable in developing a perspective on investor attitudes toward our company.” He adds that an important factor in choosing Van der Moolen was the firm’s global presence.

# MARIA SILVIA BASTOS MARQUES, PH.D.

CEO, COMPANHIA SIDERÚRGICA NACIONAL



## STEEL MAGNATE

**F**ormer professor and secretary of finance for the municipality of Rio de Janeiro, Brazilian economist Dr. Maria Silvia Bastos Marques now heads Companhia Siderúrgica Nacional (SID), proclaiming it the largest steel mill in Latin America and one of the five largest exporters of tin plate worldwide. Since taking the reins in 1996, Marques has been changing the strategic mission of CSN through investments in technology, modernization and cross-border expansion. In June CSN established a U.S. foothold by acquiring assets of Heartland Steel Inc. after its Chapter 11 filing.

**WHAT ARE SOME OF THE CHALLENGES TODAY IN THE STEEL INDUSTRY?** The industry is very fragmented right now, especially in the Americas. Producers are struggling to remain competitive globally. Capacity exceeds overall demand and prices are depressed. But there have been important consolidations in the past few years through mergers and acquisitions. In time, less competitive producers will disappear. We have been studying the markets and looking for opportunities to increase our scale and expand our company abroad.

**WHAT ARE THE RESULTS OF CSN PRIVATIZING IN 1993?** We invested \$2 billion from 1996 to 2001 in a state-of-the-art infrastructure

that reduces cost and gives us additional competitive edge. Now we own our equipment—everything. We are the only company in Brazil with our own iron-ore mine. We also have our own energy plant.

**THIS MUST BE AN ADVANTAGE, GIVEN THE ENERGY CRISIS.** With the Brazilian energy crisis, we have been able to generate our own energy requirements and be self-sufficient in our power supply. Now we are selling our energy surpluses and taking advantage of the elevated local market prices. We will also produce crude steel, where we have a competitive advantage, and sell where total production costs are higher.

**WHY ARE YOU RESTRUCTURING CSN?** Before privatization, our government invested a lot in training people technically, but not in terms of management. We are investing in management and marketing. We have started to change our internal culture from being a production-oriented company to becoming a market-oriented producer, with employees from diverse industrial sectors. Still, managing a business remains the same. It's all about maintaining good relationships with your own people. □

BY JENNIFER L. HANSON  
PHOTOGRAPH BY EVAN KAFKA