Globalization, Technology, and Total Quality Management are the driving forces in American business as it prepares to enter the 21st century.

By Heather A. O'Connor and Jay Cox
Illustration by John Mattos
As Corporate America gears up for the 21st century, a glance at the not-so-distant past reveals its ride into the future will surely be a fast one. In a matter of decades, technology has triggered an explosion of immediacy that's never been seen before, and once distant worlds empty of enterprise are suddenly just a computer screen away. The supercomputer has succeeded the pocket calculator; fax machines and e-mail make the postal service look like the Pony Express; and the Internet has emerged as the latest ultra-information marketplace. Not to be forgotten in the frenzied pace of today's business world are the customer and quality—two relatively old-world truths that have emphatically returned in a neatly packaged concept known as Total Quality Management (TQM).

Needless to say, this mother lode of innovation pushed expectations of a swiftly evolving global economy into overdrive. Don't blink, Corporate America, or you'll miss the next eruption in enterprise, and by the time you catch up another new advancement will be under way. "We live in a rapidly moving world," says George Burman, dean of SU's School of Management. "Organizations must have a quick response to opportunities resulting from change. You must act immediately and creatively."

Look, for instance, at Fala Direct Marketing in Melville, New York. Company President Jeffrey Jurick, a 1976 graduate of SU's School of Management, represents the third generation of the family-owned marketing company founded in 1916 as Fifth Avenue Letter Shop Associates. Back then, Jurick's grandmother was the word processor: Letters were taken in shorthand, transcribed, manually typed, and then sent out. Zip codes didn't even exist.

In the late fifties, when Jurick's father joined the business, the computer age ushered the company into the early stages of database collection, and production climbed to between 40 and 100 million pieces of mail a year. By 1960, the company had produced its first personalized computer letter. Now, nearly four decades later, the 350-employee marketing service pumps out 250 million pieces of mail annually. The database, meanwhile, has become a sophisticated tool that targets specific audiences. "We're not sending out mailings blindly, we have a purpose," Jurick says. "It's a very high-tech company today. This is the future of the corporate world. I often wonder what technology will be available when the fourth generation of my family takes over."

Good question. As William J. Smith '50, CEO, president, and founder of the United States Can Company in Chicago, points out: "Computers have helped to make a better product. Today, everyone knows how to use a computer, including kids."

Increasingly sophisticated computers, it seems, were the first drop in the rainstorm of technological ingenuity that introduced Corporate America to its most exciting prospects since the Industrial Revolution. Businesses have become lean, keen, globally connected machines; they're smarter, faster, more responsive, efficient, and competitive. Who, after all, envisioned that the offspring of Henry Ford's Model T would one day be equipped with fax machines and cellular phones, their operators striking deals in stop-and-go traffic with customers half a world and several time zones away.

"Globalization has become a major force," Burman says. "It creates opportunities as well as competitive pressures. Literally, every company is influenced by international competition."

As technology and political changes erase once seemingly impenetrable borders, American companies must also be astute about where they're reaching. They must examine a country's infrastructure, transportation networks, traditional practices, and especially the culture. "Corporate America really is a great new adventure in business. A lot of people are venturing into new territory," Burman says. "Several years ago people would have said, 'We can't do that.' Now, with the combination of globalization and technology, we are."

Theodore E. Martin, president and CEO of the Barnes Group in Bristol, Connecticut, says the company—which manufactures and distributes custom metal parts for the aeronautics industry—is expanding its foothold in the global arena. With 4,200 employees, it generates $600 million in sales.
annually, and both sales and earnings are rising. "We're larger now than we ever were before, and we're building. We sell to every major market in the free world—from Europe to the Pacific Rim, which stretches from China to Vietnam to Hong Kong to Korea," says Martin, who received a bachelor's degree in economics from SU in 1961 and serves on the L.C. Smith College of Engineering and Computer Science Advisory Board. "I see all global areas expanding. As trade barriers fall, the global competition will grow intensely."

Martin cites a continued market growth in the European Community, especially if Europe becomes a unified market, as well as in the former Soviet Union and the reunified Germany. North and South America still have numerous emerging markets, too, he says.

Firms, however, must remember that each country possesses its own economic, political, social, and technological conditions. The global environment also requires a more diverse workforce, with employees who are attuned to foreign cultures and how they operate. Barnes Group employees, for example, receive language training. "We're doing the obvious," Martin says. "We must be able to communicate in their language and not just in English."

The company also strengthens its younger employees' experience by sending them to manufacturing plants in Mexico, Brazil, and Singapore, and to distribution operations in the United Kingdom and France. "I want to put my younger, lower-level employees abroad. This places them out there so they can build on the experience," Martin says. "It will be more valuable to the company if they begin at 30 instead of 50."

William F. Allyn, president of Welch Allyn in Skaneateles Falls, New York, also emphasizes the importance of understanding the market and developing specific strategies for each country's needs. "We're spending more and more time trying to understand the international markets," says Allyn, a University trustee who attended the School of Management. "I want to put my younger, lower-level employees abroad. This places them out there so they can build on the experience," Martin says. "It will be more valuable to the company if they begin at 30 instead of 50."

Globalization and Technological Reach

A n astute understanding of the interplay between global strategy and technology is also crucial to achieving a competitive edge. A wake-up call in New York City, for instance, means it's tea time in London and bedtime in Tokyo. As one market awakes, another winds down for
the evening. But throw in videoconferencing, mobile phones, fax machines, pagers, laptop computers, e-mail, and the Internet, and the don't-miss-anything executive patrols a wired world where instant contact is a constant. Faxing has quickened the beat of business to an unprecedented tempo. "People no longer have the luxury of saying they are waiting for something," Hergenhan says.

That's for sure—and the fax has arrived before you finish reading this sentence. Consider, too, the feast of fax expansion: In 1970, 8,500 fax machines were sold; 15 years later, America had scooped up 300,000 fax machines; and by 1992, that number had hit seven million. "Thirty years ago, I wouldn't have predicted the fax machine," Hergenhan says. "Companies work day and night to develop technology we can't live without."

Now if that doesn't create a sense of urgency that makes you jump out of your chair and plug into the nearest electrical outlet in the name of newfangled technology, then take a tour of the Internet. Thanks to this colossal electronic creation, companies can promote themselves and display their wares on a home page, as well as advertise on selected web sites. This allows virtually everybody in the world with an Internet connection to cruise and peruse home pages as if they were pushing a shopping cart through a virtual supermarket. Not only can Internet explorers learn about companies, but they can also snap up products and connect to corporate headquarters in a couple of keystrokes. "This is a pretty exciting time to be alive because the world is full of challenges and change," says Peter Koveos, chair of SU's School of Management finance department and director of the Olivia and Walter Kiebach Center for International Business Studies. "The world is becoming a continuous global market very quickly, and changes will continue into the next century."

This efficient flow of information, however, also presents a few potential problems: information overload of the mind and the potential for reckless, reactionary decision-making. "Companies and clients have so much immediate access to information that they must determine what the relevant information is," says Joanne Hill, who received MBA (76) and Ph.D. (78) degrees from the School of Management and is now vice president of equity divisions at Goldman Sachs & Company in New York City. "Technology has become a distinct factor of corporate culture. People must use it responsibly."

Processing information, of course, is what the publishing industry is all about—and technology is having a tremendous impact on the way print media reach their readers. "The future of newspapers is multidimensional," says Howard Schneider, a 1966 graduate of The College of Arts and Sciences and managing editor of Newday in Long Island, New York. "They are moving from a conventional form toward a digital infrastructure, where information will become five dimensional—with animation, sound, video, text, and graphics." Print media have also entered the on-line world, posting electronic versions of the latest news on web sites and directing readers to other relevant locations on a variety of topics. "We are currently caught between two worlds," Schneider says.

To safely reside in this age of transition, businesses must capitalize on technology and tailor it to benefit the consumer in a personalized way. Ronald Young, vice president of marketing and sales for Agway Petroleum in DeWitt, New York, notes how Agway workers now arrive at customers' homes with hand-held computers that provide pertinent information on the spot. "When an employee services a house, he can provide a service report immediately to the customer," says Young, who earned an MBA degree in 1975 from the School of Management. "He no longer leaves a note saying that we serviced the house and will send an invoice. The information is immediate, and if a customer has a question about his history, the information is accessible."

**TQM: The Corporate Mantra**

Although technology may now take companies into nooks and crannies they've never visited before, technology alone isn't enough. "Technology won't let you survive," Koveos says. "You must have all the other business skills."
At the top of that list is the importance of cultivating a positive relationship with the consumer. Customers, in fact, are probably becoming so accustomed to instant gratification that if their expectations fall short, they may wonder who's asleep at command central. And they certainly won't have much patience with dillydallying, especially in today's rough-and-tumble competitive market. Common sense says if two companies can produce the same product at the same price and quality, the customer will most likely pick the company that turns out the product quicker. As Martin of the Barnes Group points out, an assignment should never take six weeks when it can be done in six days. "I demand a sense of urgency because our customers expect a prototype of work to be done in hours or days," he says. "We have to adjust to customer demands. They're high, and we will meet them."

Enter Total Quality Management. Sure TQM sounds like some sort of metaphysical mantra, but it's actually about as grounded in reality as business philosophy can get. Its tenet is surprisingly straightforward: the quest for quality at all levels. According to David Luther, principal of Luther Quality Associates in Corning, New York, and chair of the American Society for Quality Control, TQM has seven primary components: leadership—top management must be committed and involved to TQM to succeed; customer focus—the customer's voice must be part of the decision-making process; proper training—all employees must have quality-control training; employee involvement and recognition—this provides strong motivation; identification and improvement of major processes—customers' needs should be met, if not exceeded; communication—employers and suppliers should maintain a constant dialogue; and, assessment—results must be monitored and measured to guide improvements. "Companies aim to maximize customer satisfaction by focusing on the consumer as an individual," says Luther, who earned undergraduate ('58) and MBA ('61) degrees from the School of Management.

Luther traces the quality revolution to the early eighties when Motorola, Xerox, and Procter & Gamble embraced the idea of TQM, which spread from corporate boardrooms to the public sector, education, and other industries. "TQM continues to move forward," the School of Management's Burman says. "Clearly, organizations are pushing more responsibility to broad-based teams by allowing and expecting teams to work together and reach a decision."

Corporate America, though, has not always welcomed the idea of teamwork and inclusive management from the bottom up, openly allowing input from the company's lower levels to surface in the strategy sessions. Smith of United States Can believes the relationship between management and the workforce is one of the biggest changes America will encounter as it approaches the next century. "The average worker wants knowledge and involvement," says Smith, whose Chicago-based company employs 2,455 people. "For years, there was a break between labor and management forces. Workers had no decision-making power."

Not so today. Smith, for example, cites positive work relationships as one of the company's highest priorities, and regularly visits the company's 50 manufacturing plants. "This allows me to speak with all the managers and workers face to face," he says, which makes my employees feel a part of the company.

In turn, this personalized sense of involvement fosters employee commitment to the company, promoting work satisfaction, a higher level of pride, and positive feedback. Tom and Linda Platt, both 1975 graduates of the College of Visual and Performing Arts, believe a close working relationship with their employees has spawned myriad benefits for their small fashion design company in New York City. "It's a family; we're very close knit, and everyone has input," Tom Platt says of the 20-employee staff. "At a small company, everyone has the fulfillment that his or her contributions make a difference."

The shifting priorities of the corporate world reflect the ability of American companies to respond to society's changing expectations, Burman says. And to maintain a leadership role, Corporate America must stay in step with the ever-evolving exploration of new territory. "There is so much variability in the real world—corporations must have patience. If one decision doesn't work, corporations need to have an alternative."

"The key," Burman says, "is the ability to manage change."