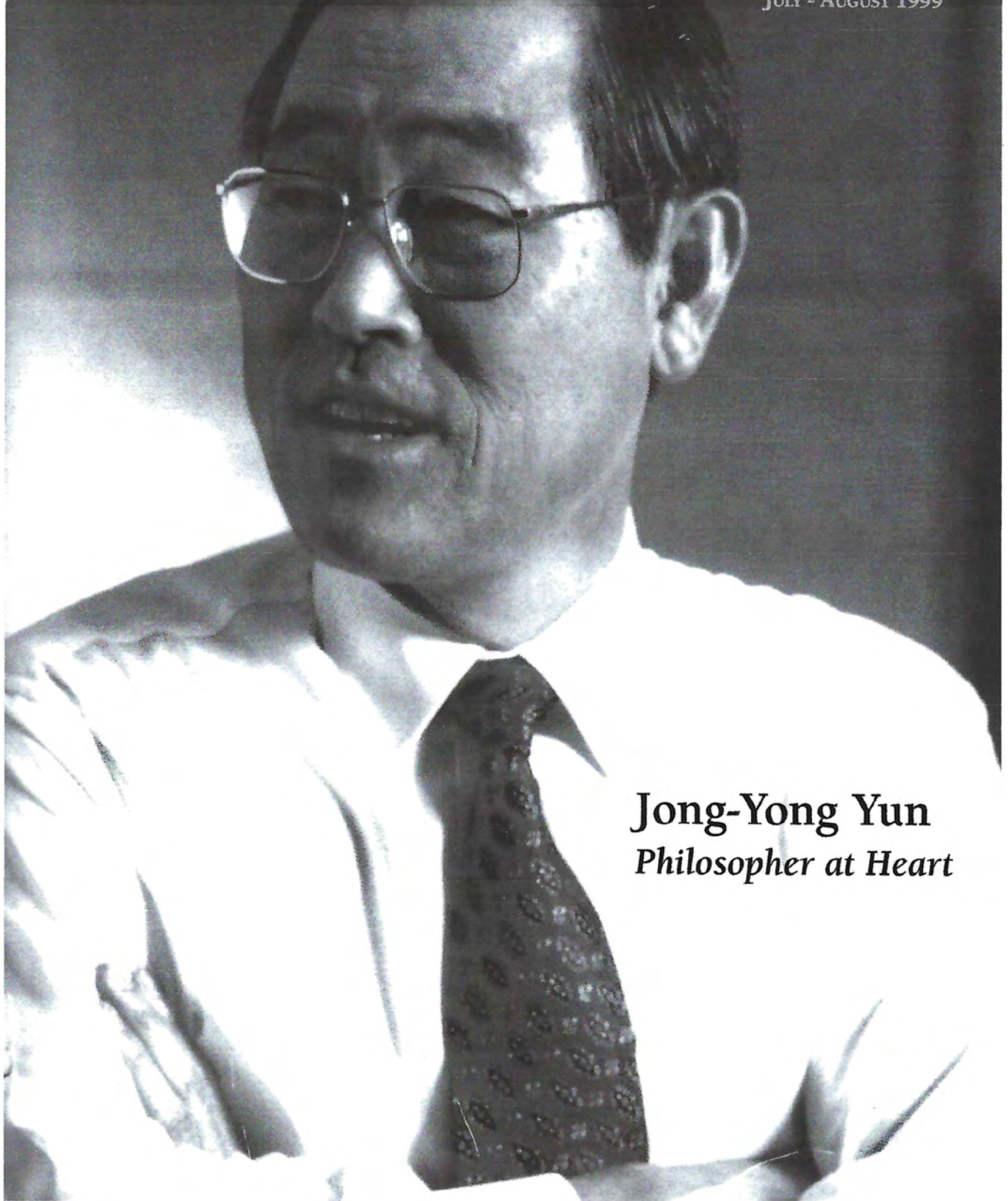
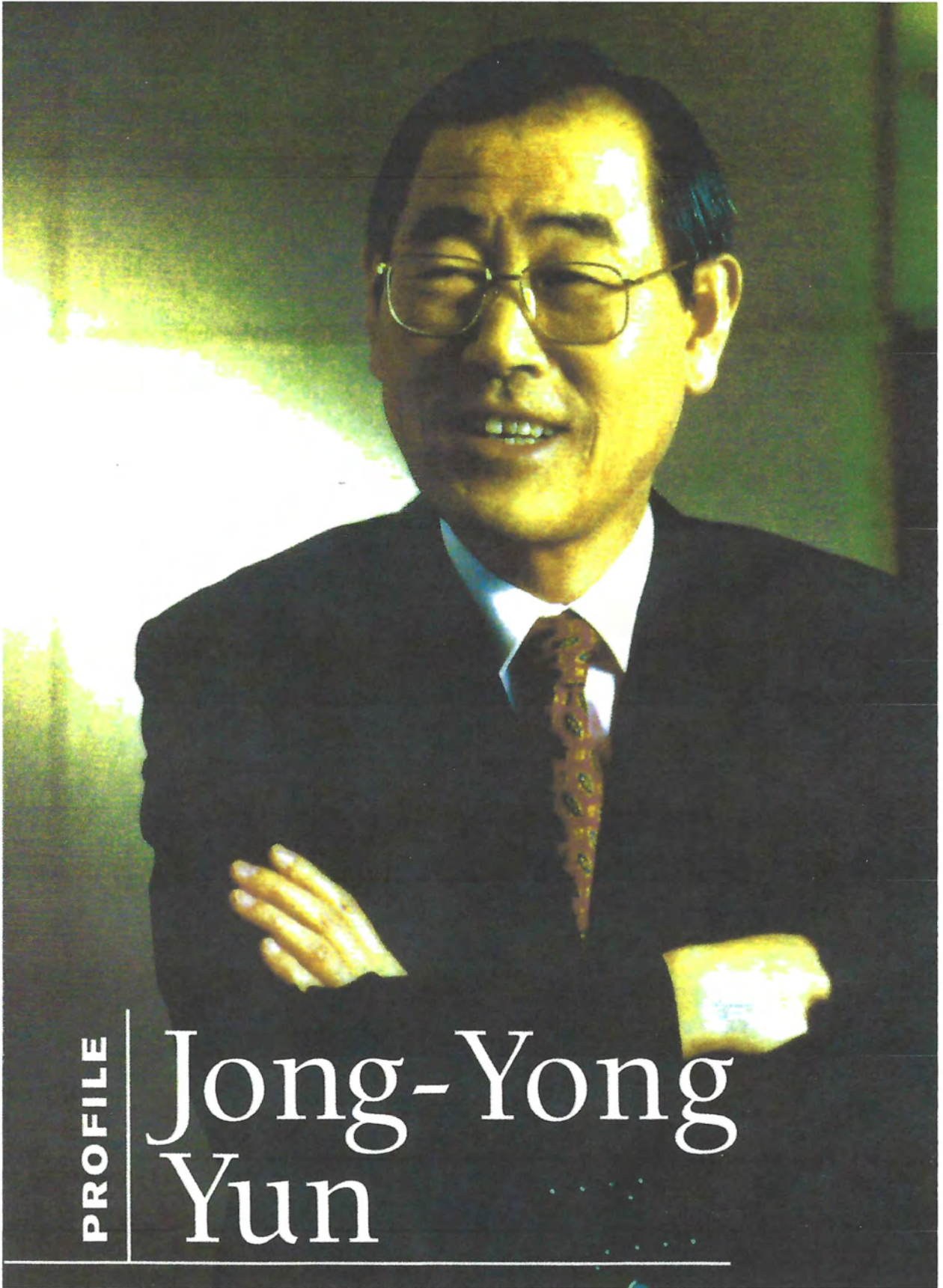


Industrial Management

JULY - AUGUST 1999



Jong-Yong Yun
Philosopher at Heart



PROFILE

Jong-Yong
Yun



A Philosophy of Change

By Eric Minton

Jong-Yong Yun has a history of bucking the establishment, a trait that was apparent well before he earned a degree in electrical engineering from Seoul National University. When his high school teacher wanted him to study physics — and even refused to submit Yun's college application if he persisted in pursuing electrical engineering — Yun managed to change his mind. "But it took me a couple of days to convince him to write up the application form," he recalls. What Yun really wanted to study was philosophy. "Korea was a poor country then, so I knew that if I majored in philosophy I would not have a job," he says.

That moment reveals the three threads of Yun's professional life: his practical vision, his intellectual pursuit of hard sciences, and his love of philosophy. When married to his engineering acumen, these qualities made Yun one of the first executives to implement industrial engineering principles in a Korean corporation. With these threads Yun has spun a career culminating with his current post as president and CEO of Samsung Electronics Co., manufacturer of semiconductors, computers, telecommunications hardware, home appliances, and multimedia equipment. At the time of Yun's promotion to the helm of Samsung Electronics on the eve of 1997, the Samsung Group affiliate had 16 divisions operating in 45 countries and employing about 83,800 people, and was en route to posting 1997 net sales of \$13 billion.

Yun's promotion came just before Korea's economic crisis, when the country's currency, the won, plummeted, and a socio-economic order established by years of prosperity

unraveled in the face of first-ever layoffs. The crumbling economy scared Korea's capitalists, including the newly appointed Samsung Electronics leader. "Who would not be worried in those circumstances?" Yun says. "I did not have that much confidence because I knew a lot of sacrifices were required, especially in terms of downsizing. I was kind of worried about whether we would actually be able to do that."

Yet Yun did more than weather the storm. As Korea finally begins to emerge from its economic doldrums, Samsung Electronics stands on firmer footing than ever, now down to 14 divisions and 58,000 employees, but posting net sales of \$20 billion in 1999. Even before the crisis hit Yun had set management reforms in motion, pursuing what he calls "speed management" with an eye toward the global market of the next millennium.

"He taught me how to focus on the bottom line and not lose sight of the future," says In-Soo Kim, who has worked for Yun for 10 years. As vice president and chief of the corporate innovation and restructuring team at Samsung Electronics since February 1997, Kim has been integral to the planning and implementation of the company's reforms. "If it were not for Mr. Yun's aggressiveness and decisiveness," Kim says, "I don't think we would have been successful in our restructuring activities, which we completed within a year despite the financial difficulties Korea has been facing."

"When I think of Mr. Yun, I think of a leader who has strong motivation and drive, so he always gets things done," says long-time colleague Bok-Hyun Ahn, CEO of Cheil Industries Co., a textile manufacturing affiliate of the Samsung Group. "At the same time he's down-to-earth and friendly, a person you can get along with easily. And he practices what he preaches."

Yun is quick to point out that while Samsung Electronics now employs some 600 IEs, he is not one of them.



What Yun preaches is continuous improvement. "Management innovation is like a religion to Mr. Yun," Kim says. "He is constantly saying that management is a continuum of change and innovation and he makes sure the employees are reminded of this fact, whether it be in a formal or informal setting."

Practicing what he preaches explains how this electrical engineer became an industrial engineering pioneer in Korea in the 1970s, though Yun is quick to point out that while Samsung

Electronics now employs some 600 IEs, he is not one of them. "My major is electronics; I don't think I'm a legal IE," he says. "I like to continuously improve upon what I do, and in the process of doing so, I had to seek new tools." Though he completed a senior executive course at the MIT Sloan School in 1988, he had begun pursuing IE principles more than 15 years before, his interest piqued by books and journals on the subject. Yun also worked in Japan on Samsung projects and decided he wanted to bring that country's productivity techniques and the United States' marketing concepts to Korea. "He was always interested in something new, something that could lead and pioneer the industry," Kim says.

Yun offers no hints as to how he developed this drive. Of his childhood he merely says that he was born on Jan. 21, 1944, in Yongchun, a town in the southeast province of Kyungsangpukdo, that he was a member of the science club since junior high school, and that he always liked to learn. "More out of curiosity than a thirst for knowledge," he says. "I just think I was very curious about everything ever since I was young, and curiosity just leads you to natural science."

Even if he does not thirst for knowledge, Yun at least keeps up perpetual intellectual motion. "Thanks to Mr. Yun, I've attained a habit of trying to learn something all the time," Kim says. "I've never seen him sit idle. He's always busy, reading newspapers or Japanese journals and magazine articles on innovative technology. He's very interested in what's happening around the world."

Another of his favorite sources for news on innovation is the Internet. "There's so much information on the Internet," Yun says, "but I don't have time to read all of it."

Yun doesn't have time because he takes up much of his work week mining another source of knowledge: his own employees. "When I lead an organization I have to be confident about the orders I give out, so I need a lot of knowledge. Therefore, I listen to a lot of people around me, and

once I'm confident about a specific plan, I implement it with full force." Since his early days in management Yun has made a practice of frequently visiting plants, meeting with line employees at the factories and joining them after work for *soju*, a vodka-like beverage made from potatoes. "Maybe three or four days a week he goes to the factory and meets with workers and talks to them," Ahn says. "He is very close to the employees, and I think that is a large factor in his success in leading such a large corporation."

"The problems usually lie at the site or in the field," Yun explains. "If you want to know accurately what the problem is, you have to go and visit the site. The decision-making process becomes simpler and faster when you visit the sites, and by talking to the employees you can do away with the gap that exists between employees and management."

That last statement has a significance that could be too easily overlooked by many Westerners. It illustrates the way Yun is willing to buck cultural traditions, in this case Korea's hierarchical society. "Sometimes when you ignore hierarchy, a lack of trust can arise," Yun says. He means trust among peers in management — a trust that he tries to maintain by force of personality. "I talk to a lot of people, ask for understanding, and do away with any kind of prejudices or biases."

"He's very attractive when it comes to human relationships," Ahn says. "I don't know if this appeal is something he was born with or something he obtained afterward, but one thing I can say is that you always feel comfortable when you are with him."

The path to the top

Yun attended Seoul National University because it had the best electrical engineering program in Korea (it didn't offer any IE classes when Yun graduated in 1966). After graduation he went to work for Samsung Group, one of Korea's few manufacturing companies at that time. Samsung was, and still is, Korea's largest multinational company. Assigned to Samsung Electronics in 1968, Yun bounced around for 11 years in the television division, working in manufacturing, materials, engineering, and administration. He made his first mark in the company when Samsung Electronics decided to start a VCR business and tapped Yun to be the division head. Samsung had to develop its own VCR technology because no other countries were willing to share their expertise.



"Mr. Yun and his team members had to work day and night, seven days a week," says Sungchil Park, director of management innovation teams at Samsung Electronics. "While overcoming these obstacles, Samsung Electronics leveled up its technology and contributed a lot to the Korean electronics industry." Korean engineers later led the way again with DRAM (dynamic random access memory) chips, digital TV, and TFT-LCD (thin-film transistor-liquid crystal display) monitors,

which were developed under Yun's guidance when he was president of Samsung Display Device in 1993.

Yun's career as a pseudo-IE took off in February 1979, when he was promoted to general manager of planning and investigation. Though Seoul National University had begun offering IE courses a few years after Yun's graduation, there were no formal corporate IE departments in Korea. Yun set up the first one, which he staffed with industrial engineering majors who reported to him. The team developed techniques to improve the efficiency of conveyor production and introduced the performance analysis and control system to measure productivity. In 1980, Yun was promoted to color television division manager, taking control of all the functions related to TV manufacturing including production, design, sales, personnel, and administration. Five years later he became head of the Samsung Electronics Research Center, and in 1988 he reached the company's senior management as vice president of the electronics business. In that position he set up an IE center, which cut across all factory functions, includ-

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ing materials, engineering, indirect support, and suppliers.

Despite 10 years of success applying IE principles to his operations, at the end of the decade Yun still encountered institutional resistance. "By introducing IE principles we were introducing a new tool for the people at the site and the people in management, and this IE tool required people to measure," Yun says. "There was resistance because people thought this was very cumbersome in the beginning. The introduction of

the new tools entailed big changes, and I think people are intrinsically adverse to change." To break down continuing resistance, Yun sponsored in-house training sessions for managers and shop supervisors while carrying out quick-fix projects that made an immediate impression on the organization. For instance, he set out to cut the VCR production lines from 180 meters in length to 120 meters. "The people in charge told me it would take two or three months. I told them, 'You have to do it in five days.' It was done in five days, and there were no problems from the shorter lines." Reluctant volunteers soon became advocates, and the influence of IE principles began to spread beyond Samsung Electronics.

"Mr. Yun was a pioneer," says Ahn, who was chief financial officer at Samsung Electronics from 1989 to 1993, where he first met and worked with Yun. "Many electronics companies in Korea have started applying IE techniques, and this has become something of a fad. After I became responsible for this company [Cheil Industries], I planned to use IE techniques." Ahn, whose training is in business management, set an objective for Cheil to improve productivity by 80 percent and cut product deficiency in half; during just the first six months of implementation productivity improved 45 percent. "I wouldn't have known all this if I



hadn't learned it from Mr. Yun 10 years ago," Ahn says.

Even as Yun was instituting changes on factory floors, he was looking toward a new frontier for IE principles and "continuum of change;" he wanted to introduce management and the corporate culture itself to these ideas. "By introducing IE, we were able to find and analyze problems on the factory floor," he says. "But I believe that way of thinking, the concepts that lie behind IE, can be applied to overall man-

agement." In 1992 Yun was promoted to president of Samsung Electronics' Audio-Visual and Home Appliance sector, and then transferred to Samsung Electro Mechanics, a sister company that supplies core components of Samsung Electronics' products. There he implemented just-in-time operations and improved shop floor productivity to reduce bottlenecks in the supply chain. The following year he was named president of Samsung Display Devices, and finally Yun became president of Samsung Electronics on Dec. 31, 1996.

Implementing IE

With that promotion, industrial engineering principles became a foundation of Samsung Electronics' corporate culture. Yun reorganized the company's 120-member IE team — still the only IE-dedicated corporate staff in Korea — and committed a total of 280 people to IE at the division level. Yun personally trained nine groups of general managers and executives, a total of 1,550, while another 5,600 lower-level managers received training within their divisions. After years of applying established IE principles — such as ready work factors, lean manufacturing, total productive maintenance, and value engineering — the company developed its own. SLP (Samsung layout planning) applies computer simulation techniques to define factory layouts and provide the best logistical efficiency for specific shop floors. SPS (Samsung production system) incorporates various production lines and cells into a mixed-mode production system designed to meet particular customer demands.

During the first year of Yun's tenure as CEO, productivity doubled, better utilization of factory space and equipment saved the company an estimated \$20 million in facilities investments, inventory of finished goods was reduced by a third, and the asset turnover rate increased more than 50 percent. Perhaps the most significant measures were those reflecting employee involvement. The number of benefit suggestions

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increased tenfold, and in an internal survey on IE implementation 85 percent of respondents said the company needed further IE innovations and 91 percent expected to see benefits from such implementations.

Aside from inculcating the corporate culture with IE practices, Yun used IE principles to map the company's vision for the 21st century. "Conceptually speaking, the 21st century will be a digital era that will involve rapid change," Yun says, "and if we are not able to adjust to such changes we won't be able to survive."

"Mr. Yun's approach to shaping Samsung Electronics for the 21st century was to develop a vision, analyze gaps between the vision and current status, and develop a strategy to reduce the gaps as soon as possible," Park says. "Other than this business model, Mr. Yun proposes to use specific IE tools to improve technology, quality, response, cost, and delivery in all areas of the organization." Furthermore, Yun gauged quality not only by customer satisfaction, but also by how well the company could speed through a digitized world.

The centerpiece to his plan is what Yun calls the three "P" pillars:

- **Product innovation.** Yun narrowed Samsung Electronics' manufacturing base to its core competencies in information communications, multimedia, and appliances, and divided products into "seed business," "sapling business," and "fruit-tree business." Park explains: "A seed business is in a pregnancy state and may take three to five years to become a sapling business. Products using new material and fundamentally new technology belong in this category. A sapling business is in a childhood state and may take one to two years to become a fruit-tree business. Products related to digital networking, such as IMT-2000 and digital TV, belong in this category. And a fruit-tree business is in an adult sta-



tus and makes profits for investment in seed and sapling businesses. Most businesses, from color TV through DRAM, belong in this category."

- **Process innovation.** Yun changed the focus of the company's manufacturing process, delivering customer orders faster and at lower prices. He changed the global supply chain from a monthly to a weekly system and shifted the make-to-stock production focus to a five-day make-to-order system.

Samsung Electronics can now plan and manage its resources and operations from a global perspective. While inventory decreased radically, cash flow has improved — a key to survival during the Korean financial crisis.

- **Personnel innovation.** Yun realized that with such a vast global operation, Samsung Electronics could not be competitive for long with management operating only from a central headquarters. That's why he instituted global

product management (GPM), in which each of the company's 14 divisions is led by a global product manager who takes sole charge of every aspect of the division's business and has the authority of a company president. "Therefore, quick decisions can be made," says Kim. "This type of system achieves speed management." Yun makes sure the managers are experienced in their particular divisions, and rates them solely on how profitably their division performs.

Giving so much autonomy to his subordinates fits Yun's practical personality. "In order to adjust to the changing world I believe that the organization must change from a functional organization to one that is focused on process. Therefore, I believe the organization should be simple, speedy, and autonomous. By autonomous I mean empowering the employees. The organization must work to take on decision making as well as processing in a

The Jong-Yong Yun Files

Favorite sayings:

"Management is the continuation of innovation" and "Every question and answer to management comes from the field!"

Favorite book: Generally interested in all books related to the history of science.

Recent reading: *Business at the Speed of Thought* by Bill Gates.

Family: He has a wife, a son, and a daughter.



more efficient manner."

With GPM, however, he was introducing a bold — and therefore much-opposed — concept. "In the East usually all the organizations are very hierarchical and the people are used to it," Yun says. "Under this new system the people who had a lot of power have been forced to give some of it up. It has also meant devolving control from headquarters, and that's why there was a lot of opposition."

Yun not only defied Korea's corporate hierarchy traditions, he also shook up traditional labor relations with a package of employee incentives and bonuses. "Korea does not have a very flexible labor market," Kim says. "Therefore, it is somewhat difficult to have a differentiation in wages and salaries and to provide incentives. Mr. Yun realized this would be an obstacle to enhancing motivation and productivity, so he implemented a plan in which outstanding performances are compensated by bonuses, which are two or three times more than the basic salary." Yun introduced annual salary contracts to executives and managers in 1998 and then to the rest of the employees this year.

These reforms were geared toward the 21st century, but Samsung Electronics had to make it through the end of the 20th century first. Korea's recent economic collapse was something of a knockout punch to all of Korea's corporate giants. Samsung Electronics took it on the chin, too. "We had to liquidate one subsidiary that had employed about 100 people, and people came to the front of my house and demonstrated a couple of times a week," Yun says. Overall, Samsung Electronics cut 30 percent of its original Korean work force of 57,800, and eliminated 38 percent of its 26,000 overseas jobs.

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In a society in which jobs are considered lifetime guarantees and layoffs unheard-of, Samsung Electronics pulled off the work force reductions with little opposition from Korea's powerful labor unions. This was partly because of Yun's overall approach to streamlining the company's processes, which cut as many management positions as factory jobs. The corporate headquarters alone cut its original staff of 1,600 in half. Yun's team weighed in on all extraneous spending, including slashing

executive salaries 20 percent, forcing senior directors to drive their own cars instead of hiring chauffeurs, and cutting out free calendars for employees and vendors. Yun also instituted the 21st Century Academy, offering workers retraining opportunities through three courses: the Samsung Advanced Technology Training Institute, concentrating on digital and software technology; the Global Marketing Center, specializing in customer satisfaction and marketing; and the Samsung Leadership Development Center, teaching IE principles and productivity improvement. Aside from these measures, all those site visits and discussions over *soju* had earned Yun his employees' trust. "We made sure that all the employees within the company felt this sense of crisis, even before the crisis actually hit Korea," Yun says. "We made employees take appropriate measures. And the management worked as a team. We knew these changes would require much sacrifice, but we made sure the top management had the determination and will to implement them."

That included Yun himself, who was not only facing the consequences of cutting loose business units and laying off workers, but also facing down criticism over his decision to focus on managing cash flow. Under International Monetary Fund constraints that saw many companies struggling just to survive, the prevailing wisdom said that companies needed to maintain as many assets as possible. Because of a 90 percent devaluation in the foreign exchange rate, Korean companies would lose money selling products overseas. Yun, however, wanted to reduce inventory — part of streamlining processes for the 21st century — and under his direction Samsung Electronics saw a reduction of about \$2.9 billion in stockpile and bonds. Rather than push the company to the edge of solvency, the practice improved cash in-flow, which rose to \$4.3 billion in July. "Even if the exchange rate changes from the current 1,200 won to the dollar to 1,000 won to the dollar, we have to be able to survive," Yun says of his cash-flow strategy.

The resulting bottom line could prompt the question: "Crisis? What crisis?" Samsung Electronics' debt-to-equity ratio fell from 296 percent in late 1997 to 198 percent a year later, while the self-asset ratio improved from 25.8 percent to 33.5 percent over the same period. Earnings in 1998 increased by 8.8 percent over 1997 to \$17.3 billion, and profit increased to \$260 million. In the first half of 1999, Samsung Electronics was already showing a \$208 million profit. Yun has his company poised to enter the 21st century on sound financial footing and with a management team prepared to grapple with the digital age.

"In the past, the most important factors in managing resources were the three M's: money, man, and machine," Yun says. "But I think that applies to a more agrarian society. Now, we need money, man, information, and time, and I think the way in which we allocate such resources will determine how successful we are in terms of management for the future."

Aside from Yun's vision for Samsung Electronics — "We want to become a world-class company in the digital era, and in particular we want to become the best in terms of digital convergence and core components," he says. Yun has his personal drive for success prompting him, too. "I want to lead Samsung Electronics to become one of the best companies in

the world," he says. "And when this goal is achieved, I want to visit historical and cultural sites around the world to pursue my study of philosophy."

Ever the practical one, it looks like he'll get where he wanted to go all along. ■

The Author



Eric Minton is a freelance writer based in Warner Robins, Ga. He has published more than 450 articles in more than 80 U.S. and European publications, covering such topics as government, business, the military, disabilities, assistive technology, and entertainment. His most recent article for *Industrial Management* was "Successful IE, Student for Life," a profile of Rudy Herrmann that appeared in the November/December 1998 issue.



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