FORTUNE

THE REAL WORLD OF THE ENTREPRENEUR Listen to the people who live the great adventure of starting their own companies. The lessons they are learning are useful for any business leader.

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(FORTUNE Magazine) – TO ITS FANS, small business is the hero of the new economy -- engine of growth, generator of jobs, spark of progress. Dissenters call it a swamp of lousy wages, benefits, and working conditions. But few cheerleaders or critics venture out to see firsthand what the men and women who run these companies are doing. We did, traveling coast to coast over several months, speaking with nearly 100 small business CEOs. (Small means employing fewer than 500 people; most here have under 100.) We looked mainly for entrepreneurs who have found better ways to serve the market. The experience has put us squarely with the cheerleaders. Most of the 18 people who tell their stories here have succeeded with innovative technologies, astute management, wit, or luck. Some of their companies are struggling. Some will likely be big tomorrow. Whether your business is big or small, you'll learn something useful from each. You'll discover that traumas and uncertainties of the Nineties haven't sapped the fabled determination of American small business. These are pragmatic people, far more focused on what they can do than on what everyone else thinks can't be done. All the entrepreneurs here have created wealth and jobs; most expect to keep on doing so. They have succeeded not just because of dinosaur default. The balance of power between large and small companies is shifting. The Davids have what the Goliaths so desperately want -- agility and resourcefulness -- and can leverage these strengths as never before. Computer and communications technologies are great levelers, giving an entrepreneur as much ability to mobilize resources as a floor full of middle managers. Entrepreneurial business has a surprising edge over the giants in attracting and developing people. Don't be misled by those invidious comparisons with job quality at big companies -- most of the statistics date to the early to mid- Eighties, and a lot has changed. Even workers who do feel snug in their corporate hives today face increasing workloads, stagnating pay, and eroding benefits. And when you get into the plants and offices of America's growing small businesses, you discover that working for one is apt to be a lot more rewarding. You find a clearer sense of purpose -- the company knows what it's doing and where it's trying to go. Lines of communication are short and direct, often because the boss walks out onto the factory floor several times a day. The person who dreams of making a company grow needs employees who care, people to whom he can give responsibility. He trains them and finds ways to keep competitors from stealing them.

This is life without a safety net -- thrilling and dangerous. Misjudgments are punished ruthlessly. When competition gets tougher, small businesses feel it first. Financing is hard to find, sometimes impossible. Regulatory costs hurt more in companies with less fat, and many cope by hiring fewer people -- one reason job growth is so slow. Owners lie awake at night worrying about what irrational government and a tort system run amok will do to them next: A bureaucratic trampling or a lawsuit can break a small company. Yet the entrepreneurial sector thrives. "In small business there are no small mistakes" -- it's a phrase that comes up time and again when you talk to the owners. Most say it proudly. The challenge excites them.

Flexibility Pays Rick Schmidt and John Ruggeri ITS -- The plant sure doesn't look as if it houses a global competitor. It's a nondescript industrial building off a semirural road near Columbia in southwest Illinois. Inside, the stamping presses and other metal-fabricating machines are old and basic -- partners Schmidt and Ruggeri bought them at auctions. The work force of 23 that bends the steel, welds the seams, and twists the screwdrivers does a lot of work by hand that you would see automated in a bigger company. The atmosphere seems informal, the pace of the work purposeful but not breakneck. Yet ITS (In-Land Technologies Services) builds everything from simple steel cabinets housing electrical and electronic components to complete canning lines. Customers include Olin, Miller Brewing, PepsiCo, and Emerson Electric. A quarter of its $1.8 million sales last year -- the company's third full year of business -- were exports. How can this little company possibly do so many things well? "Our specialty is custom manufacturing," says Schmidt. In-Land's market is a myriad of niches: one fully equipped control room here, 50 cabinets there, jobs too specialized for the customer to build himself and too small for any specialist to handle economically. ITS is a master of what's called Level 2 technology, the intermediate stage between basic assembly and full-scale integrated manufacturing, and its very simplicity is its competitive advantage. Leanness and flexibility are not new-management mantras uttered by corporate goal setters; they're how things get done. For example, there's no wasted square footage at the plant. "That keeps our overhead lower," say Schmidt, "and it also means more productivity -- there's a sense of urgency when you're short on floor space." If the company needs more for a larger project, it leases it elsewhere.

Management consists of Schmidt, who sells; Ruggeri, who runs the factory; and Herb Campbell, an electrical engineer who is the project manager. That's it. Worker supervision? "When I put a guy on a job, hopefully I won't have to talk to him again until it's done," says Ruggeri. "Each man will pass the work from one stage to another on his own." Workers have a lot of latitude in setting their hours; the only requirements are that they arrive between 6 A.M. and 8 A.M. and complete 40-hour weeks. Some work through lunch to leave early; others choose four ten-hour days. Operating this way requires conscientious workers: "Every one has to be self-motivated, creative, and have a great interest in his job," says Ruggeri. He and Schmidt hire methodically, starting with recommendations from friends. Each new worker signs on for a trial period, typically 60 days. "The average guy has 11.5 years experience on the floor," says Schmidt. Wages in the non-union shop average $11 an hour, about the same as what union workers in the area get, and In-Land pays half their health insurance. Schmidt, 46, and Ruggeri, 38, brought to their partnership a combined 24 ; years of experience at a bigger company that did the same kind of work. Neither had thought about starting a company until their employer began planning to sell the business. "We realized then that we wanted control over our own destiny," says Schmidt, "and we also figured we could do the work better on our own." They financed the business by scraping up all the cash they could and by mortgaging their houses. They are keenly attentive to bringing in business. "We must be profitable every year, every quarter, every month, every job," says Schmidt. "I don't care what we did the month before. If our scheduled work won't cover our overhead this month, I get out and hustle. We cannot get complacent." But they can be choosy and are becoming so as they find more opportunities. Last year's sales were down from 1991's $2.2 million, but margins were up. "We've been more selective," says Schmidt. "We want to grow slowly. Our goal is to stabilize in the $4 million to $4.5 million range in eight years or so. We're not in this to overextend our line of credit by being too aggressive."

The Rewards Of Angst Cherrill Farnsworth TME -- Her company is fit, focused, and fast growing, but when Cherrill Farnsworth describes how she manages it, you wonder if you haven't stumbled into one of those giants where people are desperately trying to change the culture. "We talk a lot about not creating institutional security," she says. "The goal, in fact, is institutional insecurity." What does that mean? "The only job security is the security you make for yourself." Farnsworth aims to make sure her managers are equal to the challenge of growth -- and so charged up that they don't succumb to the complacency that comes with success. Farnsworth, 44, founded TME nine years ago to provide magnetic resonance imaging services for hospitals that couldn't spend $1.5 million to $2 million to buy their own MRI machines. Today the company operates 20 imaging centers in nine states, serving 36 hospitals and four universities. TME employs 164 people and is adding about 18 a year. Revenues, $28 million in 1992, are growing far faster -- at about a 30% annual rate. Managing that kind of growth, says Farnsworth, means employees must be prepared for constant change. "We hire high-energy, highly intelligent people who don't look for traditional promotion situations," says Farnsworth. "All of them have to be promotable. I tell new employees it's a whole new company ^ every six months, with a new organization chart, new reporting requirements and interactions between managers." So when TME brought its 18 marketing people to Houston headquarters recently for three days of training, they learned about a lot more than pitching. "We taught them how to understand financial statistics, margins, business plans, and the forecasts we make to investors," she says. They also studied managing time and stress, and setting goals. "You can't look at last year to guide your future," says Farnsworth. The message is especially important for those who come from larger companies. "I tell those people to become part of the culture fast. If not, they'll be run over in the hall." The management philosophy clearly reflects Farnsworth's restless, intensely energetic nature. TME is the fifth company she has founded. Her first, in 1974, was a bus line. After her husband was transferred from Indianapolis to Houston in 1970, she noticed that people had no way to get downtown from her northwestern suburb. "Wherever there's angst, there's an opportunity," she says. Despite heavy opposition from major bus operators, she won a franchise. But running a bus line was not nearly as much fun as starting one, and after two years she sold it for a profit. "I realized at that point what value you could get by working hard and creating something new -- especially if there's no competition." Her next three ventures leased equipment -- luxury vehicles, office equipment, and oil field equipment. When MRI machines began to appear in the early Eighties, they caught her eye. "The equipment seemed to have so much merit," she says. "But more than that, when I studied the revenue streams I could see a lot of angst." Hospitals couldn't borrow to buy the machines because Medicare had not yet approved reimbursements from insurers for the service. When she first proposed to hospital administrators that they farm the business out to her, she says, "they found the idea shocking. They giggled and rolled their eyes." When their eyes settled down long enough to scan the figures Farnsworth prepared for them, they signed up. So did financial backers. Says she: "If I believe in a project, I can be more or less fearless when it comes to standing up in front of a crowd of investors and convincing them that the wisest thing they can do is put their money with me." Among her investors are Fayez Sarofim, Patricof & Co., Toshiba America Medical Systems, and Paine Webber. She'll put those fund-raising skills to work again. "I'm not a 20-year player," she says. "I've got to develop an exit strategy, probably by going public. I'm very transaction oriented. I love to put something together, build stockholder value, and then raise money again for another venture. Nothing makes me happier."

Stay At It Daryl J. Carter and Quintin E. Primo III Carter Primo Chesterton -- If you don't think this is the time to be dreaming large dreams about real estate, meet Daryl Carter and Quintin Primo. "You don't get rich looking backward," says Carter. "In the Eighties you could just ride the wave. Now you've got to be creative and find a way to add value, particularly through financial services. We are trying to figure out how to build a better mousetrap." They hope to persuade pension funds to fill the financing void left by the retreat of banks and insurance companies. The mousetrap they have in mind is a form of real estate investment trust that would buy loans from banks and package them into fixed-income securities tailored to the needs of the tax- exempt institutions. Carter and Primo figure that to get started they'll have to win enough pension funds over to create a pool of at least $100 million, the minimum needed to provide liquidity in this new market. A big dream indeed. But Carter and Primo have spent years developing it; now they've got a prestigious backer. In December they formed a new partnership with Chesterton International, a 186-year-old British property management and investment firm whose clients include the Church of England and the royal family. High school friends, the two went separate ways after graduation. Each got an MBA -- Carter at MIT, Primo at Harvard. Carter joined Continental Bank after business school, specializing in construction lending and workouts, and went on to Westinghouse Credit, where he headed the Western commercial real estate division in California. Primo joined Citicorp and by 1985 was running its real estate investment banking operations for the Midwest. In 1987 he started his own firm, managing deals for a mainly Japanese group of clients. Carter started his own company a year later in Laguna Beach, California. They were just in time for the disintegration of the real estate market. They scraped by for several years, raising money for others and providing workout services. In 1991 they joined forces and early last year decided it % was time to begin chasing their dream in earnest. "Of 40 people we talked to, half had capital available, but none of them were interested," says Primo. "For nine months we hit one brick wall after another." Then serendipity stepped in. "It was weird," says Carter. "We were calling on a potential investor, and our package was on the desk. An old friend I hadn't seen in two or three years happened to be visiting the same place. He had just joined Chesterton as a partner, and after he looked at our stuff he said, 'What you're doing looks exciting. Let me call London and see if they're interested.' " Within weeks Carter and Primo began meeting with Chesterton's senior officers. "The chemistry was good," says Carter. "Right on up to the CEO from London, a good feeling." In the U.S. market for the long haul, Chesterton shared Carter and Primo's view that there was plenty of opportunity for the patient. Best of all, it had been looking without success for a way to connect with pension funds. "The chairman asked us, 'Where do you want to go?' " says Carter. "Sheepishly, we said $1 billion in assets in ten years. That's what they wanted to hear." For funding the operation, Chesterton gets an equity stake and a seat on the board. Carter and Primo have control. Chesterton has committed to support the venture for at least two years.

How to Keep Good Employees John C. Rennie Pacer Systems -- "Anybody working in my company could walk across the street and get 10% to 15% more," says Jack Rennie. That's been true for most of the 25 years since he founded Pacer Systems in Billerica, Massachusetts, to supply the military with design and engineering services and hardware such as testing equipment and controls. Pacer has nonetheless grown to a company with $28 -million in revenues and 340 employees. Now it's about to capitalize a new environmental subsidiary by selling 20% of the unit to a group of outside investors for $6 million. Rennie, 55, clearly knows how to compete in the labor market. How does he do it? Pacer is big enough to offer a full range of benefits. "We pay around 35 cents for every dollar of salary, including the statutory stuff," says Rennie. The perks range from health and life insurance to allowances for athletic equipment, help for career-related education, and an employee credit union. There's a stock option plan for managers, and Pacer is developing an ESOP. Most levels of employees are in annual bonus pools based on the & profitability of both their unit and the company; those at the lowest levels get spot bonuses of up to $400. Employees know where their pay ranks from charts showing their places in bands that mark the upper, median, and lower ranges of people in their categories. But it takes more still to make a company an attractive place to work, says Rennie. Such as participative decision-making. "It's kind of trendy now," he says, "but it was one of the things we latched onto intuitively right away. It was clear to me that when you're dealing with intelligent employees, whether they're engineers or secretaries, you want their input. And if they understand that they can affect what goes on -- the policies we adopt, how we handle a crisis -- it keeps them involved and incented." Participation is the norm at all levels, from the executive committee to factory-floor groups. When Pacer was considering acquiring a nearby manufacturing company a few years ago, for example, groups from engineering, accounting, human resources, and other areas looked the company over before the decision was made. "Our finance group sat down with their management to see if we could merge their procedures into our control system. Then we sent over engineers to assess their products and their people, so we could get their opinions on whether we should go forward. And so on. All this took six to eight months. Finally the groups all made presentations to our executive committee." The committee recommended the acquisition to Pacer's board in a 3-to-1 vote, and, says Rennie, "it has turned out pretty good for us." You also need to let employees know that you care about their well-being, says Rennie. "Most of the time it's just being good to the people, making them feel they have a safety net if something goes wrong." When an employee had a heart attack several years ago, for example, he was worried that his sick leave would run out, leaving him with lower short-term disability pay. "He'd been a long-term, loyal employee, and we assured him we'd cover him," says Rennie. "And though it wasn't the immediate purpose, word got around. That kind of thing pays off. It has a tremendous impact on people." To be sure, Rennie is a lot more civic-minded than your average CEO, small business or otherwise. "We can't build up our little fiefdoms behind our walls and just let the rest outside fend for themselves," he says. Rennie spends a large part of his 90-hour workweek on outside activities. He's president of National Small Business United, which with 65,000 members is the most vigorous and grass-roots of the small-business advocacy groups. He's chairman of the Massachusetts Business Alliance for Education, the driving force behind the state's plan to fundamentally overhaul K-12 education (which awaits approval by the state Senate). He's also on the boards of several other nonprofit groups. Treating your employees well, says Rennie, is as much a matter of necessity as of conscience. "If you try to run your company like a martinet, you're not going to last long in this environment. Business is too complex for you to handle everything yourself -- the marketplace dynamics, the troubled financial community, the regulations. Unless you're as thick as two planks, it doesn't take you long to realize you can't do it all on your own."

Redefine The Economics Ron Berger Rentrak -- Business couldn't have been better for Ron Berger in 1984. His company, National Video, was America's largest video rental franchiser with 385 stores and still growing fast. "But franchisers can't sit back and expect royalty income for simply having come up with a concept way back when," says Berger. So he paid attention when his franchisees began complaining that they couldn't stock enough hits to keep customers happy. And Berger came up with a fundamental insight: "The economics of this business were ass-backward." The stores bought their videos from studios for an average of $65, meaning they would have to be sure of renting each some 26 times at the typical rate of $2.50 to recapture their investment. Few could afford to stock enough copies of hot new releases to satisfy demand on Friday and Saturday nights -- when stores typically do half their business -- much less a wide range of less popular titles. "I said to myself, 'This is just ridiculous. We're not maximizing revenues, the studios aren't maximizing revenues, and the customer is never satisfied.' " That insight yielded a system Berger calls PPT, or pay-per-transaction, and Rentrak, the distributing company in Portland, Oregon, he now runs. Rentrak arranges with film studios to sell videocassettes to retailers for just $8 to $10 each, and then collects and turns back fees that range from 25% to 55% of the rental revenues. Berger says his typical customer breaks even after only seven rentals, vs. 27 times for a conventional store. As a result, the store - can stock four times as many hits on average and five times as many less popular films. These economics look right: With revenues of $49 million for the most recent four quarters, up from $45 million the year before, Rentrak has been rivaling Blockbuster Video in growth. It supplies more than 3,500 stores in the U.S., Canada, and Japan. Now Berger, 44, is about to expand into Europe and has started talking to groups in Australia and New Zealand. Rentrak's stock, trading on Nasdaq, recently sold for 5 3/4. Selling radical economics took a lot of persuasion. In 1984, says Berger, "the studios' attitude was that the video rental was a cottage industry run by lowlifes -- which you could understand. Here were these moguls coming to work every day in their limousines, and when they went out into the countryside and saw who was renting their movies, what they found were either pornography stores or mom and pop businesses with poor credit ratings. They couldn't imagine charging royalties because they didn't trust the small retailers to give a fair accounting. "I went to Hollywood and spent months developing personal relations with studio executives. I asked, Are there any conditions on which you'd go to small up-front payment and revenue sharing? Sure, the moguls said: Give us a computerized system of reporting transactions that we can audit." The necessary personal computer setups cost about $20,000 then. So Berger gave owners a dramatic incentive to invest. "I went back to my owners ((the franchisees)) at our 1985 convention in Acapulco and brought with me Bill Gallagher, the president of MGM/UA's home video division, to be the keynote speaker. He announced that MGM would make 1,000 of its titles available to National exclusively if National would computerize and provide audit trails." Berger developed a system and in two years computerized several hundred stores. Then, he says, "my board and I took what was at the time a huge risk: We sold off the existing business, the only profitable one we had, to focus exclusively on PPT." Over the past four years Rentrak has spent $8 million developing its software to make it compatible with some 20 other computer systems so that new customers don't have to replace the systems they have. Berger has also added such useful features as information about turnover, costs, and profits, plus critics' ratings of movies. Now he is about to take another technological leap that could connect Rentrak with still more systems. After four years of negotiations and development, he struck an agreement last August with a Capital Cities/ABC subsidiary to build a new device that bypasses the problem of incompatible software: The machine "reads" information directly from a store's computer monitor and sends it to Rentrak's computers. (Capital Cities has bought 2% of Rentrak and owns warrants to buy another 2% and rights to buy another 1% for every 1,000 machines Rentrak sells.) Berger says the device, which Cap Cities has just begun building for him, will open up a huge market he couldn't reach before, including supermarkets and big retailers like Tower Records that have no incentive to tinker with their sophisticated software. With just under 4% of the market, Berger hasn't yet revolutionized the economics of his industry. But he has created a winning alternative to conventional wisdom.

Keep Management Down-to-Earth Roberta Cunningham Cunningham Field Service -- With 12 offices in nine states and some 300 mostly full-time employees, 11- year-old Cunningham Field Service is a star at doing legwork for test marketers. Yet as she sits in her cramped, windowless office next to the Dillard's in Tulsa's Promenade Mall, founder Roberta Cunningham says, "I got into this by accident." How do you accidentally become a major success story? Cunningham, 55, started out searching for a part-time job in Chattanooga, answered a newspaper ad for interviewers in market research, and discovered that she had an aptitude for the work. By the time she moved to Tulsa six years later she had started her own home-based interviewing business and acquired the urge to make it grow. Tulsa was fast becoming the test-market capital of America as researchers realized it had the most demographically representative population of any major city. But Cunningham didn't just grow with the market. She engulfed it, taking over or driving out of business most of the competition within a few years. Cunningham's competitive edge? Energy, determination, a sharp focus on the customer's needs -- and a gift for making potentially dreary work so rewarding that employees naturally strive to be productive and thorough. The company mostly performs "mall intercepts" -- its interviewers prowl the malls where it has offices, buttonhole shoppers, and bring them back to the office for a 20-minute interview about the product being researched. Sometimes a dozen or so interceptees will be assembled into a focus group. (The company also does door-to-door interviewing and store audits.) When Cunningham has enough interviews in hand -- typically several hundred -- it distills the findings and presents them to the client. CFS has a reputation for rising to heroic challenges. Three years ago it got an urgent call from a desperate marketer. Three field research firms it had hired in Atlanta were unable to deliver on a project; in three weeks they had accumulated only 2,000 interviews, far short of the goal. CFS flew in 35 interviewers from Florida, Arkansas, and Tulsa. Working 12 hours daily, they pulled together 14,000 five-minute interviews in seven days. On another rush job in Dallas last year, Cunningham blitzed livestock shows, car shows, and other events to pull in 21,000 interviews in nine days. Pounding mall pavements in search of shoppers can be draining. "Our people get rejected again and again, day after day," says Cunningham. "It can really get to them if they take it personally." But Cunningham gives her charges a lot of nurture. She coaches them about the personas they have to develop: "You've got to go out with a happy face, a strong attitude. Remember that most people love to give their opinions, and you're the only one who's listening." She helps them learn how to handle the rejections. "I've done it all; I know what they're going through. Without them we're nothing, and we tell them that." Importantly, Cunningham's stamp is on the whole growing organization. "We don't hire administrative-type managers," she says. Indeed, there's no middle management at all. To run one of her offices, she says, "you've got to know how the butterflies in the stomach feel before you go out in the morning." Cunningham's husband, Paul, left his job as general manager of a Kmart store to be comptroller; sons Craig and Paul, who abandoned oil field jobs to join, are partners and general managers. The only other management level includes the 22 women and two men who run the mall offices, all of whom came up from the bottom. "My sons and I know all of our managers and most of the interviewers. We all have the same goals. We just assume everybody will work day and night like us. And most have."

Blindsided By the Rules Phillip M. Ramos Jr. Philatron International -- Phil Ramos is no whiner. So it's not bitterness but astonishment -- and perhaps paranoia -- that you hear when he talks about how he is trapped in a regulatory nightmare. So far, he estimates, he has lost some $5 million in potential sales as a result and has been forced to lay off 40 of the 85 workers he used to have.

In 18 years, Ramos, 49, has built Philatron into a $10.5-million-a-year maker of electrical wire and cable products. It's a world leader, he believes, in producing coiled cable for everything from computer keyboards to semitrailers. NASA is one of his customers, he says proudly. An engineer and inventor, he designed many of the products himself, including a high-strength plastic electrical connector for the trucking industry that he guesses has captured 35% of the market from traditional metal connectors. Quality awards from customers -- Navistar and General Dynamics -- hang in the tiny reception area of Philatron's plant in Santa Fe Springs, east of Los Angeles. The troubled product is a coiled air hose used on tractor-trailer rigs between the cab and the trailer. Standard hoses are made of stiff nylon; Philatron's, made of a rubbery proprietary material, is softer and springier. It has several advantages over conventional hose, says Ramos, but the biggest is that it neither sags as it ages nor kinks when stretched taut -- potentially an important safety benefit, since a kink could shut off the air supply to a trailer's brakes. Philatron began producing the hoses early in 1991 and sold 45,000 in the first few months. Then the National Highway Traffic Safety Administration called the product unsafe, told Ramos to stop selling it, and ordered a recall. The safety issue: The hoses could not survive a 72-hour immersion in 212 degrees F. engine oil designed to simulate long-term stress. Ramos was stunned. He knew the hoses didn't meet that requirement -- he had told the agency so himself. The rule, which predates NHTSA, didn't seem to make any sense for modern trucks, in which coiled air hoses don't get bathed in oil. Ramos hired a lawyer, began lining up support from Congressmen and Small Business Administration officials, and asked for an exemption from the recall, arguing that there was no safety issue. After several months the agency agreed and rescinded its order. But it said he still couldn't sell the hoses, even though they are safe. He'll have to wait until the regulation is changed -- a process that has dragged on for seven months, with no end in sight. (It may never happen. Philatron's competitors have mobilized a lot of sentiment against it. Parker Hannifin, a leading supplier of conventional hoses, has been fighting him from day one. It armed salesmen with copies of NHTSA documents and letters critical of the product, and has offered $1,000 to anyone who can produce a defective Philatron hose. Explains Parker Hannifin's associate general counsel, James Baker: "The change Philatron is asking for is a substantial problem for highway safety." Based on tests by Parker Hannifin and another hose supplier, Imperial Eastman, a Society of Automotive Engineers (SAE) committee wrote NHTSA to argue against changing the regulation. Ramos sees a plot. Though he can't prove it, he believes Parker Hannifin influenced NHTSA's decisions and is responsible for getting truckbuilders to object to his hoses. ("Unfair and inaccurate," says Baker.) He sees the hand of Imperial Eastman in the SAE letter: The committee head, Richard L. Fischer, is the company's director of engineering. Says Ramos: "It's an old-boy network, and I'm the new kid on the block." While he still hopes for NHTSA approval, he says: "I can't let this overshadow me anymore. I've neglected my other plans." These include a new line of consumer products, starting with miniature coiled automotive jumper cables he calls Tiny Tiger. They curl into a pocketbook-size bag yet perform at least as well as full-size ones. As he talks about Tiny Tiger, his characteristic ebullience returns. "We are going to educate the public that this is more of a necessity than a spare tire, since the probability of a dead battery is a lot higher than a flat," he says. Though he's sold only about 6,000 so far, he's negotiating with national distributors, and his optimism is boundless. "We've ordered the machining and tooling, and anticipate selling a minimum of one million units in 1993 at a retail price of $29.95," says Ramos, adding that a marketing consultant has told him that worldwide demand could amount to 65 million annually in five years. Ramos pauses. "Consumer goods are a big part of our future," he says. "I want to be a FORTUNE 500 company."

Inventing A Niche William Devaney and Ivan Lacina DL Architects -- Any architect in the Northeast will agree that you couldn't have picked a worse time to start a business than the late Eighties. But here's DL Architects, which Bill Devaney and Ivan Lacina opened in 1988 with tiny offices in Boston and New York. It employs 15 to 20 architects and a dozen support people, with offices also in London, Budapest, and, as of March, Prague. By year-end, says Devaney, it will be established in Asia as well. Among current projects are office buildings and bank branch offices in Miami, New York, and London, fast-food restaurants in Eastern Europe, and a waste treatment plant in Massachusetts. Last year's fee earnings came to about $4 million, from construction management more than $25 million. Devaney, 44, and Lacina, 48, owe their success to a decision they reached after much argument in 1989. That decision made them specialists with little competition in the U.S. Devaney, who first opposed the idea, now likes to think DL "is what the whole profession will look like at the end of the Nineties." DL's specialty is combining two specialties to bring in projects fast and on or under budget. In a typical commercial construction project, the owner hires an architect to produce the designs and a construction manager to oversee the work. When problems arise, they negotiate back and forth over solutions. DL's project managers are both architects and construction experts -- principals, really, says Devaney, the kind who would be senior partners in a conventional firm. They solve problems -- or grasp opportunities -- on the spot. "This business is about very basic stuff," says Lacina. "It always comes down to the bottom line. How can we get the right tile, the right flooring, the right lighting fixtures in Budapest fast and for the best price? What can we find that works with our design? It's total creativity and flexibility. That means the principals have to be involved in every detail; they have to be constantly thinking about how to make it work." DL has no chains of command, file clerks, or purchasing managers. Principals in the field exchange drawings, requisitions, and purchase orders via notebook computers with architects in DL's home office, a renovated brownstone in New York City's Greenwich Village. The architects there have cost data as well as design tools at their fingertips and can respond quickly. Whether you think having that much authority is fun depends on your idea of fun. "It takes high-energy people," says Lacina. "They'll work 18 hours a day, if necessary, or over Thanksgiving weekend. And -- this is key -- they can make decisions. We hire people who say, 'I love to make decisions.' " DL's international scope reflects the partners' backgrounds and network of contacts. Devaney, a Scot, and Lacina, a Czech, met in the 1970s when both worked in New York for a Japanese architecture firm, Kajima International. They went their separate ways but got back together in 1988 doing design and construction management. After the real estate collapse, the new partners had to make a decision: Would DL specialize in construction management -- which many of Devaney's clients were urging -- or try to give full service, including architecture? "That's what Ivan wanted to do," says Devaney. The argument was settled after Lacina brought in a European client that planned to renovate in New York City and didn't want to deal with separate architects and construction firms. "One-stop shopping -- that's what they were looking for!" says Lacina. How big can DL get and still retain its character? "We can only grow by figuring out ways to stay small," says Devaney. "The branch offices are four to five people each, and they can grow to maybe ten. Once bigger than that, you're no longer a small business." What they don't know, but hope to find out, is how many offices they can add around the world and still be small.

Be Prepared For Luck Betty Handley Diversified Drilube -- It seems the kind of story a scriptwriter would dream up. Indomitable woman, down and out. She starts a business producing a rustproofing compound. The compound turns out to have wondrous lubricating properties. Today, 23 years later, her customers range from racecar builders and machine shops to FORTUNE 500 companies, and she is about to move operations from a cramped bungalow in Tulsa to a real plant. Fantastic, but here's Betty Handley, owner of Diversified Drilube Inc. And here today in the bungalow are jet engine pieces and disk-drive ball bearings coated by Handley and six other women with silver-gray Ultralube, ready for shipment -- tens of thousands of dollars of precision parts, arrayed neatly in rows of dime-store plastic baskets on Formica tabletops. Is there a lesson in this story? Only that if you're plucky and lucky, you really can get by with a little help from your friends. Ultralube is based on tungsten disulfide, a highly slippery substance. What else goes into the formula is Handley's secret, and she says she doesn't have a clue about the chemistry of it. "What I put in when I start is not what's there when I finish," she says. "The only thing I know is how to make the product work. A lot is in the art of applying it. But I've had no rejects or failures in 23 years." According to her test reports, Ultralube forms a long-lived molecular bond with metals, glass, and many other materials. Testimonial letters from customers tell of machine tools that last nine times longer after coating, Army helicopter gears that stand up to destructive testing ten times longer than untreated ones, products that release from their molds with unprecedented ease. Extraordinary circumstances led Handley to her compound. She and her three young children ended up in Tulsa in 1961 after her husband, a helicopter pilot, was killed in a crash in Guatemala. She was en route from New Orleans, her hometown, to Los Angeles to build a new life when she ran out of money. Determined to make a decent living, she got police training, joined the force, and spent about about six years as a cop before quitting and becoming a security guard at a Rockwell plant. She married again, but the marriage ended in 1969, leaving her with an infant son. Handley wanted to find a job where she could keep an eye on her youngest. Several Rockwell engineers she knew had been developing an anticorrosion compound to be used in NASA rockets, a low-tech substance that anybody could make once the formula was nailed down, and were looking for someone to finish the job and make small batches. Says Handley: "They said to me, 'Somebody is going to do this, so why don't you try?' " After 256 failures, she says, she produced a formula that met NASA's specifications, and became Rockwell's supplier. She began sending out samples to other companies and soon had a growing list of customers, including Texas Instruments. "One day, in walked one of their metallurgists," she says. "He had run some tests on it, and he said to me, 'I will explain your product to you.' That was the first I knew that this compound would do more than just rustproof." He wrote up a specification sheet that described its properties based on his tests, and suddenly Handley had something really special to sell. On word of mouth alone her customer list grew to include companies such as Halliburton, McDonnell Douglas, and Hewlett-Packard. Word of mouth doesn't make for fast growth; last year Handley's revenues came to just $500,000. She was too busy with day-to-day operations to think about doing more, she says. Also, though it seems hard to believe, she says she didn't have the guts to be aggressive: "I have always been so intimidated by everybody. I had an inferiority complex." But two years ago she underwent a personal transformation. "When the recession hit, business fell off," she says. "I had the time to look at myself and restructure my outlook on life. I stopped smoking and drinking coffee and took lots of classes -- in nutrition, health, business. I discovered that I could go out and talk to people. I decided I can be myself -- I can be as eccentric as I want." She also decided to start promoting Ultralube and -- for the first time -- borrow to expand the business. She's waiting for final approval of her financing -- a joint loan from the city of Tulsa, a bank, and the Small Business Administration totaling $470,000. She'll move into a 10,000-square-foot plant and expects within a year to add 20 people to her work force. Based on the work she's been offered but has turned down for lack of capacity, Handley thinks Diversified Drilube's revenues could leap to $3 million in 1993 -- and more if a foreign licensing agreement she's working on goes through.

Putting Away The Toys Edward O. Owens Owens Cos. -- Edward Owens is just hanging on. H.F. Owens Movers, the business his father started, makes a bit of money. Everything else that remains of Owens Cos., a little Boston-area empire he built in the boundless Eighties, loses money. Its survival is in question. Yet Owens says that in some important ways he has never felt better about himself. "My goals have changed. I look back and I say, 'Jeez, what was I thinking about?' I'm a different person than I was five years ago. I'm a lot more humble. I see things more clearly. My marriage is better than it's ever been. I'm a better businessman because there have been Thursdays when I didn't have the money for Friday's payroll, and I thought, 'If I can't make it, I take out 50 other people.' " The moving company has survived the past few years on the sad pickings of an economy heading downhill. It wasn't that way in the Eighties. After taking over the moving business, Owens ventured into construction, real estate, and warehousing. At their peak, he says, Owens Cos. had revenues of about $5 million and employed 100 people. He acquired a Mercedes, a boat, a vacation home in exclusive Martha's Vineyard. He sat in the best seats at Celtics games. "I had to be a star," he says. "I wanted to show Boston that a black man could be successful." Then came the collapse of New England's economy. One day in late 1987 his controller and lifelong friend, Kevin Shea, called him to his office to deliver the bad news. "I had thought this would be a one-year dip, but Kevin said, 'No, you want to attack this problem right now. You've got to sell all your toys and put your shoulder to the wheel.' " So came three years of retrenchment. Owens sold the toys, and his wife took two jobs. He slashed rents to keep tenants, and he's working with the FDIC to restructure a big loan from a bank that went under. It's not clear that he will succeed. Now Owens sits in his office deep inside a grimy industrial complex where the moving trucks are stored. It's a vast office, outfitted in the boom years, but it has the feeling of a railroad station in the twilight of the passenger train era, the expensive furnishings cluttered with piles of paper, the bar behind the neglected exercise machine dark and unused. "I walk around my office, look at the pictures of some of the activities I've been involved in in the past years -- my business, my family, my life. I was 45 years old in January, and I look around and see how fortunate I've been. I just want to hold on to my business, hold on to my house, and educate my kids. Those sound like very basic values, but I feel that if I can do that, it will be a big contribution."

Operating Beats Dealing D. Hunt Ramsbottom Jr. Thompson Lacquer -- Personable, disarming, and quick-witted, Hunt Ramsbottom left New England for California in the mid-Eighties to get rich by doing LBOs. He might now be stranded on the beach like a lot of his fellow deal-surfers if he hadn't had a smattering of hands-on business experience and a lot of persistence. "I talk once in a while to graduate students at UCLA and always come back to the will to do it," he says. "I wanted to have my own business so badly that I wasn't going to give up." Today in Los Angeles, he's running one of the country's biggest automotive paint distributors, building it by acquisitions and solid management techniques. "Everybody and his brother was buying companies," says Ramsbottom, 35, recalling the past decade. "Everybody in the world had access to capital, with no operating experience, no people skills, no nothing -- except they knew how to tap into the money. I was a small player in this league, but I got caught up, and it didn't seem so far out. "When I think back, it was way out there. We would be sitting on the back porch of my brother-in-law's house -- I was married at the time -- just dialing up companies to buy. No broker -- I didn't know a soul out here -- no backing. Crazy, but just coming from Rhode Island to here, I felt like a kid in a candy store." Ramsbottom had worked in his family's printing business in Providence but wanted to run his own show. After he arrived in California he began looking for a printing company to buy: "I figured I could flash my experience in the business to get backing." His first LBO was a $10-million-a-year printer. "I barely knew how to read a financial statement or balance sheet, so I didn't realize you couldn't leverage up a highly capital intensive business and grow it 30% a year." Nonetheless, Fleet Financial in Providence financed his venture a continent away. Ramsbottom unloaded the business at a profit after two years, selling it to Sorg Printing of New York (which went bankrupt two years later). He left the printing company with a new partner, Mort Kline, who had joined the printer as its CFO and did know how to read a financial statement. Together they looked at some 50 companies, finally finding one that seemed just the ticket to easy prosperity. Ramsbottom and Kline took control of Thompson Lacquer in another LBO in 1989. "It had the right profile for a buyout -- good market share in the region it served, no debt, a stable market, continual growth of 10% to 12% a year with what appeared to be moderate effort on the owner's part. We said, 'We don't know this industry, but we're just going to come in here and let management do its thing and add a store a year and keep this growth going.' " They put up 10% of the money. The rest came from Heller Financial and a local investment bank, Wedbush Morgan Securities. It worked for a year. Then recession hit just as several other trends they had overlooked took hold. Auto insurers began cracking down on padded body shop bills. Accident rates fell -- partly, says Ramsbottom, because cars were getting safer and partly because of growing pressures on drunken driving. Staring at disaster, Ramsbottom and Kline had an insight. "It turned out that this was a $1.5 billion industry nationwide and that we'd bought the leader with $25 million in sales. We said, 'If that's the case, there's gotta be one on every street corner, and this is a consolidation play.' So that's been our game plan for the past two years, merge to survive." With Heller, Wedbush Morgan, and Chemical Venture Partners behind them, they're now on their tenth acquisition. By the end of this year, he says, Thompson will generate revenues at a $60 million annual rate. "It's been fun," says Ramsbottom. "We've transformed this sleepy little business into a move-ahead vehicle. With the industry flat and everybody cutting prices, same-store sales are going to grow very slowly. We think they'll be back in two to three years. In the meantime we depend on the acquisition program. We have the financing, and our backers like the plan."

Starting Up -- Again Jessica Crosby and Joyce McLaughlin Ashley-Marie Industries -- You saw it here first: If two or three years from now you buy a dress from Ashley-Marie, you'll be sharing in the triumph of one of those only-in-America ventures -- an improbable partnership with a radical idea that succeeds on pure determination and enterprise. Why might it work? Jessica Crosby and Joyce McLaughlin are seasoned entrepreneurs, and the idea that brought them together two years ago when both were itching to do something new seems strikingly sensible.

Crosby had the idea. She dreamed it up in 1990 while struggling to save her commercial office-cleaning business in New York City and looking for something more promising to do. Tired of spending hours looking for types of clothes that fit well, she did some research into female anatomy and learned that while women come in four basic shapes, most clothes are designed for only one -- a narrow-waisted sort of X known as the Marilyn Monroe. (The others are, roughly, a triangle, an inverted triangle, and a rectangle.) This was not a discovery -- designers have known it for ages. But to mass producers of clothing, it is just an inconvenience. "People in the business are wedded to the idea that anything other than the X is a 'problem figure' as they call it," says she. The "problem" looked like an opportunity to her. If she could find someone to make clothes in the four shapes, she thought, she could market them through a mail-order business. At that winter's annual meeting of the National Association of Women Business Owners, Crosby went looking for McLaughlin to get advice. McLaughlin (this year's president-elect of NAWBO) headed her own telemarketing firm in Omaha, and, says Crosby, "I just had to talk to Joyce because she knew mail order." She didn't expect to find a partner, but McLaughlin thought the idea was terrific. And like Crosby, she had hit that point many entrepreneurs reach where a sort of seven-year itch sets in. Her company was a resounding success, but running it had become a routine. "I said, 'We can launch this in six months,' " recalls Crosby, laughing. "Joyce said two years if we were lucky -- this was a business we knew nothing about." McLaughlin was right and then some: Ashley-Marie is still a long way from startup. It would be hard to imagine an unlikelier partnership. Crosby, who studied psychology at the City University of New York but never graduated, became an entrepreneur on an impulse one afternoon while watching the movie Victor/ Victoria, whose protagonists are propelled from poverty to wealth. "I decided then and there I wanted to be rich," she says. "I never had a goal before, but that was it." This led to the cleaning business, which prospered until the recession devastated it. She says she was able to partly rebuild it but shut down last year because she was "burned out." McLaughlin, 49, started in a mail-order company as a cost accountant, learned to manage almost every aspect of the business from warehousing to customer service, and in 1977 was put in charge of opening and running an 800- number service center. She left to start her own firm, which she named Interstate Telemarketing, building it over 12 years to a company with just over $1 million in revenues and 60 employees. ITM, as she calls it, specializes in small clients, handling catalogue orders, magazine subscriptions, sales leads, and surveys. McLaughlin sold ITM last winter and has set up a consulting business. She, in Omaha, and Crosby, in New York, plan Ashley-Marie's future over the phone lines, meeting every few weeks to brainstorm and work on financial plans. "It's fine to have an idea," says McLaughlin, "but a lot of businesses fail because their founders really don't get into the detail they need to know about. Both of us are learning a totally new industry, a whole other ball game." Understanding the garment business alone is a major task. "You have to hire the people who know," says McLaughlin. "But we have to learn enough to know who those people are." Adds Crosby: "We've had literally tens of thousands of dollars of free advice from people in NAWBO, National Small < Business United, and others. But there are so many components to a mail-order business -- myriads." McLaughlin thinks Ashley-Marie's first line could be out in fall 1994. "The company will happen, no doubt about it," she says. "The need is there -- everyone we've spoken to has the same problem with clothes. But we're only going to have one shot, and it has to succeed."

The Employee Comes First David Sun and John Tu Kingston Technology -- This company looks like the paradigmatic growth machine. It designs and sells to users so-called electronic enhancements -- mostly components for upgrading computer memories and processors -- and from 1987 to 1992 sales increased 368% compounded annually to $251 million. Last year it headed Inc. magazine's list of America's fastest-growing privately held companies. So when Kingston Technology vice president of engineering David Sun, 41, tells you that growth is not his goal, you assume he's being disingenuous. Then you spend some time in Kingston's Fountain Valley, California, headquarters and conclude that he means it. Sun and his partner, President John Tu, 51, both immigrants from Taiwan, have a most unorthodox notion of corporate purpose. Put simply, their goal is just to do the right thing. Kingston has won what it estimates is 45% of the market for upgrades of major brand-name machines by specializing in speed and service. Its upgrades are typically out in quantity before the manufacturer's own enhancements. It had a memory upgrade for Compaq's new ProLinea a week after the computer's introduction. The company gives five-year warranties and all the technical support its customers want. The 25 customer-service people work in a huge common space along with sales and marketing people, Sun, and Tu (Dave and John to the staff). Has the customer on the phone come up against a new and baffling problem? Engineers are nearby and ready to give advice. If there's no immediate answer, they will get to the bottom of it. The engineer, in turn, may learn things he can do to improve the next iteration of design. The underlying reason Kingston performs this well is a culture so closely knit that Sun calls it family-style management. Says he: "We feel obligated to the employee. Don't ever say the customer comes first. Your employee is your most valuable asset, and your vendor is your second most valuable asset. Take care of the first two, and the customer is taken care of." Kingston is a highly multicultural company, where whites, blacks, Chinese, Vietnamese, and Hispanics work without divisions or barriers among them. Says Sun, pointing to Ron Seide, his marketing manager: "I come from Taiwan, so we are not brothers. The culture is different, family values different, there are a lot of differences. But I think after four years" -- turning to Seide: "Four years?" Seide: "Four" -- "we can communicate in the same language now. When John or I say, let's do this, he understands why and what we want. When Ron says, Let's do this, I understand exactly why." In family-style management, says Sun, "you start from the basics and let everybody understand what you're thinking. When the employees become more mature in the company they become the management, and they will carry the same philosophy. That's why we never hire managers from outside. There is no common background. You put somebody from outside in a management position, and all these people you've been working with for four or five years say, 'Who should I listen to?' " What if the company needs somebody with a specific skill or expertise that no insider possesses? "We can always learn, as long as we are patient. We have good people." They will make mistakes as they learn, says Sun. "But as long as the people are good, if you make a mistake you can always recover, because they care -- they care about the failure. When you cannot recover is when you have the wrong people." Seide is doing some learning right now -- Kingston is sending him to earn an MBA at Pepperdine University. Sun isn't sure how valuable the degree will be. "But there must be something the average person doesn't know that people get going through two years of study. So we're sending Ron to understand the MBA and teach us what it is all about." Sun says it's hard for him to understand why a company would want growth as its goal. "How can you keep on saying, 'More, more, more'? I don't think that's realistic. There is nothing forever, right?" Kingston's leaders turn the growth question around: How fast can the company expand without compromising its integrity? "When you are obligated to the employee, you are very conservative," says Sun. "You say, 'Let's make the base work first.' " What's the base? "It's whatever you do today -- it's making sure that what we do today is better than what we did yesterday. Revenue is nothing. Let's make sure the base is right. + So in a certain way we are very relaxed. We're patient. We say, 'Let's just do it the right way, build ethical, honest products, don't brag about our success. Just do it.' "