SEND WORK OUT TO HELP SERVICE OR HELP COSTS

(Outsource)

THE PROMISED LAND FOR OUTSOURCING?
As Connecticut moves to farm out info tech, suppliers drool

Don't outsource your common sense. Not like last time...

Motorola Joins Technology-Outsourcing Wave

A typical purchase order costs Ford $150.
A real-time order on the Exchange will cost around $15.

The Outlook
Why Making Things Is Out of Fashion

As other companies shed manufacturing, outside contractors are becoming global giants
Some Readings about Outsourcing

Roy Jenne
6 Sep 2000

The outsourcing of manufacturing is increasing. Outside contractors for manufacturing are becoming global giants. See the 3-page story from Business Week, Aug 28, 2000. It is useful to think about.

The OECD (for developed countries) puts out a series of studies for individual countries. In 1994, it published a study for South Korea. In 1990, South Korea had an economic output per person ($7228) that was about the same as Greece, and half as much as England. Now the wages are high enough in Korea, that it is outsourcing more and more work to China.

Several stories are included about the outsourcing of information technology within the US.

Many (or all?) automobile companies did have their own division to make parts. But then it may be difficult to obtain adequate problem analysis, quality, and cost control. So some big companies are spinning off their parts divisions. General Motors did. Now Ford is doing it (see Business Week; Apr 24, 2000).

An article in the Wall Street Journal (Nov 1999) was titled, “Why making things is out of fashion.” This is a real worry. If we forget about our productive roots (first in agriculture) and now in industry, we are in real trouble. We need the fruits of agriculture and industry as much or more than ever. The one-page story is included here. It says, “There is an intellectual disdain for people who go into industrial America.” Wow, this is really crazy! But I am afraid that it is becoming true. What is it in our education, media, and political systems that is leading people to think this way?

All about fads. A one-page story is included called, “A way too short history of fads.” For each of 12 business fads, this story starts out by listing the “high hopes.” It ends by noting the “busted dreams” (Forbes, Apr 7, 1997). I wonder why we can’t achieve a better problem analysis in order to avoid more of this nonsense. One story says: “Don’t outsource your common sense—Not like last time.”
THE BARONS OF OUTSOURCING

As other companies shed manufacturing, outside contractors are becoming global giants

Four years ago, cornfields filled the 125-acre industrial park on the dusty outskirts of Guadalajara, Mexico. Now, glistening white factories and 4,000 workers turn out thousands of Ericsson cell phones, 3Com Palm Pilots, Compaq circuit boards, and Cisco routers each day. The industrial campus boasts a growing roster of components producers and a cavernous distribution center buzzing with FedEx, DHL, and UPS trucks destined for the U.S. The complex has its own high-speed telecom network, power plants, and medical center—even a first-rate soccer field and a bus fleet to shuttle production workers to and from their homes.

One might surmise that the Mexican government has made tremendous strides in its race to catch up with East Asia as a high-tech manufacturing base. But in truth, this industrial park is a showcase for the growing power of one company—Flextronics International Ltd. The Guadalajara site is just one of a number of manufacturing campuses the company owns or is building in countries such as China, Brazil, and Hungary. Flextronics not only manufactures all the brand-name hardware assembled on the site, it also operates the infrastructure and services, down to the sewage-treatment equipment and the employment agency. By next year, production capacity at Guadalajara will double. Flextronics and other electronics-manufacturing services (EMS) providers are the big beneficiaries of 21st century corporate plans to outsource everything from production to back-office work to logistics operations. In the bid to boost return on capital and hone their core competencies, even the staid industrial giants of Germany and Japan are starting to sell off factories. They then award long-term contracts to outside suppliers—often the same companies that bought their plants. Big-name electronics companies also are asking contractors to handle after-sales service and even to help design new products, entrusting them with intellectual property that before was
a closely guarded secret.
In the process, outside contractors are ballooning into huge multinationals in their own right. Three years ago, Milpitas (Calif.)-based Soelectron Corp. was the only EMS with more than $3 billion in sales. By the end of next year, at least five should hit $10 billion, with Soelectron on track to hit $20 billion. Flextronics Chairman Michael E. Marks boldly predicts he could oversee a $50 billion business within five years. In the past four years, this industry has more than doubled, to $88 billion annually, and should keep growing at a 20% clip, says Technology Forecasters Inc. in Alameda, Calif.

**NEW BREED.** As yesterday’s industrial giants slim down, leading contract manufacturers are bulking up, floating some key tenets of New Economy wisdom. While many gurus rave about virtual corporations, Flextronics and its rivals have been quietly picking up the abandoned brick-and-mortar pieces and reassembling them into new versions of vertically integrated empires. The new age production experts are happily shelling out billions to acquire competitors along with factories once owned by Siemens, IBM, and Nortel. To broaden their services, they are also acquiring top design and engineering firms—specialists in creating anything from customized semiconductors to prototypes of futuristic wireless-Web phones. Some outside contractors are buying parts suppliers and stakes in distributors.

Flextronics and a handful of fast-growing enterprises like it may be the prototypes of a new breed of multinational. Nominally based in Singapore but with its main operations in San Jose, Flextronics has grown from a nearly bankrupt $8 million assembler of printed circuit boards into a $8 billion, 55,000-worker octopus. Barely slowed by this spring’s Nasdaq crash, Flextronics shares have climbed roughly tenfold, to around 76, in two years.

For EMS players, vertical integration has its advantages. Unlike traditional manufacturers, EMS companies don’t make their own brand-name products. Instead, they provide production and other services to all comers. And because their factories are designed to be quickly rearranged, the same shop can make different products for many customers. As a result, their factories can run at capacity almost all the time. “They have a laser focus on making products, without having to worry about heavy R&D and marketing,” says Louis R. Mincioia, a Lehman Brothers Inc. analyst who tracks the sector. And they get cheaper components by buying in enormous quantities. Even though EMS companies earn low margins, typically 6% to 8% on sales, they generate a respectable return on equity—usually around 20%.

**GROUNDBREAKING COUPS.** Recently, Flextronics scored two groundbreaking coups. In April, Microsoft Corp. hired it to manufacture and help redesign a new electronic game console dubbed Xbox. And in May, Marks struck a partnership with Motorola Inc. to make a variety of telecom products for the company that has long prided itself on production quality. Marks’s diversification into design is as crucial as its budding partnerships.

Flextronics now has teams of industrial, mechanical, and chip engineers scattered around the world. A Flextronics-made cell phone may comprise radio-frequency components designed in Norway, custom chips created in Israel, circuit boards crafted in India, factory tooling developed in Italy, and mechanical engineering from Taiwan and Colorado.

**In the past four years, the industry has more than doubled, to $88 BILLION in sales**
GOVERNMENT

THE PROMISED LAND FOR OUTSOURCING?

As Connecticut moves to farm out info tech, suppliers drool

Imagine renewing your driver’s license from the comfort of home, using your computer. Or government agencies with the ability to share information, avoiding such debacles as a foster family charged with abuse by one agency being licensed to offer day care by another. That’s the vision that is being offered to voters by Connecticut Governor John G. Rowland. He wants to hand over virtually all of the state’s information-technology systems, covering some 65 agencies, to a private company in a seven-year, $1 billion deal—the most sweeping government outsourcing effort by any state. “I want our government to be smarter, better, faster,” says Rowland.

So did governors in other states who have considered—but backed away from—major outsourcing deals, a practice already common in the private sector. In Indiana and Iowa, governors abandoned such moves after facing fierce opposition from other politicians and employee unions. Rowland, a popular Republican, has faced nearly two years of efforts to derail his privatization move. “It’s been pretty brutal at times,” admits Gregg “Rock” P. Regan, the state’s chief information officer.

A FLOOD? But Connecticut could be on the verge of a breakthrough. In July, a state panel is expected to finally choose a winning bidder, which will move forward to cement a contract. That could lead to a flood of similar deals in other states. “We think there are at least 20 states that will follow” within the next four years, predicts Howard Anderson, managing director of Yankee Group Inc., a Boston-based technology consulting firm.

“They can probably each save 15% on information-technology spending, and that’s the low-hanging fruit.” Connecticut alone spends about $250 million a year on information technology and expects to save about $50 million annually.

The big guns of the nation’s $149 billion information-technology services business are eager to penetrate the market offered by state governments. Computer Sciences Corp. of El Segundo, Calif., which is bidding on the Connecticut contract, figures that the state outsourcing market could reach $12 billion annually in five years. CSC is competing with Electronic Data Systems Corp. and IBM to nail down the pivotal Connecticut deal.

EDS has been running “advertorials” in the Hartford Courant promising job security and better career opportunities for state technology workers. EDS also vows that it can provide “uncompromising safeguards” to protect data privacy—counteracting concerns raised by opponents of outsourcing. And it has announced that, win or lose, it will open a new technical center that it says would create 200 jobs downtown Hartford. William M. Dvoranchik, the EDS executive spearheading the company’s Connecticut bid, says EDS Chief Executive Lester M. Alberth Jr. flew in last July for the company’s oral presentation of its bid. IBM’s chief wasn’t there, “and they’re only a couple of miles away,” he snipes. “We’re not going to respond to that,” says an IBM spokesman.

BIG HURDLE. But CSC may have the inside track. In March, it disclosed that it had offered an “alternative” bid in partnership with the Connecticut State Employees’ Association, as a state bid on its own. The union, representing about 450 state technology workers, has also submitted its own bid. “One of the first hurdles that has to be overcome in the privatization is to win the hearts and minds of the people,” explains Paul M. Cofoni, president of CSC’s technology management group. Adds Robert D. Rinker, director of the union: “It’s a colossal mistake on the part of the state to exit the business because it’s never been done before.” A partnership, he says, would let the state disentangle itself more easily if outsourcing flops.

Regan insists that the competition isn’t over, despite favorable comments about the CSC-union bid by Rowland and some Democratic lawmakers. But the union has vowed that if anyone else wins the contract, it could try to block a deal. Indeed, any pact still could be vetoed by a 60% vote of the state legislature. Then the anointed outsourcer must turn Connecticut into the technology showcase Rowland has promised. “Whoever wins it had better do a good job, because this is going to be the poster child,” says consultant Anderson. And if it can work for the states, could Washington eventually fall in line, too?

By Wendy Zellner in Dallas
MAYBE WHAT’S GOOD FOR GM IS GOOD FOR FORD

It hopes that a spun-off Visteon will be as successful as Delphi

Cyclical auto stocks are hardly the rage right now, but Ford Motor Co.'s proposal to spin off its $19 billion Visteon parts unit certainly has Wall Street buzzing. Ford's directors were expected to announce a decision as early as Apr. 14. Anticipation of the spin-off drove the carmaker's stock up 5½ points over several days, to more than 53 by Apr. 12. Ford's board may continue to debate the structure of any spinoff. But the deal is widely expected to happen sooner rather than later—largely because it makes so much sense. With Visteon Automotive Systems as an independent company, both Ford and its offspring would stand to profit mightily.

For Ford, the biggest benefit would be the ability to get the best technology at the best prices by shopping around at other parts suppliers. Moreover, the No.2 auto maker wouldn't have the fixed costs of running Visteon's 125 parts facilities worldwide.

Visteon, too, would surely be better off on its own. Now, says Ford, rival carmakers are reluctant to buy parts from Visteon because they fear that trade secrets would end up being shared with its parent company. Cut loose from Ford, Visteon could better compete for new business from other automotive manufacturers.

That has certainly been the experience of Delphi Automotive Systems Corp., the parts maker spun off last year from General Motors Corp. GM spun off its $20 billion parts unit in a two-part transaction, and by most accounts, the deal turned out better than expected: Delphi's sales to non-GM auto makers have risen from 13.3% of total revenues in 1997 to 28% in the first three months of this year. Delphi hasn't lost any GM business either, even though its former parent sought bids from other suppliers. Why? A booming market for cars and trucks made room for everyone.

Visteon hopes for similar success once it's freed from Ford. But the company has a long way to go to meet its goal of increasing non-Ford business to 20% of sales by 2002, from a mere 11% now.

"Visteon is as dependent as one gets," says Darren S. Kimball, an auto-parts analyst at Lehman Brothers. It is also much less seasoned than Delphi was when it achieved emancipation. Delphi was formed in 1992 as GM's Automotive Components Group. CEO J.T. Battenberg spent the next seven years shedding unprofitable businesses and boosting efficiency to prepare for independence. Visteon, on the other hand, was formed in 1997. But Kimball notes that, unlike GM, which was in the doldrums for much of the early 1990s, Ford's business—and Visteon's—has been growing. "They don't need to be in the incubator as long," he says.

LABOR PAYOUT. For Visteon to succeed as a stand-alone company, however, it must become more price-competitive. That's no easy matter given its high labor costs. With the United Auto Workers threatening a Ford strike last fall over the spin-off issue, the auto maker guaranteed that it would protect the Ford-level wages and benefits of all current Visteon employees as well as those hired by Visteon over the next decade or so. Up-front payments and associated with the labor contract knocked $103 million, or 84 a share, off Ford's fourth-quarter earnings last year. "It was a huge price they had to pay, but that was the entry fee for the right strategic move, which is a spin-off," says analyst Rod Lache of Deutsche Banc Alex. Brown.

Still, Delphi's experience indicates that Visteon's growth prospects will improve simply by setting it free. "The mere independence of Visteon creates the upside," says analyst Scott F. Merlis of Wasserstein Perella Securities. And Visteon will no doubt be on the prowl for acquisitions, too.

Ford says the spin-off will likely occur sometime in the third quarter. "Ready or not, here they come," says Lache. Given the success of Delphi, it's no wonder Ford is eager to move.

By Joanne Muller in Detroit
Motorola Joins Technology- Outsourcing Wave

BY GARY McWILLIAMS
Staff Reporter of THE WALL STREET JOURNAL

The use of outsiders to manufacture brand-name technology products got another big-name endorsement with a $30 billion deal by communications giant Motorola Inc. to outsource a sizable chunk of its cellular-phone, pager and switch production. Under terms of the five-year agreement, Motorola expects 15% of its communications products will be manufactured by Singapore-based Flextronics International Ltd., one of the larger of a group of little-known but fast-growing companies that build everything from cell phones to computers for others. The size of the deal sent Flextronics shares soaring 8.7%, or $4.375, to $54.4375 in a 4 p.m. Nasdaq Stock Market trading. Motorola shares were off $2.175 to $84.25 at a p.m. in New York Stock Exchange composite trading.

Major Outsourcing Deals
Motorola’s decision puts the Schaumburg, Ill., concern into the mainstream of big companies looking to reduce their factory investments, rush new products to market and locate manufacturing near the customer, analysts say. It hopes to spare the expense of building new factories and hiring more employees, Motorola Executive Vice President Merle Gilmore says.

Indeed, electronics contract manufacturers are riding a wave of major outsourcing deals. In January, International Business Machines Corp. announced a $1.5 billion deal with Celestica Inc., a Toronto outfit. Three months later, Nortel Networks Corp. upped the ante with a $10 billion pact with Solecron Corp. of Milpitas, Calif.

“One by one, the dyed-in-the-wool manufacturing specialists have determined that outsourcing makes economic sense,” says Pamela J. Gordon, president of market watchers Technology Forecasters Inc. She expects contract manufacturers’ revenues from electronics companies will hit $126 billion in 2002.

Design to Delivery
The electronics outsourcing business began by building-circuit boards for big-name personal-computer makers. Today, companies such as SCI Systems Inc. of Huntsville, Ala., Solecron, Flextronics and Celestica build the lion’s share of the electronic guts of computers sold by Compaq Computer Corp., Hewlett-Packard Co. and IBM and communications gear from Cisco Systems Inc., Lucent Technologies Inc. and Nortel.

In a sign of their growing role in the business, the manufacturers are expanding into product design, handling customer orders and repair services. Their ability to manage everything from design to production and delivery is winning some unexpected customers.

Even Dell Computer Corp., whose factories are the envy of the computer business, last year picked SCI Systems to build its first-ever purely consumer PC line. In SCI, it found a company willing to adapt from mass production to a build-to-order system. “With our growth, we’re having to add factories and infrastructure. That costs a lot of money,” says Martin J. Garvin, Dell’s vice president of worldwide procurement.

What’s the downside to all this? The size and scope of outsourcing deals is putting more and more brand-name products in the hands of a small number of manufacturing specialists in the throes of a massive consolidation.

Already, Ms. Gordon says, revenue for the 12-largest electronics contract manufacturers is expanding at more than twice the industry’s projected 17% growth rate for this year. In part, these companies are expanding by gobbling up one another. On Monday, Solecron signaled the consolidation would reach to every corner of the globe when it bought Australia’s Bluegum Group for an undisclosed price.

’Not Worrisome’
“A few years from now, two thirds of the business will be controlled by the top five to seven companies,” says J. Keith Dunne, a managing director at investment firm Robertson Stephens Inc. He estimates there have been 40 acquisitions within the sector since mid-1999.

Mr. Dunne says the consolidation isn’t worrisome because the industry is still in its infancy. He projects that 60% of electronics goods will be made by such companies in the future, up from about 20% today. “This business has the growth potential of the Internet with proven profits,” he says.

Of course, the trend isn’t unanimously embraced. It means the biggest names in some very competitive industries are placing their futures in the hands of companies earning tiny margins on the gear they make. And building several makes of cell phones or PCs in the same factory, while efficient, can lead to common looking—and acting—products.
Tight Job Market Pinches Temporary-Help Firms

By ROBERT JOHNSON
Staff Reporter of THE WALL STREET JOURNAL

The outsourcing cavalry has come to the rescue of employers with labor shortages for years. Now, the rescuers need reinforcements.

"Let's face it, we're struggling in the same labor pool with our clients," says Melissa Brophy, president of Maximum Management Corp. in New York. Lately, she concedes, some employers that used to take it for granted she could provide extra help or the expertise for certain specialty tasks can't count on her for the quality of outsourcing workers they used to get. "What I tell people is we may have to send someone who isn't exactly what you're looking for. We're having to adjust."

Increasingly, adjusting means beefing up an expensive recruiting tool: free job training. Manpower Inc., the nation's largest outsourcing company, offers computer training that enables recruits to hold a variety of office positions but especially jobs in personnel and human-resource departments. Manpower has provided limited training for several years, but the practice is becoming routine. With 4,000 workers in the U.S. and 11,000 more overseas, the company says its program is aimed at boosting the quality of new hires. "We'll manage our way through this, but it's something we're giving a lot of attention to," says Jeffrey Joerres, Milwaukee-based Manpower's president and chief executive.

Outsourcing companies provide everything from computer trouble-shooting to payroll preparation. Their role in the American workforce is huge: About 13 million workers, or 10% of overall U.S. employment, are outsourced. They may be "temps" sent by private employment agencies or independent contractors employed by outsourcing companies.

Steve Hipple, an economist at the U.S. Bureau of Labor Statistics, says the outsourcing industry's struggle to attract workers is an inevitable result of the 4% unemployment rate. "That's the lowest in 30 years, and all employers are eventually going to be affected," he says.

Those statistics explain why job training has become an increasingly important benefit to attract potential workers. But, paradoxically, the more training the outsourcing companies provide to recruits, the faster they lose them to clients, according to a recent study.

David Autor, an economist at the Massachusetts Institute of Technology in Cambridge, Mass., says that for many low-skill workers, temporary-help companies have become the "port of entry" to the permanent-job market because of the training they offer. Although that training may inspire loyalty, as Manpower's Mr. Joerres suggests, MIT's study indicates that two-thirds of all temporary workers would prefer to be in permanent jobs.

Further, the MIT study found that temporary companies, despite their ambitious training programs, often pay less than other employers. They offset high employee turnover rates by charging steep fees to clients that recruit their workers for permanent jobs. Thus, some outsourcing companies increasingly perform what is essentially a "screening" function.

The real winners here, says Dr. Autor, are workers who get free training and

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Aug 24, 2000
Wall St. Journal

* Outsourcing involves 10% of the US employment.
Medical Records Outsourced in $15M Deal

UCLA hopes all files can go electronic

BY JULIEKHA DASH
The University of California at Los Angeles (UCLA) Medical Center has signed a novel three-year, $15 million agreement with Irvine, Calif.-based Certus Corp. to manage its medical records operations.

Although health care organizations have been outsourcing portions of their medical record keeping for years, UCLA's decision to outsource all of its records operations is somewhat unique, said Simmi Singh, a vice president of the health care division at Edison, N.J.-based Internet services firm SeraNova Inc.

In fact, Singh said, UCLA's move may become a trend as the task of managing health information becomes more complex under the Health Insurance Portability and Privacy Act. The act mandates that health care organizations protect the privacy and security of patient information.

Under the deal, which was announced last week, Certus will manage medical records operations at several UCLA facilities, including the Santa Monica Medical Center and its outpatient clinics. Though Certus has already begun maintaining UCLA's medical records, the medical facilities won't completely transfer all of the approximately 100 employees in the medical records division to Certus until next summer.

One of UCLA's goals is to put all of its medical information online, said Dr. Mike McCoy, CIO at UCLA. While the majority of its 3 million patient charts are stored online, about 20% of the patient information, such as doctors' handwritten notes, are still in paper format. UCLA said it also hopes Certus can transform its records operations to support online processes so charts, for example, can be delivered electronically rather than in paper format.

"Now, we literally have 100 people filing papers and wheeling charts around clinics," said McCoy, who added that the decision to outsource wasn't driven by cost.

Information technology outsourcing in health care is on the rise. Currently, 45% of all integrated delivery networks (IDN) are outsourcing at least one IT function, such as data center or desktop support. That percentage is expected to almost double by 2004, said analyst Matt Duncan at Gartner Group Inc. in Stamford, Conn.

One reason health care executives are turning to outsourcing is the complexity of the IT environment among industry players, said Duncan. A typical IDN may have more than 100 applications that aren't integrated, he said.

In addition, Duncan said, health care organizations are having difficulty competing with the private sector for IT skills because providers don't "want to disrupt the salary structure" by paying a programmer twice as much as a nurse.

Sep 4, 2000

Computer world
The Outlook

Why Making Things Is Out of Fashion

PITTSBURGH

After more than five years operating a small factory here, Robert Brandegee has hit on something that managers at many far bigger companies have come to realize. He doesn't want to make things anymore.

"We've gotten rid of everything we don't do well," such as sewing together pieces of rubber to make handbags, says Mr. Brandegee. He recently signed a deal with a Chinese factory to supply most of the fashion accessories made from recycled materials that his company, Little Earth Productions Inc., sells. About a quarter of the production will stay in Pittsburgh, but the bulk will now be Chinese-made. That frees Little Earth to focus on what it does best: designing and marketing quirky accessories.

Companies have always had to ask themselves whether it's better to produce something in their own shop or get someone else to do it. But never before has making things had such an image problem.

"It's just not cool to make things anymore," says Ron Niccol of the Boston Consulting Group. Mr. Niccol says part of the problem is our changing expectations about wealth creation: We've grown accustomed to industries where value is created rapidly, as on the Internet.

But making things takes time. And even the most successful manufacturers often find their returns are meager compared with other types of economic activities, such as providing services.

That helps explain why everyone from Huffy Bicycle Co. of Dayton, Ohio, to Chicago-based Sara Lee Corp. seems to be ditching factories. Sara Lee, with operations ranging from bras to hot dogs, means to shed "low-return assets"—such as yarn factories that supplied the company's textile plants. Huffy has announced plans to shutter the last of its U.S. factories in September, saying it was completing its "transformation from a single-brand manufacturer to a multibrand design, marketing and distribution company."

Noticing the M-word missing from that new identity. Indeed, manufacturing's share of the gross domestic product declined to 17% from 19% of the total between 1987 and 1997.

But there is a positive side to manufacturing's poor image: Not getting respect has helped nudge companies to reinvent themselves, often emerging as much stronger entities. Some firms, like Little Earth, decide they shouldn't be making most of the things they sell, al-

owing them to focus on other aspects of the value chain, like designing.

The other extreme is contract manufacturers. These are companies—such as Soletron Corp., of Milpitas, Calif.—that have thrived by throwing their whole energy into the making of things. Notable about contract manufacturers is that rather than exporting jobs, these manufacturers are often bringing them back to the U.S. Contract manufacturers also are big in the production of high-tech goods.

Not that there isn't still room for companies to continue doing everything, including manufacturing. Consider an old-line maker of things, such as General Electric Co., which has thrived in recent years while many other manufacturers have struggled. Although revamping and slimming down its factories was important, the company has prospered by radically expanding what it provides its industrial customers. Rather than just selling aircraft engines, say, GE sells a bundle of services to engine buyers.

"We're all reviewing the value chain, trying to move our resources where we can make a positive return," says Stephen R. Hardis, chairman and chief executive of Eaton Corp.

He says the nation's booming economy is largely the result of old-line companies like his that have recovered their edge in the global economy. This has helped check inflation and created the economic backbone needed to support fast-growing technology industries. Some economists support this view, arguing that many of today's powerful technology businesses wouldn't have been possible without the research and development fostered by forward-thinking hard industries, such as aerospace.

But even Mr. Hardis concedes that it isn't easy being seen as a maker of things. He often experiments at cocktail parties—competing the response he gets when he introduces himself by talking about his educational background (positive), vs. as the head of a big industrial company (negative).

"It's not only considered dull," he says.

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"there's an intellectual disdain for people who go into industrial America. It's as if they can't make it in these other parts of the economy."

Little Earth's Mr. Brandegee long resisted any shift away from doing his own manufacturing. When he first moved his company out of the basement of his suburban home into a conventional industrial space, he loved the idea of creating blue-collar jobs in his hometown. He even thought of it as a marketing edge: recycled products from a post-industrial city.

But he has learned a rough lesson. His customers may say they love American goods, but at the end of the day, their buying decisions are driven by price. Moreover, making things turned out to be a complicated process.

He was still careful about making the big change. He insisted on inspecting the Chinese factory to ensure it wasn't a sweatshop. But the other day he got an order in—$110,000 of handbags made from hubcaps. "I received the order, checked the goods, then shipped them out," he says. "I can't believe I didn't do this a long time ago."

—TIMOTHY AEPPEL

Wall Street Journal

Nonfarm Payrolls

Monthly growth in thousands

This was a front page story

NONFARM PAYROLL EMPLOYMENT rose by 310,000 new jobs in October, compared with a revised increase of 41,000 in September, the Labor Department reports. (Article on page A2).
Silicon Valley pioneers John Chambers and Andrew Grove disagree on how the digital era will play out

BY JOHN A. BYRNE

CHAMBERS: ‘NOTHING EXCEPT E-COMPANIES’

Q: How is this new century going to reinvent the world of business?
A: This is truly the second Industrial Revolution, and it will change every aspect of people’s lives. The changes that used to take place in a decade—when IBM or U.S. Steel fell out of favor or General Motors stumbled—can occur in one to two years.

Q: What will be the key ingredients of a successful company?
A: Companies that are successful will have cultures that thrive on change, even though change makes most people very uncomfortable. In the end, you might just have speed, talent, and branding. Those things may be the only differentiators.

Q: What will a corporation look like 10 years from now?
A: There will be nothing in the 10-year window except e-companies. That does not mean that brick-and-mortar will go away, but click-and-mortar will become the only means of survival. Secondly, keeping your finger on the pulse of your customer will become a requirement. Customer priorities will change so rapidly and what [customers] will pay a premium for will commoditize so rapidly that if you don’t have your finger on their pulse, you’re going to be in trouble.

Q: So customers will be the big winners?
A: The consumer wins big-time here, because everything gets cheaper forever. The ability to [compare] prices from 1,000 [competitors] rather than three will drive down prices. If you don’t improve your productivity, you’re out of business. We believe the average price of consumer products in Britain alone will come down 10% to 15% in the next three years. The price of a car will come down by 30%.

Q: How will you take advantage of the global marketplace?
A: I will put my jobs anywhere in the world where the right infrastructure is, with the right educated workforce, with the right supportive government. I can do that today with the technology we have, but I can’t do it socially. I don’t know how to manage it yet. You give me a decade, and I will be able to do it extremely well. That’s what people haven’t gotten yet. This is global competition like we’ve never seen.

Q: What role will the Internet play in managing the 21st century corporation?
A: The Internet is not just a nice productivity tool. This is about survival. This is essential to the future of my company. It will determine whether you’re a chief executive five years from now. Technology has gone from a nice productivity tool to being the fundamental driver of progress. As that change occurred, the percentage of capital spending on technology went from less than 10% in the mid-70s to 60% today.

Q: How will technology and the faster flow of data change decision-making?
THE 21st CENTURY CORPORATION

BACK TO THE FUTURE

A: I can now close my books in 24 hours. I’ve known for a month what my earnings are for the weekend. I know my expenses, my profitability, my gross margins, my components. What people haven’t yet got is that this will be the biggest payback application of the Internet.

Because once I have my data in that format, every one of my employees can make decisions that might have had to come all the way to the president. And after the quarterly close, an individual product-line manager can see exactly what the gross margins are on his or her products, whether they are below expectations, and determine if that is [caused by] component costs or whether the Australians are discounting too heavily again.

Quicker decision-making at lower levels will translate into higher profit margins. So instead of the CEO and CFO making 50 to 100 different decisions a quarter, managers throughout the organization can make millions of decisions. Companies that don’t do that will be noncompetitive.

Q: If you allow more people decision-making authority, doesn’t that make it even more important to recruit the very best people?
A: We realized early on that a world-class engineer with five peers can out-produce 200 regular engineers. That’s what the startups do so well in Silicon Valley. So your success is dependent on your ability to attract the very best talent and then get out of the way and empower them.

Q: What will it take to retain good people?
A: The reason people stay at a company is that it’s a great place to work. It’s like playing on a great sports team. Really good players want to be around other really good players.

Secondly, people like to work for good leadership. So creating a culture of leaders that people like is key.

And the third is, are you working for a higher purpose than an IPO or a paycheck? Our higher purpose is to change the way the world works, lives, and plays.

Q: What’s the impact of these changes on the world’s bigger problems?
A: For the first time, we have the chance to address global poverty. We have the chance to reeducate the majority of the world. If you are in Africa and your teachers are dying of AIDS, there is no way you can educate your population without this capability. So it changes everything.

Q: Any advice for a leader trying to reinvent his company around the Net?
A: Until the leader truly believes it and truly takes ownership of it and drives it down through his or her company, it doesn’t work. You’ve got to become the champion for it. You’ve got to walk the talk.

GROVE: Corporate reform will be gradual.

GROVE: ‘I’M A LITTLE SKEPTICAL... BRAINS DON’T SPEED UP’

Q: Do you believe we’re in the midst of a second Industrial Revolution that will lead to vast changes in the way companies are managed?
A: There’s a saying that every generation thinks it has discovered sex, and you kind of wonder how we ever got to this point in humanity if earlier genera-
tions didn’t know anything about it. I have a little of that same feeling here. We have discovered the transformative power of the latest network, and we think the world is going to change completely. It probably would be useful to go back and ask if the railroads changed the world. There were definitely changes in how commerce and industry were arranged. But life remained the same, and the way people related to each other remained the same.

Q: Do you envision any major transformations at all in corporate organizations?
A: Yes, there are changes in the ways corporations will organize among each other and how they will organize inside, how supply chains are managed, and how information workers are becoming a larger portion of the workforce. But these have been gradual changes. They may accelerate some, but I don’t think we’re seeing a phase transition like ice turning to water.

Q: What about the transformation of the global economy?
A: It is pretty significant but it is evolutionary. Let’s take another example. How has the formation of the European Union abolished national borders in the largest continental society in the Western world? France is still France, and Germany is still Germany. Things have changed, but things have not changed. I suspect it’s going to be something like that.

Q: Many believe that the speed of transactions will radically change the way we do business.
A: This business about speed has its limits. Brains don’t speed up. The exchange of ideas doesn’t really speed up, only the overhead that slowed down the exchange. When it comes down to the bulk of knowledge work, the 21st century works the same as the 20th century. You can reach people around the clock, but they won’t think any better or any faster just because you’ve reached them faster. The give and take remains a limiting factor.

Q: Well, for one thing, you can tap into more brainpower around the world.
A: That’s true. But draw an analogy between that and the fact that bananas from Costa Rica can be made available at your local Safeway because of modern transportation and container ships. Factories in Taiwan can produce most of the PCs in the U.S. because of advanced transportation. Borders and distances have been broken down by previous networks. We are building on the traditions of global production and global trade that started when ships crossed the oceans. But [these developments] didn’t eradicate poverty or disease. They weren’t as hyperventilating and revolutionary as we think this one is.

Q: Do you also have concerns about the future workforce?
A: I think the workforce is making a major transformation in developed countries from manufacturing goods to providing information and service work. The service work is very low-brow and very low-paid. This poses horrible problems. Suppose everything in the middle gets eliminated and society becomes comprised of high-paid information workers and low-paid service workers. You get into situations where the living standards and costs of the former are imposed on the latter. We have childcare centers without child-care workers, schools without teachers, and police departments without policemen. I don’t quite know where it will end up going, but it has become really problematical. Yet, everybody wants to emulate Silicon Valley. As they do so, they will turn the world into more islands with the same problems.

Q: As companies farm out more and more work, how virtual will they become?
A: The impact of farming out your data processing, your manufacturing, your this and that, implies that there are companies to which you can farm it out, companies that make a business out of making that capability available not just to you but to your competitors. So this virtualization of work diminishes competitive advantages. It leads to rapidly spreading commoditization of everything. At the same time, the Web makes the buyer increasingly knowledgeable across the board so that the inefficiencies of the market are very difficult to maintain. How do you build a company where your buyers are infinitely knowledgeable and where your suppliers maintain a level playing field for your competitors? What remains your competitive differentiator or your source of value or whatever academic cliché you want to wrap around it?

Q: Will good organizations always have an advantage in attracting and retaining people?
A: Yes. Almost to the point where the more there is a tendency for the disaggregation of the workforce, the more important it is to run healthy and vigorous organizations that fill the needs of individuals. People have a need to work in teams. There is a desire to work with others and enjoy the benefits of your work and your successes together with people who enjoy the same benefits. These satisfactions are as important today as they have ever been, and I believe they will stay important.

"I’ve lived through 40 years of management, and people haven’t changed in those 40 years.... There is more looseness in the organization. But more hasn’t changed than has"

Q: Obviously, you’re much more sober about the prospects for the 21st century corporation. Andy, are you becoming a bit of a curmudgeon in your old age?
A: I have a left brain and a right brain. The left brain is the technology side, and it’s very excited. My right brain is a manager’s brain. I’ve lived through 40 years of management, and people haven’t changed in those 40 years, so I’m a little skeptical. Our fundamental organizations haven’t changed on paper. On the fringes, there is more looseness in the organization. But more hasn’t changed than has. Things have changed, but the left brain says they should be galloping. The right brain says there have only been slow, gradual changes in the way we operate organizations.

BusinessWeek online
See the Aug. 28 issue online at www.businessweek.com for additional coverage

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A Way Too Short History of Fads

Don’t outsource your common sense. Not like last time...

• Total Quality Management  High Hopes: Systematically improving the quality of corporate operations toward a goal of perfection can improve competitiveness and improve customer satisfaction and loyalty. Busted Dreams: To hell with profits! We’re going to make these damn things perfect.

• Computer-Integrated Manufacturing  High Hopes: Implementing a combination of computer databases, process control systems, and robotics can reduce operating costs, improve quality, and make possible high-margin mass customization. Busted Dreams: No way to measure success except by the money you’ve invested.

But at least you can be entertained as you go broke watching the robots destroy your products.

• Management by Objective/Theory Z  High Hopes: Establishing overall goals that become more specific as they are implemented down through the organization allows greater employee independence while still keeping the company oriented toward its long-term targets. Busted Dreams: Make the objectives too vague and they are meaningless, too specific and they turn into a noose for employees four levels below you.

• The Learning Organization  High Hopes: In the rapidly changing modern world, successful companies will be those that can adapt quickly because they are built on continuously upgraded employee skills and knowledge. Busted Dreams: It easily turns into a training and MIS sinkhole. No one has yet figured out just how an organization "learns" the right things.

• Reengineering  High Hopes: The new competitive environment not only demands that companies revise their products and services but that they also rethink their organization in light of advances in information-technology telecommunications. Busted Dreams: In the hands of a manager without imagination (that is, most of them), this becomes mindless downsizing, a meat-ax to cut away not only the fat but the flesh and bone of the enterprise.

• Virtualization  High Hopes: New technologies make possible companies “without walls” that have a new, more integrated relationship with suppliers, distributors, retailers, customers, and even competitors. Busted Dreams: Set your employees free and they may never come back. How do you hold together a company scattered over the landscape when you can rarely maintain it with everybody in one building? And what are you going to tell the poor bastards who still must go to the office?

• Decentralization  High Hopes: Making corporate groups and divisions more independent, complete with their own infrastructures, makes them more adaptive and competitive. Busted Dreams: Paradise for every empire builder and renegade in the organization.

• Flat Organizations  High Hopes: New information processing technology eliminates the need for the middle layers of corporate hierarchy that used to act as information filters and now enhances the ability of senior managers to handle a larger span of control. Busted Dreams: Some of those middle managers actually did things. Important things. And if senior executives couldn’t manage 10 people, how are they going to manage 200?

• Critical Path Analysis  High Hopes: By studying how a company brings a new idea to market, one can emphasize those components that contribute to this process while eliminating or cutting back those that don’t. Busted Dreams: Life isn’t that simple—even though you will be paying experts to force you to think so.

• Sales Force Automation  High Hopes: Sales is the last part of the company not revolutionized by information technology. Giving the sales force access to large files of product, presentation, and competitive information enables them to be more productive. Busted Dreams: No matter how you disguise it, salespeople know a hidden control system when they see one. Wait until you see the annual cost of replacing all those laptops “accidentally” dropped off car roofs.

• Chaotic Organizations  High Hopes: With the rapid shifts currently taking place in commerce and society, the best company organization is one that is essentially chaotic within a well-defined structure designed to use that energy. Hence: "chaos" and "order." Busted Dreams: Just what we need, companies that are even more unmanageable and out of control.

• Post-Capitalism/Co-Opetition  High Hopes: The emerging global economy will require a new type of business strategy, one that de-emphasizes winner-takes-all competition for new cooperative ventures that reward everyone concerned. Busted Dreams: Yeah, sure. You go first.
DIFFERENT COUNTRIES, ADJOINING CUBICLES

U.S. and European companies are outsourcing service jobs to English-speaking workers around the globe. White-collar workers left behind will be forced to retrain.

SERVICES
BY MARK CLIFFORD
AND MANJEET KIRPALANI

A grimy concrete slab building fronts on a Manila street jammed with smoke-belching taxis and jeepsneys. Upstairs is a far more tranquil scene—an air-conditioned floor divided by neat office cubicles filled with Herman Miller chairs and Dell computers. This is the new regional accounting unit of Caltex Petroleum Corp., a 64-year-old joint venture between Texaco Inc. and Chevron Corp. that runs gasoline stations stretching from Southeast Asia to South Africa.

In a dramatic rethink of its corporate structure, Caltex moved its headquarters from Dallas to Singapore last year to be closer to its customers. It shifted web site development to South Africa. And it set up the Manila accounting division before switching off the lights forever at the Dallas office early this year. "As technology and communication improve, we are scattering centers of excellence around the world," says William Pfuger, general manager of Caltex's Manila operation.

Caltex is on the cutting edge of a trend that is likely to revolutionize operations for the 21st century corporation: More and more service and professional jobs are shifting from high-cost Europe and the U.S. to developing countries. From giants like General Electric to startups such as Texas-based VideosDotCom Inc., companies are turning to skilled workers in English-speaking locations such as Ireland, remote regions of Canada, tiny Caribbean nations like Jamaica, and, most important...
because of their larger size and populations, India and the Philippines.

Companies are seeking workers to take jobs ranging from basic clerical, accounting, customer support, and legal services, to software design, scientific research, and pharmaceutical development. "This is a huge transformation—much bigger than what happened in the blue-collar world," says management guru Tom Peters. He estimates that as many as 90% of today's American white-collar and clerical jobs could be outsourced over the next 10 to 15 years. Some companies, like Caltex, are shutting down operations in the U.S. or moving whole divisions to new locations. Others, such as Verizon, are farming work out to subcontractors—from small software designers to large consulting outfits like Andersen Consulting, which has 500 employees working for multinational clients in Manila.

The global dispersion of work is sure to accelerate as new interactive software and telecom networks make it increasingly common for engineers, number crunchers, or researchers from China to Scandinavia to work on the same projects at once—as if in adjoining cubicles. As business functions converge onto the Web—and professionals adopt similar worldwide standards—financial analysts based in Mexico will be able to tap into the real-time data bank of, say, Finland's Nokia Corp.

Many companies, of course, will still want to do their own bookkeeping, market projections, and legal work in-house. But others will push the concept of virtual corporations to radical extremes: They will outsource most of their back offices to offshore service providers, enabling them to concentrate only on what they do best, such as basic research or design. Economies boasting lower-cost but well-educated and computer-savvy workers are most likely to benefit.

Countries where English—the language of global commerce and the Internet—is spoken will have the sharpest edge. That's why Ireland, where the economy is now growing at 7.5% annually, has enjoyed an astounding turnaround in the last several years: Companies ranging from Citigroup to Microsoft were attracted by its pool of skilled English speakers, plus generous tax breaks offered by the government. Indeed, Ireland has become the world's leading software exporter.

But Ireland, with a population of just 3.7 million, is beginning itself to experience a tight labor market. Unemployment is down to 4.5%, the lowest level in 18 years, and wage costs are picking up. "You can't get a clerical person in Dublin now," says Hugh Evans, head of finance and performance management for Deloitte Consulting in Britain.

So U.S. and European companies are looking to new sources of labor further East. One of the most important will be India, given its relatively low wages—less than one-third of those in the U.S., even for highly skilled workers. And there's a sizeable pool of skilled English speakers. Massachusetts Institute of Technology computer guru Michael Dertouzos figures that as many as 50 million new white-collar jobs could be created in India, which would add $1 trillion to its gross domestic product within 10 years.

"Thirty to fifty million Indians can read and write English and deliver clerical services," says Dertouzos.

"OPPORTUNITY:" The Philippines, with a population of 75 million, is also actively promoting its skilled labor force. Philippine universities graduate 70,000 engineers and another 100,000 computer scientists a year. "We recognize this as a major opportunity," says the Philippines' Secretary of Trade and Industry Manuel Roxas II, a former Allen & Co. investment banker who recently toured the U.S. as part of his high-profile campaign to lure white-collar jobs to his country. The country's skilled workers come cheap, but the quality of their work is high, says Masimina S. Martinez, a partner at Andersen Consulting in Manila. Andersen, for example, pays its employees in Manila from $20,000 to $30,000 a year compared with the $80,000 to $100,000 annual paychecks U.S. employees in similar positions at Andersen take home.

Given such wage gaps, should U.S. and European workers be worried about the migration of white-collar jobs overseas? For now, new jobs in India, the Philippines, and even Ireland are mostly supplementary and companies scramble for labor in a white-hot U.S. economy. Indeed, foreign workers may be helping
the U.S. economy by holding down costs and preventing an inflationary bottleneck that causes economic overheating in a tight labor market.

Of course, problems could crop up if too many existing jobs go from Dallas and Des Moines to Madras and Manila. Steelworkers and autoworkers reacted with calls for trade protection when they saw their jobs taken away by Japanese and Korean competitors in the 1970s and 1980s. Many white-collar workers will hear that same sucking sound of jobs moving to low-wage countries. "It is going to discombobulate international labor distribution," warns MIT's Dertouzos. "It will cause arguments, threats, and tariff changes."

That's why the pressure will be on American and European clerical and other lower-level white-collar workers to retrain themselves. They'll need to find new skills to offer corporations and other employers in an increasingly knowledge-based economy. Even high-tech jobs aren't sacrosanct. Already, companies such as Microsoft, Motorola Inc., and Bell Labs operate large research centers employing skilled Indian engineers in Bangalore and Hyderabad.

BANGALORE BOON. American startup VidesDotCom shows how an innovative U.S. company can use leading-edge Indian expertise to leverage its strengths. VidesDotCom is designing a video-on-demand service. Initially, VidesDotCom shipped work to an Indian software maker, Wipro Ltd., when the Texas-based company's staff was too busy. Now Wipro, which employs 6,700 software engineers, is doing most of VidesDotCom's development work in Bangalore. It has become more important than the company's own in-house development team. "Their extensive e-commerce experience, development skills, pricing, and overall quality have made them my primary engineering team," says President John E. Tudor.

Some U.S. companies are going even beyond basic outsourcing. One is Cognizant Technologies of Teaneck, N.J., which is contracting with clients to set up shop for them in India, hire and train workers, and implement projects. The company began as a subsidiary of Dun & Bradstreet in 1994, helping to outsource D&B's large software development projects. Three years ago, Cognizant began supplying the same service to other companies. From a 1,900-employee operation in Madras, it has provided back-office software support systems such as aircraft computer maintenance for clients like Northwest Airlines Corp. Now Cognizant is moving up the value chain, developing e-commerce services for U.S. financial houses. Sales and marketing are done in the U.S., but 70% of the development work is done in Madras and Calcutta through a high bandwidth network.

Meanwhile, General Electric Capital has shifted a chunk of its customer service department to New Delhi. At the company's call center in Gurgaon, which is outside Delhi, 1,000 young Indian English-speaking employees answer customer phone calls seven days a week, 24 hours a day. Now, GE plans to open two more centers in India to handle payroll, design, and billing services for other GE-group companies.

To keep such investments coming, India is pouring millions into its infrastructure. In the southern state of Tamil Nadu for example, a gleaming new $55 million state-of-the-art technology park in Madras threw its doors open for business in July. Within the first month, the park was nearly fully occupied with rapidly expanding companies such as San Francisco's Brigade Corp., which provides e-mail customer service response for Compaq and 3Com's Palm Pilot from offices in Madras. Brigade is hiring 150 young professionals a month. The state is also spending $10 million annually to install computers and teach computer skills in local schools. "By 2008, all the citizens in Tamil Nadu will be computer literate," says R. Gopalan, chairman of the Tamil Nadu State Industrial Development Corp. and prime mover behind the tech parks.

As the century progresses, the migration of white-collar jobs around the globe will force managers to become far more accustomed to virtual corporations. Millions of clerical workers in developed industrial countries will have to retrain themselves as jobs shift to other locations. The good news is that corporations will have access to much wider talent pools. But companies will have to groom cosmopolitan managers—equally at home in Madras and Manhattan.

With Heidi Dawley in London
With a per capita income of more than $7,000 in 1993, Korea is no longer a “developing” country. Its transformation from one of the poorest countries in the world only 40 years ago to an industrialised country has been amongst the most rapid in the world.

The emergence of Korea as a major trading nation has been accompanied by a progressive reduction in government intervention in foreign trade. Industrial policy has also been re-oriented towards a less discriminatory approach in part as a reaction to the problems which had arisen from the drive towards heavy industries in the 1970s.

With markets becoming bigger and goods more sophisticated, and with the number of companies growing and demand becoming more volatile and difficult to predict, more emphasis should be put on private sector initiatives with increasing reliance on signals from the market. The re-allocation of labour to more efficient uses will be a key to maintaining rapid growth in the next decade, along with improving technology and the easing of regulations which tend to impede the necessary transformation of the economy.

Stabilising the macroeconomic foundation

The strong demand pressure on resources had led to a high and accelerating rate of inflation in the second half of the 1980s, calling for a shift of policy priority from growth to stability. Money supply growth was reined back in 1991 and 1992, and interest rates first raised and then only allowed to drop back in line with the fall in inflation. Enterprises had to adjust to the rapid growth of real earnings, which outstripped labour productivity advances by as much as 40 per cent between 1987 and 1992. As investment in more capital-intensive lines and methods of production increased, the share of business investment in output attained a record high in 1991, followed by a sharp drop of investment growth in 1992. Many labour-intensive products are now beginning to be outsourced to foreign plants, notably in China. However, thanks to strong demand in Asia, especially in China, the growth of total exports in 1992 was twice that of world trade and the current account deficit fell to 1½ per cent of GNP.
IT industry cries foul

Vendors oppose bill that could curtail outsourcing moves by agencies

BY GEORGE I. SEFFERS

Information technology organizations are banding together to oppose a controversial bill in Congress that they say could derail the growing movement toward federal IT outsourcing and, they claim, possibly even shut down critical functions of the government.

And although officials close to the legislation say the bill likely will not pass this year, IT officials are concerned over its chances in the next Congress.

The Truthfulness, Responsibility and Accountability in Contracting (TRAC) Act is designed to force federal agencies to more effectively track outsourcing costs and savings and to force contracting competitions between government workers and the private sector.

Supporters say the measure will protect government jobs while saving taxpayer dollars, but critics rebut that it will bring outsourcing to a screeching halt, waste taxpayer dollars and maybe even force the federal government to shut down.

Sections of the bill that have sparked controversy include:

- A temporary prohibition on all government outsourcing unless a waiver is signed by the Office of Management and Budget.
- A requirement that all future contracting include a competition between the public and private sectors.
- A mandatory cost-savings analysis of current contracts and the implication that contracts with less than a 10 percent savings be canceled.

Two versions of the bill currently exist, one in the House and another in the Senate. Two unions, the American Federation of Government Employees and the AFL-CIO, support the bill.

AFGE President Bobby Harnage said in a recent news release, "The public has a right to reliable and accountable public services. The TRAC Act will help ensure that America's taxpayers get just that. This bill simply holds contractors accountable to the same standards as federal employees."

Meanwhile, the Information Technology Association of America (ITAA), the Contract Services Association and the Professional Services Council all strongly oppose the bill and are considering writing a letter to lawmakers that signals their opposition.

"The TRAC bill would prevent agencies from awarding new outsourcing contracts until they can demonstrate cost savings and other benefits. This would likely take years, if it could be accomplished at all. Introduced at a time when a majority of federal IT employees are eligible for retirement and agencies are struggling to find qualified technical personnel, the bill has the potential to slow — if not cripple — critical government programs," ITAA President Harris Miller wrote in an Aug. 24 letter to Congress.

The bill has more than 190 co-sponsors in the House, mostly Democrats, and 12 in the Senate, all Democrats, including vice presidential candidate Sen. Joseph Lieberman of Connecticut. Supporters are seeking 218 House co-sponsors because that number would ensure passage should the bill reach a vote on the House floor.

But the bill is not expected to pass this year, in part because even among co-sponsors support is seen more as an attempt to send a message to the Defense Department and other agencies to quell their outsourcing movements rather than as a real desire to make it law. But the large number of co-sponsors is still causing concern.

"Many of the co-sponsors have told us that they added their names since the bill will not pass. My question to them, however, would be, what about next year? How do you sponsor a bill one year, but then decline to sponsor it again?" said Olga Grkavac, an executive vice president at ITAA.

Proponents of the bill say it's all about fairness. "It's about giving people an opportunity to compete. Federal employees deserve an opportunity to compete and to continue to perform functions they currently perform, and the taxpayers deserve to know what the government is spending on those functions," said a staff member for Lieberman.

George Sigalos, a spokesman for the Professional Services Council, said his organization is taking a wait-and-see approach. "Regardless of whether it's a Republican or Democratic Congress, it obviously will be a completely different legislative environment," he said. "Either way, we'll take it on again at that time."
Ford’s Model E

Can Ford, the very epitome of an Old Economy company, remake itself in the Cisco mold? | BY JAY AKASIE

WHILE MOST FORBES 500 COMPANIES are still trying to figure out their Internet strategies, Ford Motor Co. has plunged boldly, reconfiguring this Old Economy company into a streamlined New Economy outfit.

“This is absolutely a transformation of Ford,” says Brian Kelley, Ford’s President for Internet strategy. “Ultimately this is about the redistribution of assets, capital and competitive advantage.”

In his New Year 2000 address to employees, new (since January 1, 1999) Chief Executive Jac Nasser put it bluntly: He wanted to transform Ford into an e-business. Lots of executives talk that way, but Nasser is putting his assets where his mouth is.

The redistribution of assets is already dramatic. Ford announced in April that it would return $10 billion to shareholders, capital that would not be needed by the new, leaner Ford. It was already in the process of spinning off most of its parts plants into Visteon. Henceforth it would be just another supplier to Ford. Between Visteon and the special cash dividend, Ford was returning $12 billion to its shareholders.

While shedding physical assets, Ford has been investing in intangible assets. In the past few years it has spent well over $12 billion to acquire prestigious brand names: Jaguar, Aston Martin, Volvo and Land Rover. None of these marques brought much in the way of plant and equipment but plant and equipment isn’t what the new business model is about. It’s about brands and brand building and consumer relationships. In the New Economy, quite deliberately, Ford has been selling things you...
can touch and buying what exists only in the consumers’ minds.

The corporate Ford of 2010 will look more like Cisco—a company that manufactures very little. “You can already see moves to divest the more asset intensive, low-margin activities off their balance sheet,” says Dresdner Kleinwort Benson’s David Garrity.

The Internet facilitates these changes in two big ways. In a B2B sense it facilitates the substitution of an outside supply chain for company-owned manufacturing. In a B2C sense it facilitates a continuing interaction with consumers that offers myriad ways to enhance the brand value that has been the focus of Ford’s recent capital spending. Says Kelley, “By using B2B supply chain management we cut down waste and with B2C we’ve finally found the way to connect the supply chain directly with the car buyer.”

At the moment Ford’s structural changes are ahead of changes in the car market. Cars are still delivered by the truckload to lots where dealers struggle to unload the inventories onto prospective buyers using incentives, rebates or the plain hard sell. This is what B2B because the supply chain for automobiles is so long and complex. Final assembly, which for now at least Ford will continue to do, accounts for only 6% of the cost of a car, which means that an efficient supply chain is vital.

Commodities—steel, paint, plastics—account for about 16% of the cost. Build-to-spec items—small stampings and injection molded parts—are combined with the commodities by the full-service suppliers like Delphi, Dana and Magna to make complex systems like seating or braking. An even larger percentage ends up in their pockets.

Under Ford’s existing EDI (electronic data interchange) system, the company already communicates well with its Tier 1 suppliers, the companies that build large, integrated systems, seats or wheels and braking. Where the speed-up is coming is among Tier 2 suppliers, the companies that provide parts to the Tier 1 group.

With an Internet-based supply chain, the paint manufacturer will get the signal to produce more purple paint at the same time as everyone else in the Ford supply chain. There will be no operations. She is a pioneer in B2B, credited with inventing the term two years ago when she was planning an Internet purchasing strategy for Ford. Miles has moved to Covisint where as Ford’s chief rep she brainstorms with her Motown competitors in the same office—she calls it neutral ground. Ford helped form Covisint, rather than go it alone, because it was more beneficial to have a larger network.

Since Ford’s relationships with Tier 1 suppliers are already close and electronic, Covisint is designed to do the same for the Tier 2 and Tier 3 suppliers. This is no small matter. Ford and its three rivals-turned-partners spend roughly $700 billion per year on the components that make up cars. The Tier 2 and 3 players account for 43% of that.

Take the automobile industry’s “In-line vehicle sequencing”: A Tier 1 seat supplier ships the seating systems in the order they are required for the final assembly. Ford tells the Tier 1 it needs so many red seats followed by so many blue and so many purple. Since the seat manufacturers are Tier 1 they are already in the information loop. With an Internet exchange like Covisint, a leather

By 2010 Ford will look more like Cisco. Instead of manufacturing, Ford will outsource over the Internet.

pundits like Grady Means and David Schneider (see p. 22) call push marketing: Produce first, then try to sell.

Using the Internet, Ford and other companies hope to change from a push model to a pull model (see chart p. 26). Instead of a manufacturer pushing product out to the consumer, the consumer—stimulated, of course, by smart advertising and promotion—will pull product through the supply chain.

If consumers suddenly decide they want purple cars, the paint supplier will know that as soon as the dealers do. There will be fewer black cars that will have to be sold with costly incentives. And not just colors: options, brands, models.

This speed of transmission matters production delays due to shortages of the right color pigment.

Ten miles down the Southfield Freeway from Ford’s Dearborn, Mich. headquarters is an office complex that houses Covisint—standing for collaboration, vision and integrity. Here executives from age-old rivals Ford, GM and DaimlerChrysler (soon to be joined by their counterparts from Renault-Nissan) work together in a way that would have been unheard of even a few years ago. B2B has bought them together.

Jointly owned by these big automakers Covisint hopes to be the world’s largest B2B exchange, connecting with more than 50,000 prospective suppliers to the member companies.

Alice Miles is Ford’s president of B2B supplier will see the changes in Ford’s seat orders on a real-time basis and can prepare its inventory and manufacturing lines accordingly. No need to wait for the seat manufacturer to get around to communicating its needs.

In addition to integrating these companies into the supply chain, Covisint will post its members’ needs where they can be accessed by anyone, anywhere in the world, who thinks he could handle the order. That in itself offers the possibility of substantial cost savings.

But the savings are also about transaction costs. Whereas a typical purchase order costs Ford $150, the company estimates that a real-time order on the exchange will cost around $15. These
Engine Overhaul

A new Sylvester Stallone movie opens June 1 and includes a heart-pounding chase scene with the star driving a yellow Mustang. Ford dealers across the country suddenly get inquiries about the flashy convertible. Back in Dearborn, executives realize this car is going to be hot.

OLD WAY:

1. Ford schedules dealer council meeting over the next month to discuss these inquiries.
2. July. Dealers come to Dearborn for week-long meetings and confirm yellow will be this year’s black.
3. Ford’s marketing department schedules focus groups across the country.
4. August. Focus groups say they’re wild for yellow convertibles.
5. Marketing presents results to executive committee, which makes the decision to ramp up production of yellow Mustang convertibles.
6. Aug. 15. Purchasing finds out and calls Mustang parts and paint suppliers. Tells them the plant will need millions of gallons of extra yellow paint in the coming months.
7. Paint supplier calls its suppliers, who make components of that shade of yellow, to order more.
8. September. Paint supplier finally gets more dyes and chemicals and can begin increasing production of yellow paint.
9. New yellow Mustang convertibles don’t run off the lines until next quarter, three months later.
10. Dealers receive cars on Dec. 1, six months after Sly’s movie comes out.

WEB WAY:

1. One week after movie’s release, Ford is bombarded with queries on DealerConnect network about the availability of yellow Mustang convertibles. Inquiries from * Bolt.com and Villlage.com roll in as well.
2. Executive committee orders ramp up in production of the car.
3. The next day, Purchasing transmits the order and all tiers of suppliers on Covisint immediately see the order and begin stocking up.

savings mount when you write thousands of purchase invoices every year.

The third and maybe the biggest saving will come from slimming and even reducing inventories. Equipped with real-time knowledge of what is happening at the sales end, even the supplier at the very end of the chain can react quickly to changes. “The real value of Covisint is taking out the inventory by setting up the transparencies,” says Miles. “Today everyone in the supply chain has to build up inventory because they don’t want to be caught short.”

This transparency has other advantages: If a supplier knows his line will be down in June while car companies retool, he might scramble to find low-margin business to keep his plant working near full capacity. The Internet makes that process a lot easier. The supplier simply posts its production availability on the Internet and people all over the world can bid for it.

“This changes how assets are managed,” says Miles. Much as the Internet enables airlines and hotel chains to find buyers for idle seats and idle beds, so it will enable auto suppliers to keep their lines busy in what otherwise would be dead time.

Covisint is only a small part of Ford’s B2B strategy. ConsumerConnect is the name of Nasser’s sweeping Internet strategy. The goal is to create a seamless Internet web from consumer research right down to the people who supply door handles, rubber mats and paint.

General Motors has a similar effort, and in one way is ahead of Ford: On the consumer side it has OnStar, which will soon connect cars directly with the Internet and give GM a continuing relationship with buyers of its cars. At present, auto companies have direct contact with their customers an average of only three years—essentially as long as the warranty runs.

Ford is moving fast to close this gap. Last month it launched Percepta, a joint venture with Teletex, the consumer marketing firm. Its aim is to allow drivers to connect by telephone, fax or e-mail with call centers in case of breakdowns or other emergencies and to give the company a detailed service record of every car it sells. This movement toward more intelligent cars offers manufacturers an opportunity to maintain a continuing relationship with car buyers.

In cultivating consumers, Ford isn’t waiting for them to become old enough and affluent enough to buy a car. The age group loosely defined as Generation-Y—Americans between 14 and 24—is even larger than the baby boom generation. Ford is already reaching out to this group—on the Internet.

On Bolt.com, a popular teen Web portal, Ford sponsors the automotive section along with banner ads that flash on every area of the site. The activities are cleverly constructed to feed Ford data on what teenagers think, especially about autos. In any given week polls ask: “What do you think is the best way to help the environment?” or “Which would you rather be seen in, a Lexus or a Jaguar?”

“Teenagers are encouraged to write adventurous stories
Ford’s Model E

Alice Miles, in charge of B2B, arranged for Ford to join the enemy on neutral ground at Covisint.

involving cars and road trips, and submit their own designs for the ultimate dream car. You can imagine that teenagers have a much different idea of what’s cool than Ford engineers in Dearborn,” says Annie Hiraoka, who oversees the company’s consumer Web drive.

Women Web surfers haven’t been shy about telling Ford what features they’d like on their next car. The Lincoln Navigator now comes with pedals that can extend upward for shorter drivers. The Windstar minivan concept vehicle at the time when car companies still count on dealers for most of their sales and when car dealers have enormous political clout at the state level. But to the extent that the dealer system eventually survives, it, too, becomes more efficient because it won’t need large inventories. No longer will dealers have to shave their margin to the vanishing point to move models that are not in high demand locally. Mark Roman, the lead Ford liaison on the Microsoft venture, insists dealers will remain important for trade-ins, test drives and service.

But certainly the role of the dealer is going to shrink. Ford believes that the Web will largely replace the influential dealer councils in the product development phase. Lengthy meetings on consumer preferences and trends will be replaced by the click of a mouse by potential buyers. “Consumers want to feel they’re in control of the buying process, and we’re trying to convince dealers that that’s not such a bad thing,” says Roman.

By laying everything out on one database, the system lets Ford track what happens with every dealer query, a major advantage in measuring customer satisfaction. “We’ve always

A typical purchase order costs Ford $150.
A real-time order on the Exchange will cost around $15.

Detroit Auto Show this year came equipped with a microwave oven, a small washer and dryer, and a wet-dry vacuum—all suggestions Ford received from women on Livillage.com.

What about the dealers? In September 1999 Nasser announced a joint venture with Microsoft’s CarPoint for a consumer portal where you can research and buy a car and get delivery within three days. Right now Web-based car buying systems rely on locating the car the consumer wants and then delivering it.

Ford plans to take this to the next level: Direct-to-the-assembly-line ordering which will enable Ford to custom configure cars much the way Dell custom configures computers. “We want to use the Internet to build cars that people want and not build inventory,” says Jeff Dossett, a Microsoft executive and president of the alliance. Microsoft’s software will one day be able to locate a car halfway down an assembly line and configure the rest of it along the lines ordered by a CarPoint buyer.

Still, what happens to the dealer is a touchy question at a tracked inventory. Now we can track consumer preference,” explains Roman.

It would be hard to find a giant Old Economy company that is making this transformation more seriously than Ford. If it all comes together, the payoff could be huge: Decapitalized, brand-owning companies can earn huge returns on their capital and grow faster, unencumbered by factories and masses of manual workers. Those are the things that the stock market rewards with high price-earnings ratios.


Brian Kelley thinks his company has a great shot at it. “Who’s in the best position to take advantage of these e-technologies?” he asks, rhetorically. “We’ll give the startups their due, but we have the massive customer base, great brands and plenty of resources that we can apply in the New Economy better than anyone else.”
DON'T REWRITE THE RULES OF THE ROAD

PERSPECTIVES • BY JAMES COLLINS

The Internet is a big deal, but electricity was bigger. Building a great company requires adherence to principles predating both

The question of what to manufacture was postponed. In fact, the whole founding concept of the company was not so much what, but who. They were best friends in graduate school and simply wanted to work together and create a company with people who shared their values and standards.

As Hewlett and Packard scaled up, they stayed true to this guiding principle. After World War II, they hired a whole batch of fabulous people streaming out of government labs, without anything specific in mind for them to do. Packard grasped the subtle truth that a great company will always generate more opportunity than it can handle, and that growth is ultimately constrained only by the ability to get enough of the right people. At the same time, if he picked the wrong person—someone misaligned with the company's values or unable to deliver results—Packard would throw him off the bus, and in a hurry.

Yes, the Internet requires significant changes in the way we manage and lead. But if you don't have the right people, it doesn't matter what you do with the Internet; you still won't have a great company. If, for example, Value America had spent less on advertising ($69 million in 1999 on a revenue base of $1.183 million) and invested even half that in assembling an army of the best possible people, then perhaps it would have avoided the distinction of becoming the consummate dot-com implosion. Iacocca-style advertising and a snazzy Web site are all fine and

Collins is co-author of Built to Last. His new book, Good to Great, will be published next year by HarperBusiness.

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good, but Packard’s Law still holds, even in the Internet economy: Growth in revenues cannot exceed growth in people who can execute and sustain that growth.

In fact, our bigger problem today lies not in the fact that we live in a time of change. Rather, like people in the 1500s groping to understand the natural world, we have only limited understanding of the physics of great companies. Worse, we inconsistently apply what we do understand.

My group recently completed a four-year project to answer the question, “Can a good company become a great company?” We began our research with 1,435 companies that had been among the 500 largest, going back to 1965. We then searched for companies that made a shift from good to great performance—meaning they generated cumulative shareholder returns greater than three times the market average over 15 years. How many do you think we found?

The answer: eleven.

Despite the rise of first-class business schools and the explosion of management literature, only 11 of 1,435 companies showed a sustained and verifiable shift from good to great. In analyzing the good-to-great CEOs, two things became clear. First, they had a firm grasp on a few basic principles, such as getting the right people on the bus. Second, they were fanatically consistent in applying those principles. When in doubt, they would not hire, no matter what the pressure to get a warm body on board. And when they knew they had to make a personnel change, they would not make the mistake of waiting for a more convenient moment; they acted.

The truth is, there’s nothing new about being in a New Economy. Yes, the Internet is a big deal, but electricity was bigger. And in each evolution of the economy over the past 150 years, the best executives have adhered to the same basic principles, with rigor and discipline.

I can’t tell you exactly what a corporation will look like 50 or 100 years from now. But I can promise this: If you toss out all the time-proven fundamentals, you’ll have no chance whatsoever of building an enduring, great company.
BRANDS IN A BIND

Many household names are hurting—and taking a cue from high techs

In the 1980s and early '90s, they were the masters of the superbrand: Coca-Cola, McDonald's, Procter & Gamble, and a handful of others were pushing their American icons into every corner of the globe. They were centers of innovation, hot places to work, and the growth stocks that investors wanted. The envy of Corporate America, they got all the buzz that today only tech companies seem to enjoy.

These days, however, are long gone. From P&G to Gillette to H.J. Heinz, the companies that created the everyday products that consumers now take for granted have been drifting for years. In a world where a new snack food looks ho-hum compared with a neon-orange iMac, consumer-products companies seem to have less to say to people. "If you look at where the marketing innovations were in the 1970s and '80s, it was P&G and McDonald's," says Mercer Management Consulting Inc.'s John Kania. "Who's innovative today? It's financial services, computing, retailing."

TECH SURGE: That innovation is showing up in the way brands are getting valued. In its 2000 analysis of the biggest global brands, British consultant Interbrand found that four of the top five are technology names: Microsoft, IBM, Intel, and Nokia. Coca-Cola, at No.1, saw its brand value drop $11 billion, to $72.5 billion. Some of the fastest-growing brands, meanwhile, are Internet names. Yahoo! Inc., with an estimated $6.3 billion in brand value, is worth 258% more than it was last year. Amazon.com's $4.5 billion in brand value is up almost as much.

That's why traditional big-brand companies are striving furiously to reinvent themselves and to restore value to their venerable brands. The more forward-looking among them are showing signs of success. While it's still early in the game, these companies are already showing improving margins and profits. And investors are paying attention. Since a spring meltdown among consumer-product stocks following bad earnings news at P&G, such companies as Kimberly-Clark and Colgate Palmolive have recovered much of their losses.

How are they doing it? These corporations, along with others, are embracing an entirely new business model: one based not on the advertising rules of Madison Avenue but on the kind of innovation and organizational revolution more commonly found in Silicon Valley.

To read consumers better—especially younger ones—and get products out faster, they are emphasizing teams, speed, the effective use of data-mining, and clever online marketing strategies. "The Silicon Valley model is the road ahead," says Jay Conger, a senior research scientist at the University of Southern California's Center for Effective Organizations.

The old road was for sure not working. Big-brand companies have been losing their focus for years, as consumers have started spending elsewhere. Data compiled by economists at RFA/Dismal Sciences Inc. show that categories such as autos, beverages, food, cosmetics, and cleaning supplies represent a much smaller portion of household budgets today than they did 10 and 20 years ago.
Marketing

tastes to dreaming up new products to getting them on the shelf faster.

At the new Coke, local managers, for the first time, are encouraged to develop new products, including beverages without carbonation. And Coke is launching a series of local “innovation centers” around the world, where scientists work directly with marketing executives to develop, package, and sell new drinks for local markets. So far, these efforts have yielded a pear-flavored drink in Turkey, a berry-flavored Fanta for Germany, and a sports drink called Aquarius sold only in Belgium and the Netherlands. While such efforts are still young, investors like the company’s new direction. From a 52-week low of $43 a share in March, Coke is up 42%, to 61. “Our big successes have come from markets where we read the consumer psyche every day and adjust the marketing model every day,” says marketing chief Stephen C. Jones. REAL WORLD. To understand consumers better, companies are deploying the same kinds of teams that Silicon Valley has used for years. At Kraft Foods Inc., executives are tearing down the old bureaucracy and insisting that staff should get out into the real world. In May, after a marketing meeting in Los Angeles, Bridgette F. Heller, executive vice-president of Kraft and manager of its $13 billion coffee business, sent her team out to the city’s Spanish and Asian markets. “We took the most Connecticut-type people and dumped them in the middle of a Spanish bodega and said, ‘See what you can find.’ They came up with great ideas—ideas that will be a part of our business plan next year,” she says. “You’re not allowed to just sit in an office and be a part of my team.”

All the great products in the world won’t matter, though, if they don’t get to market quickly. Colgate-Palmolive Co. has leveraged its global presence to tap into innovation wherever it occurs. Take Frescura. Colgate developed the breath-freshening toothpaste last year in Venezuela in only six months and then tested it simultaneously in markets around the world. Shortly after its October launch in Venezuela, it was on U.S. shelves as Colgate Fresh Confidence and is now available throughout Europe too. So far, it’s selling well against rival Close-Up.

How do companies know they’ve come up with something consumers really want? Jack Sansolo, chief of marketing at Eddie Bauer Inc., remembers not so long ago when his information was limited to general tastes based on Zip Code. Now, Sansolo says, online strategies allow him to track a single customer’s interactions with the retailer at stores, through catalogs, and online. A springtime advance test of Eddie Bauer’s swimwear online resulted in expanded orders for certain styles. Says Sansolo: “I’m able to understand the individual customer.”

No customers are more important to the consumer-brand companies than young ones. And here, too, technology has given traditional consumer companies a powerful tool. Family-run Z. A. Gallo Winery has been quickening to a younger market with online wine tastings in which people all over the globe sip and discuss. The company prints an e-mail address on every bottle, and 34-

SWAMPED Coke is decentralizing as it faces a sea of rivals: flavored teas, sports drinks—and water.

ago. Instead, Americans are spending a bigger share of their money on computers, cable TV, stock-trade fees, and recreation and are adding entirely new categories such as cellular phones. “There’s a multiplication of consumer loyalties,” says Jonathan Knowles, director of consultant Wolff Olins.

And just look where they are going. Snapple Beverage Corp. and breath mint Altoids, two brands that were barely on the radar screen a few years ago, have exploded in the marketplace with popular offerings that appeal largely to teens and twenty-somethings. Walmart Stores Inc., meanwhile, has deployed the power of its brand to help popular store-branding re-emerge with products such as Ol’ Roy dog food.

LOOSENING BOND. The new reality is a sobering landscape with endless choices for consumers. There are now, according to branding expert Jack Trout, about 40,000 distinct items in the average American supermarket, of which the typical family needs only 150 to fill 80% of its needs. “Customers love brands, but the bond between the consumer and the brand is loosening,” says Douglas Toews, executive vice-president for ideas and image at makeup giant Coty Inc.

No company embodies the current turmoil and how to deal with it better than Coca-Cola Co. After years of mediocre performance, Coke under CEO Douglas N. Daft, who took over last February, is starting to fight back. Daft’s strategy: to do as the techies do and abandon the highly centralized structure that once helped make Coke great. Daft is rethinking everything Coca-Cola does—from gauging consumer markets.

WHY BRANDS ARE HURTING

LACK OF FOCUS
An explosion of choice has left consumers confused—and less loyal. Frito-Lay, for example, now sells 78 flavors of its snack chips, up from 10 in the early 1970s.

INNOVATION RUT Lots of new products, but not much that’s revolutionary. Nothing, for instance, that makes the impact Pampers did when they came out.

TOO BIG, TOO SLOW It took brand giant Procter & Gamble 30 years to get fat substitute Olestra to market. Even hits like Swiffer haven’t been able to make up for other weaknesses.

OUT OF VOGUE Many of the best and brightest college and business-school graduates are choosing other paths, especially Internet-related jobs.