

Don't Change Corporate Culture—Use It!

By PETER F. DRUCKER

Changing the corporate culture has become the latest management fad. Every business magazine carries articles about it. And not a week goes by without my being asked to run a seminar on the subject.

There is indeed a need to change deeply ingrained habits in a good many organizations. Electric-power and telephone companies always had their profits guaranteed by public regulation. Now they find themselves up against cutthroat competition. Customers demand just-in-time delivery. Consumers are increasingly picky about quality and service. Employees sue at the drop of a hat alleging discrimination and sexual harassment. And with product lines shrinking, there is an urgent need in most mechanical industries in the U.S. (and even more in those of Europe) to change drastically the way new products and new models are conceived, designed, made and marketed, with the process eventually being telescoped into months from years.

Form and Content

What these needs require are changes in behavior. But "changing culture" is not going to produce them. Culture—no matter how defined—is singularly persistent. Nearly 50 years ago, Japan and Germany suffered the worst defeats in recorded history, with their values, their institutions and their cultures, discredited. But today's Japan and today's Germany are unmistakably Japanese and German in culture, no matter how different this or that behavior. In fact, changing behavior works only if it can be based on the existing "culture."

Japan is the best example. Alone of all non-Western countries it has become a modern society, because her reformers, a hundred years ago, consciously based the new "Westernized" behavior on traditional Japanese values and on traditional Japanese culture. The modern Japanese corporation and university are thoroughly "Western" in their form. But they were used as containers, so to speak, for the traditional and thoroughly un-Western culture of the mutual obligations and loyalties of a clan society—e.g., in the lifetime commitment of company to employee and employee to company, or in organizing industry in *keiretsu*, groups of autonomous firms held together as "vassals" by mutual dependence and mutual loyalty.

The reformers of India and China, by contrast, felt that they had to change their countries' cultures. The only results have been frustration, friction, confusion—and no changes in behavior.

Another example: Konrad Adenauer in

the 1920s was a vocal critic of Weimar Germany, for its "bourgeois" values, its greed, its materialism, its worship of money and business. When he became chancellor of a defeated Germany after World War II he deliberately and uncompromisingly strove to restore the pre-Hitler "bourgeois" Germany he so thoroughly detested. When criticized—and he was harshly attacked by well-meaning "progressives" both in Germany and in the West—he answered: "Pre-Hitler Germany,

competent person—e.g., an emergency-room nurse. The new model of the washing machine or of the laptop computer has to be ready for market testing within 15 months of its predecessor's introduction. Every customer inquiry, including every complaint, has to be settled by telephone within 24 hours (the standard of a well-run mutual-funds firm).

The next—and most important—step is not a "training session" or a management conference, let alone a lecture by the big

achieved not by doing something different but by systematically doing something everyone had known all along should be done, had in the policy manuals, and had been preaching—but only the few exceptions had been practicing.

The next step, therefore, is for top management to make sure that the effective behavior as it develops out of the organization's own culture is actually being practiced. This means, above all, that senior management systematically asks, again and again: "What do we in senior management, and in this company as a whole, do that helps you to produce the results that all of us are agreed are the necessary ones?" And: "What do we do that hampers you concentrating on these necessary results?" People who successfully managed to get old and entrenched organizations to do the needed new things ask these questions at every single meeting with their associates—and take immediate action on what they hear.

Iraq vs. Grenada

Finally, changing habits and behavior requires changing recognitions and rewards. People in organizations, we have known for a century, tend to act in response to being recognized and rewarded—everything else is preaching. The moment people in an organization are recognized—for instance by being asked to present to their peers what made them successful in obtaining the desired results—they will act to get the recognition. The moment they realize that the organization rewards for the right behavior they will accept it.

The best example: the way the American military services worked together in the recent Iraq campaign. In the invasion of Grenada in 1983 there was no cooperation at all between the services—If there had been the slightest opposition, the invasion would have ended in disaster. The military immediately organized all kinds of conferences, pep sessions, lectures and so on, to preach cooperation. Still, less than a year and a half ago, the Panama invasion almost foundered because the services still did not cooperate.

Only a year later, in Iraq, cooperation worked as no service cooperation ever worked before. The reason: Word got around, I am told, that henceforth the appraisal of an officer's cooperation with other services—as judged by those other services—would be a material factor in promotion decisions.

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no matter how deficient, is the only culture Germans alive today know that still worked; we have no choice but to use it to build the new, the post-Hitler Germany."

But there is also a good—and American—business example: the railroads. In the late 1940s, the American railroads were losing money hand over fist. Worse still, they were losing market share to trucks and airplanes even faster. Yet they were clearly needed—and so Uncle Sam, everybody agreed, would have to take them over. And most of the passenger business did indeed have to be taken over by government agencies. But passenger business was never more than one-tenth of railroad traffic.

The railroads' real business, freight traffic, remained totally private in the U.S.—the only country in the world where this is the case. Moreover, the American railroads are the only ones that make money. Every other railroad system is virtually bankrupt. And the railroads in the U.S. carry a significant share of the country's freight—a little more than one-third of long distance traffic—with no other system carrying more than 5% to 8% (and neither the British nor the Japanese railroads carry even that much). The American railroads based this turnaround on the existing values of their managers, their clerks, their train crews—on the railroads' dedication to technical standards, for instance.

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The first thing is to define what results are needed. In the hospital emergency room, for instance, each patient should be seen within one minute after arrival by a

boss. It is to ask: "Where within our own system do we do this already?"

The American railroads began their turnaround around 1948 or 1949 when executives at the Union Pacific, the Chesapeake & Ohio and the Norfolk & Western first asked: "What is the most important result we need?" They all answered: "To get back on the railroad the shipment of finished automobiles from factory to dealer." Then they asked: "Is anyone on any railroad actually doing this?"

The moment the question was asked, they all realized that one subsidiary of the Chesapeake & Ohio—the one serving Flint, Mich., home of the Buick Division of General Motors—was actually increasing its share of finished-automobile shipments while every other railroad in the country was losing automobile business. Yet all these people in Flint had done was to find out what traditional railroad services Buick needed and was willing to pay for—and then to provide the service with true excellence.

Marshall Field in Chicago was one of the first of the high-class big-city department stores to get into trouble, in the 1970s—and one of the first ones to get out of trouble too. Three or four successive CEOs tried to change the culture—to no avail. Then a new CEO came in who asked, "What do we have to produce by way of results?" Every one of his store managers knew the answer, "We have to increase the amount each shopper spends per visit." Then he asked, "Do any of our stores actually do this?" Three or four—out of 30 or so—did it. "Will you then tell us," the new CEO asked, "what you people do that gives you the desired results?"

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The Bush Administration's Budget-Shell Game

By Scott Hodge

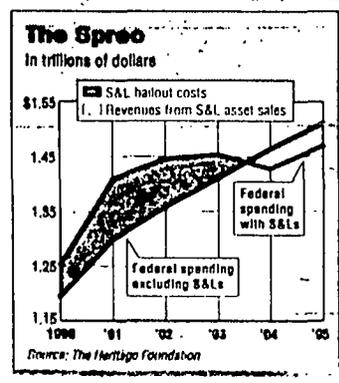
President George Bush just two years ago told the nation that America "has the will, but not the wallet" to tackle all of its domestic problems. Yet his administration has embarked on a domestic spending spree that makes Lyndon Johnson seem like a tightwad.

Though budget director Richard Darman publicly insists that government spending will increase far less than the projected 4.3% rate of inflation, the real increase will be about 25% higher than that—and domestic spending will increase by nearly twice the projected rate of inflation.

Mr. Bush's first term will see domestic spending increasing an inflation-adjusted average of \$29 billion a year—outpacing presidents John F. Kennedy, Lyndon Johnson, Richard Nixon, Jimmy Carter and Ronald Reagan. In inflation-adjusted dollars, Mr. Bush's domestic spending spree will be twice as costly as President Kennedy's "New Frontier" increases, nearly double President Johnson's "Great Society" budgets, nearly top President Nixon's, outdo President Carter's by one-and-a-half times, and will be a staggering five times greater than President Reagan's

ten in the same breath—that total federal spending growth will be kept below the inflation rate and that the costs of the S&L bailout are "off-budget."

While it is true that the S&L costs are technically off-budget, these costs nevertheless have been included in aggregate federal spending. It is only by including these costs in the total that the administration can claim to be holding spending



in fiscal 1992, costs are expected to drop to about \$88 billion; and in fiscal 1993 it will drop still more, to about \$44 billion.

In the Darman budget, the very high up-front costs sends aggregate fiscal 1991 spending levels through the roof. But, as the S&L costs shrink in subsequent years, so too will the aggregate growth rate of federal spending, even though domestic spending accounts will be increasing rapidly.

According to the budget, total spending in fiscal 1992 will increase "just" \$36.5 billion from 1991 levels, from approximately \$1.4 trillion to \$1.45 trillion. Yet the actual increase, excluding the S&L bailout costs, is \$60 billion—from \$1.3 trillion to \$1.36 trillion (see chart). The additional \$23.5 billion—hidden in the budget mumbo-jumbo—is the difference between the 1991 and '92 S&L bailout costs.

Likewise, in fiscal 1993, a \$52 billion jump in total federal spending is made to look like a modest \$8 billion increase.

That's not the end of the scam, however. As part of the S&L bailout, the government will own considerable real estate and other assets, which will be sold to the

look considerably smaller. In fiscal 1994, for instance, total spending is shown in the budget to decline by \$27 billion from fiscal 1993 levels. Remove the S&L gimmick, and fiscal 1994 spending is revealed to be \$55 billion higher than in fiscal 1993.

Mr. Darman plays a similar game with the money trimmed from the defense budget. As a result of last year's budget deal, defense spending will decrease by roughly \$10 billion over the next several years, from \$299.6 billion in fiscal 1991 (excluding the costs of Operations Desert Shield and Desert Storm) to \$289 billion in fiscal 1995. However, these small annual reductions account for much more in Washington parlance. Because defense spending had been projected to grow to \$351 billion by 1995, a cumulative increase of \$176 billion over the levels agreed to by the negotiators, Mr. Darman can claim massive spending restraint. But the money saved will not be used to reduce the deficit, nor will it be returned to the taxpayers in the form of tax relief. Instead, these defense savings are being used to further the appearance that aggregate spending growth is slowing when, in fact, non-defense spending is rising at an unprecedented rate.

Permanent Cost Cutting

By PETER DRUCKER

Scores of large organizations — businesses of all kinds but also government agencies, hospitals and universities—have sharply cut staffs these past few years. But few have realized the expected cost savings. In some cases costs have even gone up. In many more performance has suffered. And there are growing employee complaints about stress and work loads.

Cutting staffs to cut costs is putting the cart before the horse. The only way to bring costs down is to restructure the work. This will then result in reducing the number of people needed to do the job, and far more drastically than even the most radical staff cutbacks could possibly do. Indeed, a cost crunch should always be used as an opportunity to re-think and to re-design operations.

Eliminate Operations

To start cost-cutting managements usually ask: "How can we make this operation more efficient?" It is the wrong question. The question should be: "Would the roof cave in if we stopped doing this work altogether?" And if the answer is "probably not," one eliminates the operation. This is unpopular, to be sure. Some one is bound to argue: "We needed this procedure only 18 months ago and may need it again 18 months hence." But eliminating an entire operation is by far the most effective way to cut costs, and the only one likely to produce by itself permanent cost savings. It is by no means accident that the only places where cost-cutting done during the past few years has produced real savings are where an entire operation was eliminated—in the commercial bank, for instance, that closed down an unprofitable merchant-banking subsidiary.

And it is always amazing how many of the things we do will never be missed. One example—a fairly typical one—is the old manual order-entry system used until the task was computerized five years ago, but still maintained "just in case." Another is the system of duplicate patient files that many hospitals maintain, one for billing, one for patient-care, each run on a different computer with a different program. Altogether, up to one-third of all clerical and control operations are likely to be found unneeded, because they either never served a purpose or because they have outlived it. And nothing is less productive than to make more efficient what should not be done at all.

The next question in respect to the two-thirds of operations that will be found to serve a need is: "What contribution to the business should each make? What purpose does it serve?" Managements usually think the answer to be obvious. But more often than not, no one has an answer; or the answer is patently wrong; or, worst of all, there is more than one.

"Why do we check all our sales peoples' expense accounts?" "To keep them honest, of course." But that is hardly a business objective. The right answer is: "To keep sales expenses under control." And this is best done—and at a fraction of the cost—by determining expense standards based, for instance, on a sales person's need to travel and on the number of nights spent away from home. All that is needed to arrive at these standards is for a small number of experienced sales people to keep a record of their actual expenses twice a year for one week.

The previous system in the company—the system that thought its purpose was morality—kept 11 clerks busy the year round. The new system employs not even one full-time person. And it further enabled the company—a large national wholesaler of builders' supplies—to cut its sales force to 158 people from 167, despite a steady growth in sales volume. Sales people have more time to sell, when they no longer misuse selling time filling out lengthy "swindle sheets."

Just as common as the wrong answer to the question of what purpose a given operation serves, are two or more answers. But a well-designed and cost-effective operation serves one purpose only. To combine two or more in one operation means inefficiencies and sky-high costs.

"We have two objectives in supplying our 2800 national distributors," said the builders' supply people in answer to the question of what their big logistics operation contributed. "We make sure that none of our distributors is ever out of stock. And we make sure that we don't pile up excess

Drucker on Management

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One would make sure that the distributors are always stocked adequately with the fast-moving standard items that together account for about half of the firm's dollar sales. This is being done by stocking the distributors with 15% to 20% more of these items than they will sell during the next three weeks. There is no central inventory of these items any more, and no inventory control. The stock level for every distributor is determined by systematic spot checks, taken every other week, of the actual retail sale of a 3% sample of distributors—that is of 84 distributors throughout the country. This requires only seven or eight sales trainees, and has been found, incidentally, to be a most effective training tool.

A second operation then handles the 20% of "specialty" products—mostly big-ticket items—that together account for the other half of the firm's dollar sales (and for a substantially larger part of its profits). These are stocked in one central warehouse located at the hub of an air freight company, and shipped free of charge by overnight air delivery anyplace in the country within six hours of receipt of the order.

The old system cost almost 1% of the company's sales (and that in a business where a 6% return on sales is considered outstanding!). The new systems together cost less than one-third as much. And where the old system kept 53 people busy the two new systems together employ 20. Yet the new systems give both, better service and better inventory control.

The question of how to organize the re-

structured organization for maximum performance and minimum cost comes only at the very end. More computers to handle more data faster is rarely the right answer. To be sure, the end product will be in many cases expressed by a computer program. But the task is to define what information is needed rather than how to manipulate it.

This may mean—as it did in one of my earlier examples—switching from inside to outside data, in order to find out the actual retail sales of one's customers to the ultimate consumers. It may mean—especially in operations aimed at controlling a process—shifting from counting to statistics and sampling. Not only is sampling much cheaper than counting, it is far more reliable. Statistical analysis alone can provide the crucial information on which effective control rests: the difference between fluctuations within the permissible range of normal, and the "exception," that is the genuine malfunction, which calls for immediate remedy.

Cutting costs is only the beginning. If all that is being done is to cut costs without putting in adequate cost prevention, a recurrence of excess costs a few short years hence, can be guaranteed. For costs never drift down. Cost prevention requires steady work on productivity improvement of every operation, year in and year out—with a 3% annual improvement a minimum goal. It requires that every operation and every activity be put, every third year or so, to the question: "Do we really need to do this or should it be abandoned?" It requires that new operations and activities—and especially new staff operations—be entered only if an old operation is abandoned or at least pruned back.

Each operation and activity should also be questioned—again every three years—as to the purpose it serves and the contribution it makes to the business. And each, finally, should be subjected to the question: What is the simplest way to achieve this purpose?

Excess Fat

By now most of us have learned the hard way that dieting off fat is a good deal more difficult than not putting it on in the first place. Excess costs are excess fat. Cutting costs rarely gets much support from the work force itself; it means, after all, laying off people. Without active work-force participation, however, none of the measures needed for effective cost control are easy to implement. Indeed one reason why so many of the cost-cutting efforts of past years have failed to cut costs is that they were imposed from above on a work force that saw in them a threat to their own jobs and incomes. Cost prevention, however, can count on active, and indeed, enthusiastic work-force support. Employees know where the fat is. They also know that low, controlled costs mean better and more secure jobs.

A great deal more cost-cutting is still needed, especially in big organizations (and by no means only in American ones—the big Japanese companies, e.g. the big banks, are far more over-staffed still). But cost-cutting should always be used as the first step towards building permanent cost prevention into the organization.

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This may mean—as it did in one of my earlier examples—switching from inside to outside data, in order to find out the actual retail sales of one's customers to the ultimate consumers. It may mean—especially in operations aimed at controlling a process—shifting from counting to statistics and sampling. Not only is sampling much cheaper than counting, it is far more reliable. Statistical analysis alone can provide the crucial information on which effective control rests: the difference between fluctuations within the permissible range of normal, and the "exception," that is the genuine malfunction, which calls for immediate remedy.

Cutting costs is only the beginning. If all that is being done is to cut costs without putting in adequate cost prevention, a recurrence of excess costs a few short years hence, can be guaranteed. For costs never drift down. Cost prevention requires steady work on productivity improvement of every operation, year in and year out—with a 3% annual improvement a minimum goal. It requires that every operation and every activity be put, every third year or so, to the question: "Do we really need to do this or should it be abandoned?" It requires that new operations and activities—and especially new staff operations—be entered only if an old operation is abandoned or at least pruned back.

Each operation and activity should also be questioned—again every three years—as to the purpose it serves and the contribution it makes to the business. And each, finally, should be subjected to the question: What is the simplest way to achieve this purpose?

Excess Fat

By now most of us have learned the hard way that dieting off fat is a good deal more difficult than not putting it on in the first place. Excess costs are excess fat. Cutting costs rarely gets much support from the work force itself; it means, after all, laying off people. Without active work-force participation, however, none of the measures needed for effective cost control are easy to implement. Indeed one reason why so many of the cost-cutting efforts of past years have failed to cut costs is that they were imposed from above on a work force that saw in them a threat to their own jobs and incomes. Cost prevention, however, can count on active, and indeed, enthusiastic work-force support. Employees know where the fat is. They also know that low, controlled costs mean better and more secure jobs.

A great deal more cost-cutting is still needed, especially in big organizations (and by no means only in American ones—the big Japanese companies, e.g. the big banks, are far more over-staffed still). But cost-cutting should always be used as the first step towards building permanent cost prevention into the organization.

Mr. Drucker is a professor of social sciences at the Claremont Graduate School in California.

How to Be Competitive Though Big

By PETER F. DRUCKER

The big companies dominate the headlines. But midsized businesses are fast replacing them as the engines driving the American economy.

Between 1985 and 1990 American manufactured-goods exports rose by more than 50% in volume; those to Japan actually doubled. Yet, only two of the nation's biggest companies, Boeing and General Electric—selling airplanes and aircraft engines, respectively—significantly increased exports. The rest of the growth—the fastest ever recorded in peacetime America, and one of the fastest in any country's history—was contributed by medium-sized firms with sales (in 1990 dollars) of more than \$75 million to less than \$1 billion.

Since the 1987 stock market crash, big businesses across the board have steadily cut employment. Indeed, for the first time since the Great Depression, big businesses have been laying off white-collar people in large numbers. Yet, until the second half of last year, total employment still grew faster than population. Labor-force participation remained the highest in our history (and the highest ever recorded in peacetime for a developed country), and unemployment remained at a boom-time low. At least 75% of America's almost explosive employment growth since 1975 took place in midsized businesses.

Handicaps Disappeared

During the past decade or two, midsized business has become more competitive and big business less competitive. The handicaps under which midsized business used to labor have largely disappeared. Above all, now that a managerial or professional job in the big company no longer promises life-time security as it did only 10 years ago, midsized companies are fast becoming the employers of choice for many of the ablest young people.

But more important than the strengthening of the midsized firm is the decline in the advantage of being big.

The manufacturing companies that dominated their industries during the past hundred years—GE, Siemens and Philips;

Procter & Gamble, Unilever and Nestle; Du Pont, Hoechst and ICI; International Harvester and International Paper; the Standard Oil companies, Shell and Texaco; GM, Ford, Fiat and Daimler-Benz—were all built on the same conceptual foundation. And so was the Bell Telephone System. To each industry, the theory asserted, belongs one clearly delineated technology. It generates all the knowledge needed to lead the industry. In turn, whatever knowledge comes out of the industry's specific

This theory enabled the successful retailer to change from being a "distributor" of goods designed by outside makers into being a "buyer" who creates and designs the goods he sells—the pioneers were Sears and Marks & Spencer in the '20s and early '30s. Again, the theory still worked in the postwar period. Kmart, for instance, was built on it.

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technology will become a salable product for the company. And there is, the theory asserted further, very little if any overlap between different technologies and between different industries based on them.

This theory still underlay the rise of the very big companies of the post-World War II period, such as IBM in the U.S. and Matsushita, Hitachi and Toyota in Japan. It also underlay the rise since 1950 of such pharmaceutical giants as Hoffmann-La Roche, Merck and Pfizer. One of them, only 20 years ago, defined its business as "the application of biochemistry to supplying whatever products are needed in health care." And Citibank's strategy for becoming the world's first financial institution that is both transnational and a "universal bank" was based on the same theory of the business.

A parallel theory underlay the rise of the large retailers, such as Sears Roebuck in the U.S., Marks & Spencer in Britain, and the department-store chains in the U.S., Western Europe and Japan. They assumed homogeneous but totally distinct mass markets, again with little overlap between them. Everything bought by a customer within one of these markets would belong in the same value category, in terms of price or quality or life-style appeal.

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Conversely, one technology no longer feeds only one industry. Much of what the research labs of the big companies are now discovering finds its major application outside of the company and even outside of the industry—in the case of Bell Labs, for instance, outside of telecommunications. Above all, "industry" is becoming a very fuzzy term indeed.

Twenty-five years ago, computers and telephones were separate industries. Now AT&T has decided that telecommunications leadership requires acquiring a major computer company—NCR, a century-old maker of cash registers and a leader in computerized office equipment. Twenty-five years ago, copiers, printing machinery, typewriters and computers were

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Big businesses are not going to disappear. On the contrary, we will need quite a few big businesses, some even bigger than anything we have today. Information and money are becoming increasingly global. New challenges, such as the environment, demand the kind of transnational work that only very big enterprises can perform. And there are many products and services that can be supplied efficiently only by big organizations: building a big power plant or a pipeline; producing passenger jets; making paper; running long-distance telephone service, or making automobiles and trucks that can be serviced throughout the world or at least across a continent—the list is endless.

Global competition in high technology almost certainly requires bigness. The competitors threatening America's global position in high-tech industries, whether semiconductors, computers, factory automation or high-resolution TV, are not lonely garage mechanics. They are multi-billion-dollar giants. And the only American companies that have successfully fought them so far are very big companies—IBM, Intel, Motorola and Xerox, for example.

The challenge, therefore, is for the corporation to learn how to be competitive despite being big. This means becoming market-driven. It means building into the company's system an organized abandonment of yesterday's products and technologies. It means organizing the whole business around innovation. Big businesses will have to become not only better but different. "Synergy" will be out. The more clearly a business (especially a big one) is

focused on one product range or on one market, the better it is likely to do.

Another implication: Whatever diversification a big business needs—e.g., to gain access to a different technology or a different market—is better achieved through strategic alliances, such as partnerships, joint ventures and minority participations, than through acquisitions or grass-roots developments.

Finally, decentralization is no longer enough for a multiproduct, multitechnology, multimarkets company; the various units have to be set up as truly separate businesses. This is what GE, for instance, is trying to do in setting up 13 "Strategic Business Units." One might go a step further and organize the big business the way GE's European counterpart, Siemens in Germany, is organized: as a "group" in which each business is a separate company with its own CEO and board.

The Right Size

Big diversified companies of tomorrow may not even have "central management." They may emulate the two most successful builders of large business empires in the past two decades, the American investor Warren Buffett and the Anglo-American Hanson PLC. Both operate as "investors" that "supervise." They make sure that their individual businesses have the right plan, the right strategy and the management they need. But they do not "manage."

Still, bigness will no longer be desirable in itself. It will have to serve a function. For 100 years superior performance went with being the biggest in a given industry. From now on it will increasingly mean being the right size. And in most fields this will mean being midsized—as the leaders in American exports of manufactured goods already are.

The shift from the big to the midsized enterprise as the economy's center of gravity is a radical reversal of the trend that dominated all developed economies for more than a century. It has been all but ignored so far by economists, politicians and the media. It may well, however, have been the most important economic event of the past 20 years. One of its consequences is that to be competitive despite being big is fast becoming the new management challenge.

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A Better Way to Pay for College

By PETER F. DRUCKER

The "prestige" private colleges—the likes of Princeton, Amherst, the University of Chicago, Oberlin, Carleton and the Claremont Colleges (where I teach)—are all running scared. "How much longer," they ask, "will we still attract enough first-rate students?" They are hiring marketing consultants to "polish our image," churn out glossy recruiting brochures, and romance promising high-school seniors and their guidance counselors. And they have reason to worry.

Ten—even five—years ago, these colleges enjoyed a boom in applications even though the number of young people in the nation reaching college age was plummeting. Today, the college-age decline has bottomed out, and the number of youngsters qualified by their grades and test scores for admission to a prestige school is actually going up. Yet, applications are going down. The market share of the prestige colleges has been falling steadily these past five years, perhaps by as much as one-fifth. It is still going down.

There is only one reason for this decline in market share: "sticker shock." The number of youngsters wanting to go to a prestige school is as large as ever; and so is the number of parents who would like to send their child to one. But more and more of these youngsters, no matter how well qualified, do not even apply. They know that they cannot afford it.

The colleges have only themselves to blame. They all talk about "marketing," but they are guilty of the worst of all marketing sins: negative misrepresentation.

"In 1991-92 it'll cost you \$20,000 a year to come here," the prestige schools now tell prospective customers. But the relationship between this "sticker price" and the real cost for the average student is no closer than that between what the shopkeeper in the curio shop next to the Pyramids first asks for one of his "guaranteed fakes" and what even the most gullible tourist pays in the end.

More Like \$11,000 a Year

The average prestige-college students will end up paying around \$11,000 up front—that is, not much more than half the sticker price.

To be sure, up to two-fifths of the students actually pay the advertised price. But even they have access to student loans of about \$2,000 to \$2,500 a year. Three out of every five students, however, get "financial aid"—the euphemism for "discount." Prestige colleges now offer an average financial-aid discount of \$6,000 per student. Student loans, as already mentioned, cover an added \$2,000 to \$2,500. And a final \$1,000 to \$1,500 is accounted for by credit for work done by the student on campus. This then leaves an average bill of \$11,000 per student. Of course, since that is the average, many students pay less.

The colleges like to shroud financial aid in secrecy and mumbo-jumbo. But in the great majority of cases it is determined by a fairly straightforward formula: Take the applicant's family income; add to it whatever additional cash the applicant can draw on, e.g. from a trust fund set up by Grandmother; make a small allowance in the applicant's favor if any siblings are currently in college—and, presto, the admissions office knows within a few dollars how much financial aid it is going to allocate.

By and large, all the colleges use the same financial-aid formula. In fact, the Justice Department recently indicted the

Ivy League schools for price-fixing because they jointly set the financial-aid formula they all follow. The only ones who don't even know that there is a formula and who don't know how much they will have to pay are the prospective customers.

To be sure, \$11,000 is still a lot of money for one year of college—though, adjusted for inflation, it is about what prestige colleges charged during the Depression. It is also not significantly more than the \$8,000 to \$9,000 charged out-of-state students by major state universities. Above all, all our evidence shows that more than enough qualified applicants and their families would be perfectly willing to pay what colleges actually charge if only they knew the amount in advance. Just publishing the financial-aid formulas would almost overnight reverse the downward trend in applications at the prestige private colleges—it would probably swamp them.

But this would still be only a temporary fix. Five—at most 10—years out, the pres-

Drucker on Management

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The prestige private schools depend on a low student-to-faculty ratio, which means that faculty costs are high to begin with. And faculty costs will be under tremendous upward pressure as the present glut of Ph.D.s turns into a shortage around 1995. Unless the prestige private schools (and private schools in general) change the way they collect their money, their charges will sooner or later—and probably sooner—appear unacceptably high even with financial aid. In the end, under the current system, college charges will go so high that they will end up being taken over by the taxpayer, and the private college will become a thing of the past.

The basic problem of American higher education is that traditionally it has been priced no different from the way food, soap or shoes are priced. Customers pay in full when they take delivery of the merchandise. But a college education is not a consumer good that will be used up and gone within a short time. It is a long-term investment in the lifetime earning power of the graduate. As a consumer good, college education is becoming more and more of a bargain, and none a greater one than the degree of a prestige school.

The lifetime earnings of a person with a college degree are about three times those of a person without a college degree. And the lifetime earnings of a person with a degree from one of the prestige schools are even higher. This gap is widening as jobs paying above-average money without requiring advanced education—mainly blue-collar jobs in unionized mass-production industries—are fast disappearing.

Using present prices: Average prestige-school graduates will have put about \$50,000 of their or their families' money into their college educations by the time they

get their degrees. But the difference between their expected lifetime earnings and those of a graduate of any other kind of college may be as high as \$500,000. The difference between their expected lifetime earnings and those of a non-college graduate may well exceed \$1.5 million.

This may not be what the faculty means when it talks of "quality." But it is very much what potential students and their parents mean when they talk of "prestige schools."

It would not be very difficult to shift paying for a college education from the "front end," when most students have no money and next-to-no earning power, to a later period when their incomes are already sizable and rising fast. A substantial percentage of the students probably will elect to stick with the present system and pay in full while in school. And every student probably should be expected to pay a sizable portion of the bill—maybe a third—when the expense is incurred. But up to two-thirds of the bill could be postponed, if the student so chose, with the first installment payable (with adequate interest, of course) no later than, perhaps, five years after graduation and the last one no later than 15 years thereafter (i.e., before the graduates are well into their 40s and have college-age children themselves).

Students exercising this option would have to agree to have the installments paid through payroll deduction—something that came close to being made a requirement 40 years ago when we first went into federally guaranteed student loans. And they should be required to take out 20-year term life insurance for the amount of the outstanding liability; such insurance at age 22 costs practically nothing.

Little Financial Burden

Then the repayment claim for the investment made by the college in the future earning power of the student would become an eminently salable security, bearing little risk and a fair rate of return. The college under such a plan could be sure of being paid. The former student, now a graduate with a job and a decent income, could easily carry the annual installment, even if in a low-paying profession such as the ministry or nursing. And the graduate's family would have little or no financial burden at all. Under such a system, the colleges could charge what they need to build faculty and curriculum and still would not price themselves out of the quality-student market, as they are now about to do.

Neither of these proposals—to publish the real cost of going to college and to price college education according to the recipient's earning power—are new. John Silber, longtime president of Boston University—the largest, at 28,000 students, of the prestige private colleges—has advocated for years that we move the student's repayment liability into the graduate's earning years. And every college administrator readily agrees that the present system misdirects prospective customers and steadily erodes the private colleges' constituency and their ability to attract the students they need to survive. But the only thing the colleges have been *doing* so far is raising the sticker price 15%, year after year. It makes me wonder whether the private colleges really want to survive.

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would be perfectly willing to pay what colleges actually charge if only they knew the amount in advance. Just publishing the financial-aid formulas would almost overnight reverse the downward trend in applications at the prestige private colleges—it would probably swamp them.

But this would still be only a temporary fix. Five—at most 10—years out, the prestige private schools would find themselves in deep trouble again unless they change the way they price.

The prestige private schools depend on a low student-to-faculty ratio, which means that faculty costs are high to begin with. And faculty costs will be under tremendous upward pressure as the present glut of Ph.D.s turns into a shortage around 1995. Unless the prestige private schools (and private schools in general) change the way they collect their money, their charges will sooner or later—and probably sooner—appear unacceptably high even with financial aid. In the end, under the current system, college charges will go so high that they will end up being taken over by the taxpayer, and the private college will become a thing of the past.

The basic problem of American higher education is that traditionally it has been priced no different from the way food, soap or shoes are priced. Customers pay in full when they take delivery of the merchandise. But a college education is not a consumer good that will be used up and gone within a short time. It is a long-term investment in the lifetime earning power of

their college educations by the time they get their degrees. But the difference between their expected lifetime earnings and those of a graduate of any other kind of college may be as high as \$500,000. The difference between their expected lifetime earnings and those of a non-college graduate may well exceed \$1.5 million.

This may not be what the faculty means when it talks of "quality." But it is very much what potential students and their parents mean when they talk of "prestige schools."

It would not be very difficult to shift paying for a college education from the "front end," when most students have no money and next-to-no earning power, to a later period when their incomes are already sizable and rising fast. A substantial percentage of the students probably will elect to stick with the present system and pay in full while in school. And every student probably should be expected to pay a sizable portion of the bill—maybe a third—when the expense is incurred. But up to two-thirds of the bill could be postponed, if the student so chose, with the first installment payable (with adequate interest, of course) no later than, perhaps, five years after graduation and the last one no later than 15 years thereafter (i.e., before the graduates are well into their 40s and have college-age children themselves).

Students exercising this option would have to agree to have the installments paid through payroll deduction—something that came close to being made a requirement 40 years ago when we first went into federally guaranteed student loans. And they should be required to take out 20-year term life insurance for the amount of the outstanding liability; such insurance at age 22 costs practically nothing.

Little Financial Burden

Then the repayment claim for the investment made by the college in the future earning power of the student would become an eminently salable security, bearing little risk and a fair rate of return. The college under such a plan could be sure of being paid. The former student, now a graduate with a job and a decent income, could easily carry the annual installment, even if in a low-paying profession such as the ministry or nursing. And the graduate's family would have little or no financial burden at all. Under such a system, the colleges could charge what they need to build faculty and curriculum and still would not price themselves out of the quality-student market, as they are now about to do.

Neither of these proposals—to publish the real cost of going to college and to price college education according to the recipient's earning power—are new. John Silber, longtime president of Boston University, the largest of 28,000 students

they ask, "will we still attract enough first-rate students?" They are hiring marketing consultants to "polish our image," churn out glossy recruiting brochures, and romance promising high-school seniors and their guidance counselors. And they have reason to worry.

Ten—even five—years ago, these colleges enjoyed a boom in applications even though the number of young people in the nation reaching college age was plummeting. Today, the college-age decline has bottomed out, and the number of youngsters qualified by their grades and test scores for admission to a prestige school is actually going up. Yet, applications are going down. The market share of the prestige colleges has been falling steadily these past five years, perhaps by as much as one-fifth. It is still going down.

There is only one reason for this decline in market share: "sticker shock." The number of youngsters wanting to go to a prestige school is as large as ever; and so is the number of parents who would like to send their child to one. But more and more of these youngsters, no matter how well qualified, do not even apply. They know that they cannot afford it.

The colleges have only themselves to blame. They all talk about "marketing," but they are guilty of the worst of all marketing sins: negative misrepresentation.

"In 1991-92 it'll cost you \$20,000 a year to come here," the prestige schools now tell prospective customers. But the relationship between this "sticker price" and the real cost for the average student is no closer than that between what the shopkeeper in the curio shop next to the Pyramids first asks for one of his "guaranteed fakes" and what even the most gullible tourist pays in the end.

More Like \$11,000 a Year

The average prestige-college students will end up paying around \$11,000 up front—that is, not much more than half the sticker price.

To be sure, up to two-fifths of the students actually pay the advertised price. But even they have access to student loans of about \$2,000 to \$2,500 a year. Three out of every five students, however, get "financial aid"—the euphemism for "discount." Prestige colleges now offer an average financial-aid discount of \$6,000 per student. Student loans, as already mentioned, cover an added \$2,000 to \$2,500. And a final \$1,000 to \$1,500 is accounted for by credit for work done by the student on campus. This then leaves an average bill of \$11,000 per student. Of course, since that is the average, many students pay less.

The colleges like to shroud financial aid in secrecy and mumbo-jumbo. But in the great majority of cases it is determined by a fairly straightforward formula: Take the applicant's family income; add to it whatever additional cash the applicant can draw on, e.g. from a trust fund set up by Grandmother; make a small allowance in the applicant's favor if any siblings are currently in college—and, presto, the admissions office knows within a few dollars how much financial aid it is going to allocate.

By and large, all the colleges use the same financial-aid formula. In fact, the Justice Department recently indicted the

tomers. To be sure, \$11,000 is still a lot of money for one year of college—though, adjusted for inflation, it is about what prestige colleges charged during the Depression. It is also not significantly more than the \$8,000 to \$9,000 charged out-of-state students by major state universities. Above all, all our evidence shows that more than enough qualified applicants and their families

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The basic problem of American higher education is that traditionally it has been priced no different from the way food, soap or shoes are priced. Customers pay in full when they take delivery of the merchandise. But a college education is not a consumer good that will be used up and gone within a short time. It is a long-term investment in the lifetime earning power of the graduate. As a consumer good, college education is becoming more and more of a bargain, and none a greater one than the degree of a prestige school.

The lifetime earnings of a person with a college degree are about three times those of a person without a college degree. And the lifetime earnings of a person with a degree from one of the prestige schools are even higher. This gap is widening as jobs paying above-average money without requiring advanced education—mainly blue-collar jobs in unionized mass-production industries—are fast disappearing.

Using present prices: Average prestige-school graduates will have put about \$50,000 of their or their families' money into

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Neither of these proposals—to publish the real cost of going to college and to price college education according to the recipient's earning power—are new. John Silber, longtime president of Boston University—the largest, at 28,000 students, of the prestige private colleges—has advocated for years that we move the student's repayment liability into the graduate's earning years. And every college administrator readily agrees that the present system misdirects prospective customers and steadily erodes the private colleges' constituency and their ability to attract the students they need to survive. But the only thing the colleges have been doing so far is raising the sticker price 15%, year after year. It makes me wonder whether the private colleges really want to survive.

Mr. Drucker is a professor of social sciences at the Claremont Graduate School in California.

The Big Three Miss Japan's Crucial Lesson

By PETER F. DRUCKER

General Motors, Ford and Chrysler have improved car quality so much that several of their models are now as well-made as anything the Japanese offer. And through their discounts and financing deals they now offer the lowest prices. Yet they still steadily lose market share to the Japanese.

Detroit has also sharply reduced costs; some new Ford plants in the U.S. and in Mexico may now be the world's lowest-cost producers. Yet the Big Three are losing money hand over fist while the leading Japanese companies are profitable. All three—again with Ford in the lead—have sharply reduced the time it takes to develop a new design and bring it to market. But in the meantime the Japanese have reduced their lead-times even further, so that the time gap between Detroit and the Japanese has hardly narrowed at all.

There are a great many different diagnoses of Detroit's sickness: "fat" instead of "lean" manufacturing; union work rules; management's short-term vision; departmental parochialism, and so on. But the root of Detroit's problems goes much deeper. Detroit still operates on the assumption that the U.S. car market is homogeneous in its values and expectations but sharply segregated by income into four or five "socioeconomic" groups. This theory of the market shapes how Detroit sees the market, how it organizes itself, and how it designs, makes, merchandises and distributes its products. But this theory became obsolete at least 15 years ago.

Sloan's Legacy

Both the homogeneity of the market's values and expectations and its socioeconomic segmentation were first discerned by Alfred P. Sloan right after World War I. Sloan built GM on this insight into the world's biggest and for many decades its most profitable manufacturing enterprise. And both Chrysler and Ford—Chrysler during its rise in the '20s and '30s, Ford during its rebirth after World War II—built themselves in GM's image and on Sloan's socioeconomic market segmentation.

The Sloan theory of the U.S. market worked for more than 40 years—a good deal longer than such theories usually last. But it ceased to be valid in the '60s. Ford's Edsel should have been a roaring success.

It was researched, designed and marketed as the ultimate socioeconomic car for the newly affluent "middle-middle" market. Instead, it was rejected by every socioeconomic group. The marketing success of that period was the Volkswagen Beetle—the symbol of the "youth culture" and a low-priced car for affluent people. The 1973 petroleum crunch then finished off socioeconomic segmentation in the car market. It made driving a small, fuel-efficient car fashionable, if not patriotic, and a status symbol for the upper-middle class.

Many older Americans, those over 55 or so, still buy cars according to socioeco-

nomics. It makes sense, then, to have long lead-times for a new design. A life-style market is fuzzy and extremely volatile. One has to plan long-range and for every possible (or impossible) contingency so as to be able to act with extreme speed when opportunity knocks.

The life-style market is the one the Japanese take for granted, the market that they see, plan for, are prepared for. For their automobile industry barely existed when socioeconomic market segmentation prevailed. It emerged only after World War II and entered the U.S. only in the '70s. Japanese cars are therefore designed

ferent from any other Mazda car. 80% of its parts are standard. This then enabled Mazda to make good money on the Miata even though it probably has sold fewer than a hundred thousand units, at which volume any American manufacturer would lose his shirt.

Detroit knows how to design successful life-style cars. In fact, every truly successful American car since World War II has been a life-style car: the Jeep as it was transformed after World War II from army roughneck into a high-performance and comfortable "outdoors" vehicle; the Rambler, American Motors' original compact, which was designed as the second car of the newly affluent; Ford's Mustang and Thunderbird; the Dodge Minivan. But despite these successes Detroit remains in the grip of Sloan's socioeconomic market segmentation. GM set up the Saturn Division a few years back as a new and separate life-style-based business. But when the Saturn car was unveiled last year, it turned out to be just another socioeconomic car for the already overcrowded "middle-middle" segment.

Forty-five years of unbroken success are indeed hard to slough off. Everybody in Detroit management has grown up with socioeconomic market segmentation as an article of faith, if not as a law of nature. Worse: The way the Big Three are structured all but forces them into a socioeconomic straitjacket.

Sloan decentralized GM in the early '20s into divisions, each of which serves one socioeconomic segment. He similarly organized distribution in dealerships, each serving one of these segments. Despite countless reorganizations, this is still how GM, Ford and Chrysler function. As a result, planning, design and marketing are either socioeconomically determined—that is, run counter to the way the market now actually works—or, if one of the Big Three designs a life-style car it is then subordinated to the socioeconomic axiom.

One example: The Chevrolet Cavalier is arguably the best second car on the American market—small enough to park easily and big enough for the entire family and a lot of luggage. But in order to give each GM division a "popular" car, it was parceled out among them. Several divisions thus offer and advertise the same car under different names, through different dealers and at different prices. Thus GM

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nomics. Detroit is losing the younger ones and with them the future. Up to half of them buy "life-style" cars—primarily non-Detroit cars. Income is, of course, still important. But where it was the determinant in automobile buying from 1920 until 1965 or 1970, it has now become a restraint—in the U.S., in Western Europe and in Japan. The determinant increasingly is "life style": that is, values and expectations a potential customer largely selects for himself. And life style is as elusive and qualitative a concept as socioeconomic segmentation was tangible and rigorously quantitative.

Equally important: Sloan's theory of the market assumed one car per family. But the American family today owns two as a rule. And there is nothing "typical" about the choice of the second car. In the same upper-middle socioeconomic group—all two-career professional families—there may be the family whose two cars are a Buick and a Dodge minivan; the family with two compacts, one American, one Japanese; the family whose two cars are a big Mercedes and a Ford Escort; and the couple, both professors at the state university, who drive "His" and "Hers" BMWs. Which of the four is "typical"?

A market of socioeconomic segments is

from the beginning as life-style cars, and the cars for one life-style market are designed to look very much alike regardless of price. All Toyota "family cars," for example, from the low-price Corolla to the luxury Lexus, have the same look of comfortable solidity. They differ mainly in options and accessories rather than in style or in the way they handle.

But the Japanese are also organized to be opportunistic, which means that they continuously plan for every conceivable contingency so that they can move with lightning speed whenever an opportunity opens. When the success of Honda's Acura showed that there was a substantive market for a luxury car among baby boomers reaching middle age, Toyota and Nissan both already had detailed plans for such a car—and this enabled them to have it produced and out in the market in less than three years.

The Japanese also try to design parts so that they can be combined in any number of ways even though this considerably increases the cost of tools and dies—rank heresy for any American automobile producer. This made it possible, for instance, for Mazda to bring out in no time at all its sports car, the Miata—the marketing sensation of 1989. Though it looks entirely dif-

customers are confused and complain that GM cars have lost all product differentiation. GM customers also tend to settle for the cheapest version with the fewest options and accessories and thus with the lowest profit margin for GM.

The Cavalier's main competitor, Toyota's Corolla, is marketed, advertised and sold as one model by one group of dealers and with a full array of options and accessories. As a result, Corolla customers tend to buy the biggest package of options and accessories, which is where the profits are. And the Toyota dealers can also give much better service because they have so much more volume.

Teams vs. Traitors

The socioeconomic bent of the American automobile industry also explains in large measure its long lead times in developing new models and in reacting to market changes. Instead of being divided into autonomous market-segment divisions, the Japanese companies are decentralized into powerful, autonomous company-wide functions, such as engineering, manufacturing and marketing. It is easy for them to form company-wide teams to work on designs outside the existing product scope. In Detroit, however, where market-segment divisions dominate, people who work on such teams risk being considered traitors by the division on whose payroll they are.

How can Detroit free itself from the straitjacket of its past success? It may require the complete restructuring of the traditional divisions and of the traditional dealer system as well. It may even require that GM, the biggest (and for more than 50 years, the most successful) company, be split into two or more competing businesses (which, incidentally, was advocated by some GM executives right after World War II). And until Detroit restructures itself to fit today's rather than yesterday's American automobile market, and today's American society, no amount of improvement in manufacturing processes, quality management or interfunctional and inter-departmental teamwork is likely to restore it to health and to leadership.

Mr. Drucker is a professor of social sciences at the Claremont Graduate School in California.

Secrets of the U.S. Export Boom

By PETER F. DRUCKER

The most important event in the world economy in the 1980s was the boom in U.S. manufacturing exports. In just five years, from 1986 to 1991, these exports almost doubled, with the biggest increases in sales going to Japan and West Germany.

This came as a surprise to businessmen, economists and government forecasters. When the over-valuation of the dollar, especially against the yen, was corrected in the fall of 1985, everyone was absolutely certain that imports into the U.S. would fall sharply. Instead, they have risen steadily, thanks mainly to the unquenchable thirst for oil and to the continuing decline of the American automobile industry. But exports? No one then thought seriously that they could do more than hold their own at best.

The export boom was unprecedented in American history and, indeed, in economic history altogether. Never before had a fully developed country experienced such a rapid growth in exports of manufactured goods—and that was starting from a very high base, since the U.S. was already the world's number one exporter. This performance is all the more impressive since most of Latin America, traditionally the best customer for American manufactured goods, is still deeply depressed. Only Mexico—and then only during the past two years—has come to life again as a big buyer.

Explosive Growth

The export boom fueled the continuing expansion of the U.S. economy during the second Reagan term. It has kept the recent recession from turning into full-blown depression with double-digit unemployment. And, unless the world economy slumps, exports of American manufactured goods are likely to continue to do well. Their explosive growth, however, has slowed down sharply. The export boom has clearly peaked. What, then, are its lessons?

At first glance there seems to be no pattern. The list of goods whose exports jumped contains high-tech products such as jet engines, heart valves and sophisticated software for programming paper machines. It also includes goods normally not considered "tech" at all; movies and rock recordings, running shoes, blue jeans and office furniture—and everything in between.

The star performers come in all sizes: giants such as Boeing, which sells airplanes, and General Electric, which produces body scanners and aircraft engines; any number of middle-sized companies

such as Millipore of New Bedford, Mass., the world's leader in water treatment equipment, and Giorgio Perfumes of Beverly Hills, Calif.; and, amazingly, many small and even tiny companies such as the machine shop with 35 employees that makes a specialized control instrument for the pharmaceutical industry or the company that produces hospital paging systems.

Among the stars are firms that have been active in the world economy for a long time, including many, such as 3M, that have operated big plants abroad for decades. But the list also includes quite a few firms that had never before filled a foreign order.

Yet, for all their diversity, the winning products and their makers have some fea-

same tastes, the same values, the same buying habits as American engineers or American teen-agers. "I do not sell on the world market," says the heart-valve manufacturer. "I sell to cardiac surgeons."

This, then, is probably the most important lesson of the export boom: The world market is a "foreign" market only in terms of trade statistics. For successful business people, it is a congeries of "familiar" markets, at least for knowledge-intensive products. And these are the products that increasingly dominate world trade in manufactured goods.

Another important lesson: Bigness is not an advantage, let alone a prerequisite, to success in the world market (as Americans believed 30 years ago and as the Japanese still seem to believe). Many of the

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tures in common and it is these that explain their success. Indeed, these features may be the keys to success in today's world economy.

All the successful export products have clear product differentiation. Each is distinct; not one is a "commodity." They are priced competitively; but not one is sold primarily on price. The successful export products are all high "value-added" goods. And what adds high value to them is knowledge, or, at least ingenuity, as in the case of 3M's "Post-Its."

Most of the successful companies also have clearly defined markets; indeed, they have clearly known customers. "I never before shipped anything overseas," says the maker of the control instrument for the pharmaceutical industry. "But I've known every one of my overseas customers for any number of years from trade shows and industry conventions. As customers they were new; but as people they weren't 'foreigners' but 'old friends.'"

Similarly, Boeing knows every single one of the world's airlines and Hollywood knows every major movie distributor anywhere. The Japanese engineers buying U.S.-made work processors or the East German teen-agers queuing up for U.S.-made rock tapes are not, of course, known personally to the U.S. producers. But neither are they "foreigners." They have the

winners in the U.S. export boom are middle-sized or small companies with expertise in a given field. All successful companies—no matter what their size—are highly concentrated. They are all single-product or single-technology businesses.

Boeing, for example, is very big; but all it makes is airplanes. General Electric is engaged in a multitude of different businesses but its medical-electronics division makes and sells only medical electronics, and its jet-engine division produces only aircraft engines. The world market does not pay for what is still fashionable among financial people and still taught in the business schools: running a company as a "portfolio" of businesses; "balancing" businesses with different cyclical characteristics; or keeping old products as "milk cows" to offset the cash demands of new technologies and new products.

One more lesson. There is an additional skill crucial for successful exporters in today's world market: managing foreign-exchange exposure and thus avoiding foreign-exchange losses.

During the Carter and early Reagan years, U.S. exporters took huge foreign-exchange losses. European and Japanese exporters still do. But for American companies such losses are now quite rare even though the past five years saw extreme currency fluctuations.

This isn't the case with taxes. Compared to the Europeans—especially the Germans—the Americans are still babes in the woods when it comes to them. Small exporters rarely know that they can get substantial tax savings under American law (though as a rule only with professional help). But even the smallest American exporter now knows how to minimize foreign-currency exposure. This newly acquired skill has become a major competitive advantage for U.S. business in today's world markets.

Exporting and manufacturing abroad; the U.S. export boom shows, complements each other. Once an exporter of a knowledge-intensive product holds a substantial share of a foreign market, he has to produce there. Otherwise he simply creates market opportunity for a domestic competitor. This holds true even for the small exporter. When he had gained 35% of the market in Western Europe and Japan, the maker of hospital-pagers had to start operations there. "Local imitators were beginning to sell around us," the owner says. "We began with assembly operations; within two years we had to put in small but fully equipped machine shops."

Far from "exporting American jobs," manufacturing overseas for overseas markets creates American jobs. Within two years, for example, the hospital-pager firm had to hire an additional 15 Americans to supply parts and machinery to its new overseas operations.

National Economies

Finally, the export boom of the past five years provides strong support for the contention of Harvard economist Robert Reich, who argues in "The Work of Nations" that knowledge rather than national boundaries defines today's developed markets. But it also supports the opposite thesis of the importance of a national economy and of the structure of the home market—the thesis recently put forth by another Harvard professor, Michael Porter, in "The Competitive Advantage of Nations."

The reason American manufacturers responded so quickly and so successfully to the export opportunities opened by the dollar-devaluation of 1985 is that the vigorous competition of the U.S. home market makes them both opportunity- and market-driven.

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Another important lesson: Bigness is not an advantage, let alone a prerequisite, to success in the world market (as Americans believed 30 years ago and as the Japanese still seem to believe). Many of the winners in the U.S. export boom are middle-sized or small companies with expertise in a given field. All successful companies—no matter what their size—are highly concentrated. They are all single-product or single-technology businesses.

Boeing, for example, is very big; but all it makes is airplanes. General Electric is engaged in a multitude of different businesses but its medical-electronics division makes and sells only medical electronics, and its jet-engine division produces only aircraft engines. The world market does not pay for what is still fashionable among financial people and still taught in the business schools: running a company as a "portfolio" of businesses; "balancing" businesses with different cyclical characteristics; or keeping old products as "milk cows" to offset the cash demands of new technologies and new products.

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During the Carter and early Reagan years, U.S. exporters took huge foreign-exchange losses. European and Japanese exporters still do. But for American companies such losses are now quite rare even though the past five years saw extreme currency fluctuations.

This isn't the case with taxes. Compared to the Europeans—especially the Germans—the Americans are still babes in the woods when it comes to them. Small exporters rarely know that they can get substantial tax savings under American law (though as a rule only with professional help). But even the smallest American exporter now knows how to minimize foreign-currency exposure. This newly acquired skill has become a major competitive advantage for U.S. business in today's world markets.

Exporting and manufacturing abroad, the U.S. export boom shows, complement each other. Once an exporter of a knowledge-intensive product holds a substantial share of a foreign market, he has to produce there. Otherwise he simply creates market opportunity for a domestic competitor. This holds true even for the small exporter. When he had gained 35% of the market in Western Europe and Japan, the maker of hospital-pagers had to start operations there. "Local imitators were beginning to sell around us," the owner says. "We began with assembly operations; within two years we had to put in small but fully equipped machine shops."

Far from "exporting American jobs," manufacturing overseas for overseas markets creates American jobs. Within two years, for example, the hospital-pager firm had to hire an additional 15 Americans to supply parts and machinery to its new overseas operations.

National Economies

Finally, the export boom of the past five years provides strong support for the contention of Harvard economist Robert Reich, who argues in "The Work of Nations" that knowledge rather than national boundaries defines today's developed markets. But it also supports the opposite thesis of the importance of a national economy and of the structure of the home market—the thesis recently put forth by another Harvard professor, Michael Porter, in "The Competitive Advantage of Nations."

The reason American manufacturers responded so quickly and so successfully to the export opportunities opened by the dollar-devaluation of 1985 is that the vigorous competition of the U.S. home market makes them both opportunity- and market-driven.

Mr. Drucker is a professor of social sciences at the Claremont Graduate School in California.

Japan: New Strategies for a New Reality

By PETER F. DRUCKER

Quietly, and with a minimum of discussion, the leading Japanese companies are moving to new business strategies. They are embracing two radically new theories: To do blue-collar manufacturing work in Japan is a gross misallocation of resources that weakens both the company and the national economy. And leadership throughout the developed world no longer rests on financial control or traditional cost advantages. It rests on control of brain power.

These companies are also fast restructuring their organizations on the assumption that the winner in a competitive world economy is going to be the firm that best organizes the systematic abandonment of its own products. And they are moving from Total Quality Management toward Zero-Defects Management based on drastically different principles and methods.

The Japanese now hold about 30% of the U.S. automobile market and expect to increase this share substantially in the next few years. Yet they also expect to stop exporting Japanese-made cars to the American market within the next three to five years; by 1995 or so, most Japanese marques sold in the U.S. should be manufactured in North American plants.

The Real Reason

Similarly, the Japanese expect to have something like one-third of the automobile market of the European Economic Community by the year 2000 (whatever their present promises to the EC to the contrary), but again without exporting many cars from Japan. And Japanese multinationals—Toyota, Honda, Sony, Matsushita, Fujitsu, the ceramics leader Kyocera, and the Mitsubishi companies—are pouring staggering amounts of money into manufacturing plants in developing countries. They are in Tijuana on the U.S.-Mexican border, throughout South America, in Southern Europe, and in Southeast Asia.

The standard explanations for moving manufacturing out of Japan are "foreign protectionism" and "Japan's growing labor shortage." Both explanations are legitimate, but they are also smoke screens. The real reason is the growing conviction among Japan's business leaders and influential bureaucrats that manufacturing work does not belong in a developed country such as Japan.

Before youngsters can go to work on the assembly line, my Japanese friends say again and again, Japan pours \$100,000 in school expenses into them. And then they have to get a middle-class income, lifetime security, a pension and health care. In Bangkok or in Tijuana, youngsters require very little capital investment in their educations; and they are "middle class" if paid a 10th the wages of the U.S. or Japan. Yet their productivity after two or three years of training is as high in Tijuana or in Bangkok as it is in Nagoya or Detroit. When you figure the enormous social-capital invested in them, my friends say, the

direct financial return is usually zero. But the Japanese are paying not for dividends but access to the knowledge their partners will produce, and control over it—or at least priority in using it.

Increasingly Japanese companies employ foreigners in their international operations, both as professionals and as executives. The large Japanese auto makers now all have design studios in Southern California and Westerners running their international marketing. But the use of the knowledge these foreigners produce is "proprietary" and tightly held within the Japanese management team. And while in

Drucker on Management

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return that blue-collar workers make to society in developed countries is at most 1% or 2%; in Latin America or Indonesia, it's 20 times that.

Whenever I then argue that a country is highly vulnerable without a strong manufacturing base, they respond that the supply of young people in the developing world will be so large in the next 30 years that it's absurd to worry about the "manufacturing base," the way Americans do. Indeed it's my friends' social responsibility to Japan, they say, to make sure that as few as possible of its high-investment, high-cost young people are being misused for low-yield manufacturing work.

Instead, the new Japanese strategies call for total control of what now matters. To be competitive, the argument goes, Japan requires leadership in technology, marketing and management, and firm control of what my Japanese friends are beginning to call "brain capital."

The Japanese are willing to pay large sums to gain access to knowledge—through a minority participation in a Silicon Valley computer specialist; through similar investments in U.S. and European pharmaceutical or genetics entrepreneurship; above all, through financing research in Western (mainly U.S.) universities. The di-

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Every major Japanese industrial group now has its own research institute, whose main function is to bring to the group awareness of any important new knowledge—in technology, in management and organization, in marketing, in finance, in training—developed world-wide. On my last trip to Japan, a few months ago, I spoke at the 20th anniversary of one of these think tanks, that of the Mitsubishi Group. At lunch after my talk, one of the most respected elders of the Mitsubishi clan said to me: "In another 20 years the entire Mitsubishi Group will be organized around this research institute."

Everybody now knows that the Japanese can bring out a new product in half the time it takes their American competitors and in one-third the time it takes the Europeans. And everybody also knows that major U.S. companies are reorganizing their research and development work on the Japanese model, along cross-functional lines. But the Japanese are already moving to the next stage.

They are reorganizing R&D so that it

simultaneously produces *three* new products with the effort traditionally needed to produce one. And they do this by starting out with a deadline for abandoning today's new product on the very day it is first sold. "The faster we can abandon today's new product, the stronger and the more profitable we'll be" is the new motto.

To most Western businessmen, this is madness. They believe that a product becomes more profitable the longer its product life—for then the money spent on developing it has been written off. But "writing off" to the Japanese is useful to cut taxes but otherwise self-delusion.

Money spent on developing a product or a process is not "investment" to the Japanese; it is "sunk cost." But the main reason the leading Japanese businesses are now shifting the life cycle of their products is their conviction that the only alternative is for a competitor to do so—and then the competitor will have not only the profits but the market.

My Japanese friends acknowledge that some Western companies—3M, for example—have long operated on the policy that 70% of their sales five years hence will have to come from products that do not exist today. But these companies rely on a spontaneous upswelling of entrepreneurship from within.

By deciding in advance that they will abandon a new product within a given period of time, the Japanese force themselves to go to work immediately on replacing it, and to do so on three tracks:

One track (*kaizen*) is organized work on improvement of the product with specific goals and deadlines—e.g., a 10% reduction in cost within 15 months and/or a 10% improvement in reliability within the same time, and/or a 15% increase in performance characteristics—and enough in any event to result in a truly different product. The second track is "leaping"—developing a new product out of the old. The best example is still the earliest one: Sony's development of the Walkman out of the newly developed portable tape recorder. And finally there is genuine innovation.

Increasingly, the leading Japanese companies organize themselves so that all three tracks are pursued simultaneously and under the direction of the same cross-functional team. The idea is to produce *three* new products to replace each present product, with the same investment of time and money—with one of the three then becoming the new market leader and producing the "innovator's profit."

Finally, the leading Japanese companies are moving from Total Quality Management to Zero Defects Management. "We can't use TQM," one of the top manufacturing people at Toyota recently said. "At its very best—and no one has reached that yet—it cuts defects to 10%. But we turn out four million cars, and a 10% defect rate means that 400,000 Toyota buyers get a 100% defective car. But Zero-Defects Management is now possible and actually not too difficult."

What the Japanese now practice is very much a return to Frederic Taylor's Scientific Management. Only the operators themselves, rather than the industrial engineer, take the initiative in studying the task, the work and the tools. And instead of stopwatch and camera, they use computer simulation.

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The Drucker Foundation

THE WALL STREET JOURNAL THURSDAY, DECEMBER 19, 1991

It Profits Us to Strengthen Nonprofits

By PETER F. DRUCKER

America needs a new social priority: to triple the productivity of the nonprofits and to double the share of gross personal income—now just below 3%—they collect as donations. Otherwise the country faces, only a few years out, social polarization.

Federal, state and local governments will have to retrench sharply, no matter who is in office. Moreover, government has proved incompetent at solving social problems. Virtually every success we have scored has been achieved by nonprofits.

The great advances in health and longevity have been sponsored, directed and in large part financed by such nonprofits as the American Heart Association and the American Mental Health Association. Whatever results there are in the rehabilitation of addicts we owe to such nonprofits as Alcoholics Anonymous, the Salvation Army and the Samaritans. The schools in which inner-city minority children learn the most are parochial schools and those sponsored by some Urban League chapters. The first group to provide food and shelter to the Kurds fleeing from Saddam last spring was an American nonprofit, the International Rescue Committee.

Double Rehabilitation

Many of the most heartening successes are being scored by small, local organizations. One example: The tiny Judson Center in Royal Oak, Mich.—an industrial suburb of Detroit—gets black women and their families off welfare while simultaneously getting severely handicapped children out of institutions and back into society.

Judson trains carefully picked welfare mothers to raise in their homes, for a modest salary, two or three crippled or emotionally disturbed kids. The rehabilitation rate for the welfare mothers is close to 100%, with many of them in five years or so moving into employment as rehabilitation workers. The rehabilitation rate for the children, who otherwise would be condemned to lifetime institutional confinement, is about 50%; and every one of these kids had been given up as hopeless.

The nonprofits spend far less for results than governments spend for failures. The cost per pupil in the New York Archdiocese's parochial schools—70% of whose students stay in school, stay off the streets and graduate with high literacy and salable skills—is about half that in New York City's failing public schools.

Two-thirds of the first-offenders paroled in Florida into the custody of the Salvation Army are "permanently" rehabilitated—they are not indicted for another crime for at least six years. Were they to go to prison, two-thirds would become habitual criminals. Yet a prisoner costs at least twice as much per year as a parolee in the

custody of the Salvation Army.

The Judson Center saves the state of Michigan \$100,000 a year for each welfare mother and her charges—one-third in welfare costs and two-thirds in the costs of keeping the children in institutions.

Though the majority of the students in private colleges and universities get some sort of financial aid, their parents still pay more than do the parents of students in state universities and colleges. But the state-university student's education actually costs a good deal more than (in some states twice as much as) that of the student in a private nonprofit institution—with the difference paid by the taxpayer.

nell, head of Independent Sector, the national association of the large nonprofits) believe that, within 10 years, two-thirds of American adults—120 million—will want to work as nonprofit volunteers for five hours a week each, which would mean a doubling of the man- and woman-power available for nonprofit work.

And the nonprofits are becoming highly innovative. When some friends and I founded the Peter F. Drucker Foundation for Non Profit Management a year ago, we planned as our first public event a \$25,000 award for the best innovation that would "create a significant new dimension of non profit performance." We hoped to

ble appeals most of us get in the mail every week, usually just one talks of results—the one that gets our check.

The nonprofits will have to get the additional money they need primarily from individuals—as they always have. Even if there is government money—mainly via vouchers, I expect—and money from companies, they can supply only a fraction of what is needed.

Finally, we need a change in the attitude of government and government bureaucracies. President Bush has spoken glowingly of the importance of the nonprofits as the "thousand points of light." If he really believes this, he should propose allowing taxpayers to deduct \$1.10 for each dollar they give to nonprofits as a cash donation. This would solve the nonprofits' money problems at once. It also could cut government deficits in the not-so-very-long run—for a well-managed nonprofit gets at least twice the bang out of each buck that a government agency does. Some of the voucher programs already enacted cut public school budgets, since some of the district's per-pupil spending moves with the child into the private sector.

Instead of such a policy, however, we have the IRS making one move after the other to penalize and to curtail donations to nonprofits—and the tax collectors of the big states are all doing the same. Each of these moves is presented as "closing a tax loophole"; in fact, none has yielded a penny of additional revenue and none is likely to do so.

First Line of Attack

The real motivation for such actions is the bureaucracy's hostility to the nonprofits—not too different from the bureaucracy's hostility to markets and private enterprise in the former Communist countries. The success of the nonprofits undermines the bureaucracy's power and denies its ideology. Worse, the bureaucracy cannot admit that the nonprofits succeed where governments fail. What is needed, therefore, is a public policy that establishes the nonprofits as the country's first line of attack on its social problems.

In my 1969 book "The Age of Discontinuity" I first proposed "privatization," only to have every reviewer tell me that it would never happen. Now, of course, privatization is widely seen as the cure for modern economies mismanaged by socialist bureaucracies. We now need to learn that "nonprofitization" may for modern societies be the way out of mismanagement by welfare bureaucracies.

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Drucker on Management

A great many nonprofits still believe that the way to get money is to hawk needs. But the American public gives for results. It no longer gives to "charity"; it "buys in."

The nonprofits have the potential to become America's social sector—equal in importance to the public sector of government and the private sector of business. The delivery system is already in place: There are now some 900,000 nonprofits, the great majority close to the problems of their communities. And about 30,000 of them came into being in 1990 (the latest year for which figures are available)—practically all dedicated to local action on one problem: tutoring minority children; furnishing ombudsmen for patients in the local hospital; helping immigrants through government red tape.

Where 20 years ago the American middle class thought it had done its social duty by writing a check, it increasingly commits itself to active doing as well. According to the best available statistics, there are now some 90 million Americans—one out of every two adults—working as "volunteers" in nonprofits for three hours a week on average; the nonprofits have become America's largest "employer."

Increasingly these volunteers do not look upon their work as charity; they see it as a parallel career to their paid jobs and insist on being trained, on being held accountable for results and performance, and on career opportunities for advancement to professional and managerial—though still unpaid—positions in the nonprofit. Above all, they see in volunteer work access to achievement, to effectiveness, to self-fulfillment, indeed to meaningful citizenship. And for this reason there is more demand for well-structured volunteer jobs than there are positions to fill.

Some observers (such as Brian O'Con-

receive 40 applications. We received 809—and most were deserving of a prize.

The actual award went to the Judson Center, but the big nonprofits are as innovative as the small fry in many cases. With several billion dollars in revenue, Family Service America—headquartered in Milwaukee—has become bigger than a good many Fortune 500 companies; it now is probably the biggest American nonprofit next to the Red Cross. It has achieved its phenomenal growth in part through contracting with large employers such as General Motors to help employee families with such problems as addiction or the emotional disorders of adolescent children.

For the nonprofits' potential to become reality, three things are needed. First, the average nonprofit must manage itself as well as the best-managed ones do. The majority still believe that good intentions and a pure heart are all that are needed. They do not yet see themselves as accountable for performance and results. And far too many splinter their efforts or waste them on non-problems and on activities that would be done better—and more cheaply—by a business.

Second, nonprofits have to learn how to raise money. The American public has not become less generous—there is little evidence of the "compassion fatigue" nonprofit people talk about. In fact, giving has been going up quite sharply these past few years—from 2.5% of personal income to 2.9%. Unfortunately, a great many nonprofits still believe that the way to get money is to hawk needs. But the American public gives for results. It no longer gives to "charity"; it "buys in." Of the charita-

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ble appeals most of us get in the mail every week, usually just one talks of results—the one that gets our check.

The nonprofits will have to get the additional money they need primarily from individuals—as they always have. Even if there is government money—mainly via vouchers, I expect—and money from companies, they can supply only a fraction of what is needed.

Finally, we need a change in the attitude of government and government bureaucracies. President Bush has spoken glowingly of the importance of the nonprofits as the "thousand points of light." If he really believes this, he should propose allowing taxpayers to deduct \$1.10 for each dollar they give to nonprofits as a cash donation. This would solve the nonprofits' money problems at once. It also could cut government deficits in the not-so-very-long run—for a well-managed nonprofit gets at least twice the bang out of each buck that a government agency does. Some of the voucher programs already enacted cut public school budgets, since some of the district's per-pupil spending moves with the child into the private sector.

Instead of such a policy, however, we have the IRS making one move after the other to penalize and to curtail donations to nonprofits—and the tax collectors of the big states are all doing the same. Each of these moves is presented as "closing a tax loophole"; in fact, none has yielded a penny of additional revenue and none is likely to do so.

First Line of Attack

The real motivation for such actions is the bureaucracy's hostility to the nonprofits—not too different from the bureaucracy's hostility to markets and private enterprise in the former Communist countries. The success of the nonprofits undermines the bureaucracy's power and denies its ideology. Worse, the bureaucracy cannot admit that the nonprofits succeed where governments fail. What is needed, therefore, is a public policy that establishes the nonprofits as the country's first line of attack on its social problems.

In my 1969 book "The Age of Discontinuity" I first proposed "privatization," only to have every reviewer tell me that it would never happen. Now, of course, privatization is widely seen as the cure for modern economies mismanaged by socialist bureaucracies. We now need to learn that "nonprofitization" may for modern societies be the way out of mismanagement by welfare bureaucracies.

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Drucker on Management

A great many nonprofits still believe that the way to get money is to hawk needs. But the American public gives for results. It no longer gives to "charity"; it "buys in."

The nonprofits have the potential to become America's social sector—equal in importance to the public sector of government and the private sector of business. The delivery system is already in place: There are now some 900,000 nonprofits, the great majority close to the problems of their communities. And about 30,000 of them came into being in 1990 (the latest year for which figures are available)—practically all dedicated to local action on one problem: tutoring minority children; furnishing ombudsmen for patients in the local hospital; helping immigrants through government red tape.

Where 20 years ago the American middle class thought it had done its social duty by writing a check, it increasingly commits itself to active doing as well. According to the best available statistics, there are now some 90 million Americans—one out of every two adults—working as "volunteers" in nonprofits for three hours a week on average; the nonprofits have become America's largest "employer."

Increasingly these volunteers do not look upon their work as charity; they see it as a parallel career to their paid jobs and insist on being trained, on being held accountable for results and performance, and on career opportunities for advancement to professional and managerial—though still unpaid—positions in the nonprofit. Above all, they see in volunteer work access to achievement, to effectiveness, to self-fulfillment, indeed to meaningful citizenship. And for this reason there is more demand for well-structured volunteer jobs than there are positions to fill.

Some observers (such as Brian O'Con-

receive 40 applications. We received 809—and most were deserving of a prize.

The actual award went to the Judson Center, but the big nonprofits are as innovative as the small fry in many cases. With several billion dollars in revenue, Family Service America—headquartered in Milwaukee—has become bigger than a good many Fortune 500 companies; it now is probably the biggest American nonprofit next to the Red Cross. It has achieved its phenomenal growth in part through contracting with large employers such as General Motors to help employee families with such problems as addiction or the emotional disorders of adolescent children.

For the nonprofits' potential to become reality, three things are needed. First, the average nonprofit must manage itself as well as the best-managed ones do. The majority still believe that good intentions and a pure heart are all that are needed. They do not yet see themselves as accountable for performance and results. And far too many splinter their efforts or waste them on non-problems and on activities that would be done better—and more cheaply—by a business.

Second, nonprofits have to learn how to raise money. The American public has not become less generous—there is little evidence of the "compassion fatigue" nonprofit people talk about. In fact, giving has been going up quite sharply these past few years—from 2.5% of personal income to 2.9%. Unfortunately, a great many nonprofits still believe that the way to get money is to hawk needs. But the American public gives for results. It no longer gives to "charity"; it "buys in." Of the charita-