Instead of Layoffs: Saving, Improving, and Creating Jobs

As a new century dawns, people, skills, and knowledge are the basis of real wealth, not raw materials. Japan is one country that capably demonstrates this, as does Denmark. When regions combine innovative cooperative leadership with resources in knowledge, diverse industries, and a good infrastructure, they become leaders in the new world markets.

Getting involved with government is not most small business people's highest priority. In the area of enabling companies to become more competitive by cooperating, some governments already play a low-cost, high-leverage role.

In place of huge tax breaks for a few favored companies, some implement a "doing more with less" strategy. They use scarce taxpayer dollars in small amounts to leverage large private sector results. The key to success is simple: business people not government officials lead the effort.

Communities can't wait for global and national recovery to trickle

down years from now, if ever. Localities need to position their regions as healthy competitors in the new global economy where networks are increasingly the organizational norm.

What About Jobs?

At century's end, jobs are the central issue world around. Some jobs go elsewhere. Some jobs go nowhere. Jobs are about survival, security, independence, and prosperity in very personal terms.

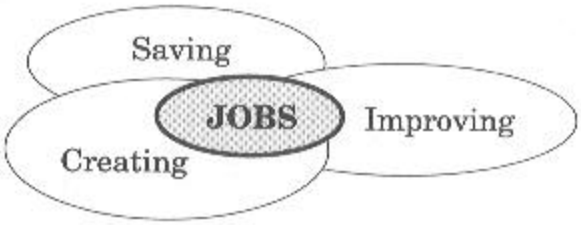
There is more to the job news than additional layoffs at big companies. Th see the good news requires a shift of focus. Future prosperity depends upon the cumulative effect of a few jobs at many small firms. Here, job growth trickles up.

Since the beginning of the Industrial Era, ever-bigger companies have created most new jobs—but no longer. Around 1970, small business employment began to climb after almost a century's decline, according to a 1990 International Labor Organization study.' Even more remarkably, the study noted, the trend reversal appeared all around the world in widely varying economies in roughly the same amount at approximately the same time.

> *In capitalist, socialist, and communist countries, 1970 was the unheralded takeoff point for small business employment growth.*

While governments can do little to directly affect jobs with big companies, except through huge public expenditures and tax write-offs, they can have great impact on the health and prosperity of small companies. With very small dollar expenditures, governments can help small companies survive, compete, and innovate.

Three Aspects to Jobs



"Jobs" is a complex little word that has several important aspects. While attention usually focuses on new jobs, a community's first struggle is often to maintain existing jobs. And all new jobs are not necessarily of equal value. Replacing good lost jobs with low-skill, low-wage opportunities is a long-term prescription for a lousy place to live and work.

Most business networks originally spring from the need to stay alive. "I know I can't do business the way my father and grandfather did. Something has to change, so I'm willing to try anything," says one member of Arkansas's Metalworking Connection at an early meeting.

The most common joint programs are marketing, training, and bulk buying. Once they meet survival needs, networks move on to goals of enhanced competitiveness and growth.

SAVING JOBS

The only way to maintain jobs is to compete and survive in the global economy. Joint marketing efforts, whether shared lines, market research, trade shows, or trade missions, lead to global marketing clout. Purchasing together lowers costs and helps local businesses survive. Investment in education, training, and skills makes for a superior workforce, allowing productivity gains to offset lower wages available elsewhere. Governments can encourage these activities, and amplify their messages. The province of

Ontario, Canada, is a good example. Its Ministry of Industry, Trade, and Technology has outposts in 15 cities around the world, including Paris, London, Milan, Frankfurt, Hong Kong, Seoul, Tokyo, and Boston (where commercial officer Catharine Arnston invited us to attend the International Software Alliance Symposium, co-sponsored by the Ontario government and the Commonwealth of Massachusetts). The symposium introduces Ontario software companies to the New England computer community.

IMPROVING JOBS

It is not enough to maintain commodity jobs, or work that can be done almost anywhere.

> *The best jobs with the highest satisfaction, most freedom, and greatest reward are*
> *those that sell expertise.*

Value-added jobs, based on specialized and customized work, serve high-end markets. Technology transfer, rapid product development, and quality programs enable networks to offer higher value-added products and services. For a region to offer the world's best jobs, competitiveness—striving for excellence—needs to be Job Number 1 for everyone. Some places already have this as a goal: the state of Oregon's 1989 strategic plan calls for a workforce "equal to any in the world by 2010," a rather large challenge.

CREATING JOBS

New, high-value jobs are ultimately a function of innovation and risk taking. Basic science, R&D, education, incentives, and smart people are all part of the brew. To stimulate creativity—

fundamentally where high-value jobs come from—few cookie-cutter approaches guarantee success. As with companies that strive to be learning organizations, visionary localities can strive to create large-scale learning environments—where key strategic information is widely available and quickly circulated.

To maintain jobs, networks form for marketing reasons, to target training, and to develop purchasing power. To improve jobs, networks engage in joint product development, technology transfer, and quality programs. To create new good jobs, networks seek cooperative R&D arrangements and participation in mutual learning opportunities, wellsprings of innovation.

Economic development based on a small business networking strategy is not pie-in-the-sky. It is a proven path to economic vigor.

Small Business on a Large Scale

THE NEW ITALIAN RENAISSANCE

In 1970, Italy, a country known for its constantly changing, confusing bureaucracy, organizes itself into 21 administrative regions that never existed before. (After all, we are talking about the country that gave birth to the West's first highly centralized government, the Roman Empire, 2,000 years earlier.) Emilia-Romagna, an old, historic, moderately rural but highly industrialized region with Bologna as its capital, is the fourth poorest—and in decline. [2]

Just 15 years later, Emilia-Romagna looks entirely different. By 1985, Emilia-Romagna is Italy's second wealthiest region. It has raised its income level from 10 percent below the national average to 25 percent above. In the mid-1970s, unemployment is 20 percent. Ten years later, it is 0. At the end of the 1980s, it is cited as the seventh most prosperous region in the Economic Community. Fairly impressive statistics if recession is your problem. Bologna is forecast to have the most rapidly improving standard of living in

Italy in the 1990s, according to a 1992 Cambridge University study.

While Emilia-Romagna always was home to numerous small businesses, in 15 years, the number explodes. By the late 1980s, there are 325,000 firms in this region of 4 million people—an incredible one firm for every 12 people—90,000 of them manufacturing firms alone. Propelled in part by Emilia-Romagna, Italy passes France as the world's fourth largest manufacturing economy. The area is thriving so much that people want to invest there. In late 1991, the Dutch bank ABN/Amro capitalized its "Enter Italy" fund with $77 million, targeted specifically at investments in small and medium-sized firms in central and northern Italy. Bank deposits reflect another measure of the region's economic success: in 1991, the group of 45 small rural and artisan savings banks showed a 20 percent increase in deposits, a 21 percent increase in loans, against only a 2.9 percent default rate.[4] *The Economist* attributes Emilia-Romagna's remarkable growth to a "large number of very small interlinked enterprises."

How did this happen?[5] In one of its first acts after the 1970 national administrative reorganization, the Bologna regional government establishes an economic development program based on its strong foundation of small firms. Beginning in 1976, the government sponsors a variety of programs intended to stimulate collaboration, such as grants to attend trade shows, buy equipment, or even build factories. These benefits are generally *available only to groups of firms acting in concert.*

> *This notion of a "grant to a group" is the essence of the new approach to economic development in a time of scarce resources.*

Like many rural and semirural communities around the world, Emilia-Romagna has a history of small business cooperatives. CAMA is a good example. Established in 1945, this association of

300 small woodworking firms is a large cooperative for buying and warehousing lumber and veneer. CAMA is itself an affiliate of an even larger network, Confederazione Nazionale dell'Artigianato (CNA), the artisans' confederation, the premier trade association in Emilia-Romagna. CNA provides services to more than 140,000 member firms—accounting, payroll, tax preparation, financial advice, and training. Most have fewer than 25 employees. These trade associations provide a safe, rich environment for business networking.

Technical service centers—another critical success factor of these new industrial networks—enable the collaboratives to compete globally. In 1974, the Emilia-Romagna government set up the Regional Board for Economic Development (ERVET), a semi-autonomous joint stock company. ERVET, in turn, opened 10 service centers, each with a different focus. Some address specific cross-industry needs, like ASTER for advanced science and technology, and SVEX for export assistance; others target specific industries—such as CERMET for mechanical industries and Centro Ceramica for ceramics and CITAR for the garment industry. Among other services, CITAR maintains state-of-the-art marketing and design information about fashion worldwide.

Although public funding initiated the service centers, today many are independent. CITAR, for example, is now completely self-supporting through private member fees. CERMET, by contrast, is still entirely government-supported, while Centro Ceramica moved from 85 percent public funding initially to 85 percent industry funding a decade later.

In this conducive incentive brew, networking developed spontaneously and grew rapidly among the region's myriad small firms. While the Italian experiment was clearly successful, it was not clear how transferable the experience was.

Were medieval artisan communities the hidden secret ingredient in Emilia-Romagna's success? For example, the ceramics center, an area southwest of Modena, has ancient origins stemming from the Middle Ages when a tile-making artisan tradition developed in the area. Around the small cities of Sassuolo and Fiorano, more

than 100 ceramics firms and many hundreds more collateral firms—e.g., design, tool making, and distribution companies— flourish.

The answer seems to be that business networks can indeed happen elsewhere under different circumstances. Denmark shows how.

INTO THE LAND OF LEGO: DENMARK'S STORY

In the early 1990s, Denmark should be an economic disaster, what with the new 1993 European market, the dominance of Germany, and the imperatives of scale. Instead, Denmark is a boom economy, with the lowest inflation in the European Community (EC).

In 1988, however, Denmark, one of the smallest nations in the E C, a mere 1.5 percent of its 320 million population, is in crisis. According to McKinsey & Company's diagnosis, the Danes' declining economy is attributable to terminal "smallness." Almost all their industries are "traditional": textiles, wood and furniture, food processing, along with the usual assortment of tool, metalworking, and service industries. Most companies have 10 to 30 employees; there are few even semilarge firms in Denmark. The only really well-known large company is the Danish maker of very small things: Lego.

Although some indicators look good—GNP in the world's Top Ten and social services in the Top Three—the Danes can nevertheless see the danger signs in their economy, and all the trends are going the wrong way. Moreover, the recommended merger strategy is not working. Small business people hate giving up their independence. Then, when small companies do merge, all they manage to create are not-very-big (i.e., still small) companies compared with the multinational giants that populate Europe's successful economic machines.

Long one of the world's richest people, the Danes can see, and feel, disaster staring them in the face. Smallness puts them at a disadvantage in what seems to be an economy of giants. The challenges they face include:

? Marketing at an international level;
? Keeping up with innovation globally;
? Utilizing full production capacity;
? Fading ability to compete with high value-added; and
? Home markets threatened by international competition.

Until recently, experts prescribed mergers, mergers, and more mergers as the one basic economic development cure for the disease of smallness. While mergers are sometimes the right thing to do, the general prescription does not sit well with the Danes.

In the midst of the merger debate comes an emissary from Italy—ironically, an American. C. Richard Hatch had lived the Emilia-Romagna experience firsthand as the manager of a metalworking firm. In a seminar for a group of Danish manufacturers, Hatch draws on the Italian experience: "It's not size that counts but competence. If individual small firms are weak and vulnerable, networks give them strength. Networks are, quite simply, collaborative efforts to escape from the limitations of size."[6]

Hatch's seminar sets other wheels in motion. Niels Christian Nielsen, then at the Jutland Technological Institute (JTI) and now Director of Corporate Strategy at the Danish Technological Institute, suggests that a letter be sent to the new Minister of Industry, Niels Wilhjelm, proposing a program to encourage cooperation among Denmark's small businesses. It meets with some hesitation because no one seems to believe it will work. "The basic attitude in the country was that there was no way to make a small company owner cooperate. He [stet] is fiercely independent. He created his own business to be able to make his own decisions. He is going to make his stand on independence till he dies.... And even talking about building next steps in the national economy on cooperation among small companies was made quite a laughing stock," Nielsen later tells a group of Oregon legislators.

But the Nielsen-Hatch letter convinces Minister Wilhjelm. He, in turn, sets up an industry steering committee to oversee the network project. The Ministry hires JTI to develop the program, and JTI hires Hatch to develop broker training. In March 1989, the

Danish Ministry of Trade and Industry announces "Strategy '92," the network plan. The government passes a bill in the spring, and by August, the program is rolling. Within a year, networks involve 1,554 firms, and just six months after that, 3,500 of Denmark's firms belong to networks, according to Nielsen's Oregon testimony.

How did the Danes accomplish this feat in such a short amount of time?

HOW CONTROVERSY RAISES THE VOLUME

Upon its announcement, Strategy '92 has a great good fortune. It unleashes a storm of opposition, sometimes the best thing that can happen with a new idea, better than being ignored. "By luck, the whole thing became quite controversial and that meant that the media coverage was free," says Nielsen. While national trade associations oppose the idea, smaller sector trade associations support it, as does the Federation of Crafts and Small Industries, one major group. These controversies keep the issue on the front page and TV news for two months, not the usual fate of economic development initiatives. Nor does Minister Wilhjelm shy away from the controversy. Rather, he works to see that the government approves legislation, with a three-year limit put on the experiment.

At the heart of the program is the feasibility study, what Nielsen later called the "tiny element that set the whole thing going at a large scale." The conditions are simple:

- Any group of three or more companies with an idea for a network can apply for a $10,000 grant to investigate its feasibility.
- The application form is only two pages.
- Response time is usually less than a month.
- The answer is almost always "Yes."

Instead of requiring companies to call or write for application forms, the program distributes them in places where business people naturally go: banks, post offices, insurance offices. Banks,

which have been losing money on small businesses, become among the strongest advocates of networks. Eventually, forms are available in most banks in the country.

Another key part of the program is the multiplier effect provided by broker training. If grants are not highly competitive, broker training is. The Ministry sets high qualification levels and selects 40 from numerous applications, then charges $4,500 for seven two-day training sessions given six weeks apart.

The Ministry also finances lawyers to work up standard contracts for networks and to work out some of the product liability issues. Accountants and tax consultants work through other financial issues so each new network will not have to reinvent the cooperative wheel. Importantly, an evaluation process enables program administrators to learn quickly from their mistakes and take advantage of opportunities.

Denmark's initial program consists of:

? $22 million in development grants, including $3 million for feasibility studies, $5 million for detailed planning grants, and $14 million in operating awards to the networks; and

? $3 million for creating the overall environment for networking, including promotion, technical support, evaluation, and broker training.

The $10,000 micro-grants, known as Phase 1, leverage great potential. There are enough of them—hundreds, each involving at least three companies—to create critical mass. They encourage companies to talk and to take the critical step of coming up with an explicit idea for what a network can achieve.

It is the process, not the idea, that is important. "Of course, two-thirds of all the ideas that people came up with were miserable and unsound. But then in the process of paying someone to work on that idea, give them feedback, give them suggestions, and so on, 10 new ideas would come up and eventually they ended up coming up with networks. Often, not the same networks that they started out with, but networks anyway," Nielsen says.

Phase 2 grants, which offer up to 50 percent of detailed planning costs, require participating firms to come up with matching investment. Here, grants are not virtually automatic, but the application process provides additional direction for successful networks. In Phase 3, grants cover up to 50 percent of the first-year costs of establishing the network and up to 30 percent of the second year's costs. This start-up operating capital is critical, an innovative way to provide venture funds to groups of businesses.

MADE IN DENMARK

To those involved with Denmark's economy, this abrupt success story is no accident. It came about because of a deliberate attempt to revitalize small business in the country by establishing networks of small firms in a variety of industries—and being creative about the business they do together.

Garments—Sewing Together a Line

CD (Corporate Design) Line, one of a number of Danish successes in the clothing industry, is the 14-company textile manufacturing network aimed at the job wear market, i.e., uniforms. Each company produces part of a complete collection: shirts, suits, skirts, women's knitwear, men's knitwear, ties and scarves, leather, and so on. Marketing an entire collection benefits all the firms. Together, they hire a quality manager, then set up sales agents in their two most promising markets—Sweden and Germany. They jointly contract with famous clothing designers, bringing success and name identification in the upper end of the market. Then the network moves into new markets previously closed to small firms. Contracts with major customers, like Volkswagen, now require "EDI," but network members don't know what it means. After solving the mystery—it means "electronic data interchange"—one member firm with this capability provides it to the network on a

cost-sharing basis. Through this and other lucky matches, CD Line now competes with very large companies. Jointly, they employ 900 people; 45 percent of sales are exports.

Danish Furniture—Made in Taiwan

In the 1950s and 1960s, Denmark's furniture industry enjoys a reputation for fine design and exceptional quality. Then, it goes into decline. Foreign competitors, particularly the Taiwanese, begin turning out superior "Danish" furniture. In Denmark, the industry myth is that they lost U.S. market share to big companies. In fact, Danish companies had lost the desired high-price end of the market to Italian companies even smaller than themselves. The important difference was that the Italian companies organized themselves in networks. So, Danish producers quickly assemble into "spectacularly creative networks," according to Nielsen. Together, they buy advanced equipment, hire design firms, fund export marketing, and jointly develop work processes.

In one case, when five firms get together to brainstorm other value-added options, a former contractor helps them spot a new business opportunity: subcontracting the interior furnishing of a major new facility—like a conference center, hotel, or government agency. Usually a madhouse of hundreds of individual subcontractors, they map out the whole job, noting requisite skills and products, and recruit the lamp, carpet, curtain, and, of course, furniture firms that allow them to bid on projects worldwide. They hire the best Danish designers and architects to give the network's products a common coherent look—and they name themselves Alphabetica.

Landscaping, Golf Courses, and—Cemeteries!

New buildings mean work for landscapers; conversely, when construction is down, so is landscaping. With Denmark's weak economy and the building industry in decline, five landscapers get

together to see what they can do. When a golf lover among them complains about the busloads of Swedes “invading” Denmark’s courses, a light goes on. What about exporting golf courses? Which they proceed to do.

First, they research the best courses and construction practices, found in the world’s only golf course industry—in the United States. Then, they sponsor a U.S. tour, sign contracts with U.S. course builders, import specialized equipment, and hire salespeople with reputations in the golf world. Within the first year, they have four golf courses under construction in Sweden. Then, someone has the bright idea to contact the Polish minister of tourism with this suggestion: “If you want to attract rich German tourists, you have to have golf courses.” Presto! A contract for 15 courses in Poland.

There's an eerie twist to this lush story. Noticing how beautiful Danish graveyards are, one of the group’s U.S. partners spots a market opportunity going the other way. Soon the U.S. firm begins to import Danish graveyard know-how. So the Danish golf course consortium eventually pays for its American knowledge of greens and fairways with graveyard beautification expertise.

A Special Ability in Disability Aids

Denmark’s national health system has given rise to a craft industry that produces high-quality aids for the disability device market. To remain in the forefront, the industry needs to embed electronics in its products. By falling behind the technology curve, the industry descends into crisis. Small firms can neither afford to develop electronics expertise in-house nor subcontract with the best engineering firms. It isn’t only the money. Larger electronic producers just cannot be bothered with small specialized disability device manufacturers with a yearly output of 18 units. However, when a network of 36 producers contacts the best electronics companies, it finds itself in a bidding war as the companies seek the network’s business. Combined with international marketing and quality programs, this industry reestablishes its reputation for leadership in the field.

Even Lawyers

As small Danish firms in a wide range of businesses begin to form networks, the small-town lawyers and accountants have to respond. Used to local manufacturers serving nearby markets, the professional services community suddenly faces complex new situations involving a much higher degree of international activity. So the lawyers face a crisis. Unless they can expand their resources, they will lose their business to the large Copenhagen law firms. Their response? To form networks themselves, combining expertise in international law with knowledge of patents and experience in specific sectors as different client situations require.

Not to Mention Big Business

Even Denmark's most famous large firm, Lego Systems, Inc., is intimately involved in the effort. Networks of small toy producers sell their products globally under the Lego name. In 1992, Lego launches its high-quality, attractive children's clothing line, developed out of Denmark's excellent network of small garment producers who put the Lego logo on their products.

RESULTS TO THE NATIONAL BOTTOM LINE

It doesn't take long for results to show. First, the evidence comes from within, the rapid spread of networks throughout Denmark. Then comes the impressive evidence from without.

Germany provides the test of excellence in European exports. It is a major magnet for Danish industry, concentrated as it is at the western edge of the country on Germany's border. Germany is always a difficult market to enter, and the economy seems to favor larger companies. In November 1989, shortly after the August launch of Denmark's network grants program, the Berlin Wall comes down and the two Germanys hurtle toward reunification.

Businesses all over Europe race to adapt to the changed, greatly enlarged, reunified German market that appears almost overnight. Denmark speeds across the finish line.

With the first returns in on the new market, Denmark's positive trade balance with Germany shows a remarkable performance, particularly since no other European country can say the same. The result is a first for Denmark.

The rest is an impressive array of statistics. "We have the highest per capita trade balance surplus of any country in the world. After 30 consecutive years, we reversed a negative balance of trade with Germany in 1991—the only country in Europe to do so," Nielsen says.[7]

Not surprisingly, a number of studies are undertaken to assess why Denmark did so well. One study finds that "smaller companies cooperating in networks had quite a penetration into the German market and contributed significantly to these new exports."

The Danish government shows its faith in the practical results of networking by launching a second stage to the program. Already, the first $25 million had been appropriated against the tide, as the government was simultaneously abolishing all industry subsidies. A second $25 million extends the original grant program through 1992 to complete applications in process, targets tourism for network development, and supports export networks, including international subcontracting.

SMALL CAN'T DO THE JOB ALONE

Denmark's "midterm evaluation" of its networking initiative, which interviewed 70 networks, reveals that:

? All increased employment;
? All reduced costs in one or more important areas;
? Forty percent introduced new products or new product ideas;
? Sixty percent entered new markets; and

? Ninety percent planned to continue regardless of government funding.

Even with all these positive indicators, Nielsen can point to "no real trend, yet, to our solving the problem of unemployment." Not even small businesses can keep up with the pace at which big businesses and other institutions in Denmark are reducing jobs.

"Denmark has 15,000 new companies every year adding 25,000 jobs; 8,000 die in the first five years, taking with them 25,000 jobs," Nielsen says. "Small firms in networks have a slightly higher growth and survival rate: 57 percent to 52 percent. Those five percentage points are very dramatic. They contribute 10,000 jobs, but the individual never sees this."

On the U.S. scale, Denmark is a state-size economy of small firms naturally pursuing a small business networking strategy to compete globally. The U.S. economy as a whole is the world's largest and is a relatively even mix of small businesses and large. Americas strategy for dealing with unrelenting change needs to address all levels, sizes, and types of business.

AND ELSEWHERE IN **EUROPE**

In the early 1990s, Denmark's other Scandinavian neighbors begin to experiment—regions of Sweden and Norway, and the government of Iceland, an island economy 75 percent dependent upon raw fish exports. In Spain, several regions now have networks. In Germany, 56 Chambers of Small Industries and Crafts undertake a major networking effort: *three-quarters of a million small firms employing 4.7 million people have jointly trained 500,000 apprentices.*

"Portugal will surpass networking anywhere because of the readiness there. Everything is much more adolescent. They're enthusiastic and ready to conquer the world," Nielsen predicts.

Nielsen is an adviser to Albertino Jose Santana, manager of

PEDIP—the European Community—funded program to increase Portugal's competitiveness and raise its GDP to the level of other European countries. Jointly appointed by Portugal's president and minister of industry, Mr. Santana keeps a "very lean staff, just eight people who network. They spend money on people who can do it locally": $4 billion over three years in industrial modernization in a country with just 4.5 million people.

Nielsen's first encounter with Santana was not all that auspicious. "The first time I met him was a Saturday morning in Copenhagen after a big company party. Let's just say I needed sleep, but at noon, I had to leave for Tanzania and he was on his way to Asia. So we walked in the sunshine together and agreed to do something.

"The next thing I knew I was at my laptop computer looking at Kilimanjaro, writing about what a network project could be in Portugal, and faxing it to him in India. Then I flew to Oregon to testify before a state committee, where Mr. Santana called and asked me to fly to Lisbon. So I arrived the next Sunday and we spent the morning together. Unfortunately, I had spilled orange juice on my shirt on the plane, so I felt a little silly. But we sat on the banks of the Tejo River in Lisbon and looked at the monuments to Portugal's explorers."

OREGON'S NETWORKING "LAWS"

As we catch the early history of the worldwide movement unfolding in the United States, Oregon leads the way at the state legislative level. As Denmark was inspired by Emilia-Romagna, so has Oregon been inspired by Denmark.

Denmark proves that centuries-old concentrations of small firms are not required for networking to begin. In Emilia-Romagna, there is one company for every 44 inhabitants, a phenomenal figure. Denmark's one manufacturing firm for every 684 people, however, is more like the U.S. average, based on 365,000 American manufacturers nationwide.

Oregon's 7,000 manufacturing companies about match Denmark's

number. Oregon's 2.8 million people give it a higher per capita concentration of firms, however—one for every 400 people. Major sectors of Oregon's economy include agriculture, forestry, fisheries, metals, tourism, and electronics.

The world increase in small business employment becomes a fact of life in Oregon in the 1980s. Among Oregon's manufacturing firms, "small firms created all of the net new jobs, while large firms were actually losing employment," according to *Small Is Bountiful*, the Joint Legislative Committee on Trade and Economic Development's 1988 report. In a more extensive study of the whole economy, the state's Economic Development Department found that "firms with fewer than 20 employees have been the source of most new jobs since 1981. This finding holds for every major industry group, including manufacturing, distributive services, producer services, social services, and personal services."[8]

Like Denmark, Oregon in the late 1980s faces a crisis in its economy. Providing almost one-fifth of U.S. softwoods, Oregon's timber industry accounts for 36 percent of the state's manufacturing jobs. More than half of the harvested timber comes from federal lands. Environmental pressures to preserve the fast-disappearing old-growth forests explode with the fight to save the habitat of the northern spotted owl.

Although some paint the owl as the villain in destroying logging jobs, other forces are also at work. Changes in U.S. Forest Service land use management plans and the quality of second-growth timber point to a long-term decline in the raw resource lumber business. In five years, it is estimated that over 11,000 jobs will be permanently lost.

In addition, Oregon is in the midst of a statewide renewal of its vision and goals. In May 1989, then governor Neil Goldschmidt issues *Oregon Shines: An Economic Strategy for the Pacific Century* with three key initiatives:

? A superior workforce that is "measurably the most competent in America by the year 2000, and equal to any in the world by 2010";

? An "attractive quality of life that . . . will drive an advanced economy"; and
? An "international frame of mind that . . . distinguishes Oregonians as unusually adept in global commerce."

Against this backdrop, in September 1989, the Northwest Policy Center leads a five-country European tour for 11 government officials and business people. Sponsored by the German Marshall Fund, the group looks at how the European experience applies to small business problems of the Pacific Northwest economy.

One of the participants is Joseph Cortright, executive officer of Oregon's Joint Legislative Committee on Trade and Economic Development (including both the president of the Senate and the Speaker of the House), that later sponsors Senate Bill 997, one of two laws passed in the 1991 session that encourage networks. Cortright's report to the committee, *Old World, New Ideas: Business Assistance Lessons from Europe,* brilliantly applies the European networking lessons to American soil, and articulates the policy implications of these lessons for states.

At the heart of Oregon's Senate bill are two key ingredients adopted directly from Denmark. First, the state's Economic Development Department is to "promote the concept of flexible networks and provide network feasibility grants" of up to $10,000 for groups of three or more firms. Second, a network broker training program is set up "to provide persons with the necessary knowledge, skills and abilities to assist private firms in the formation of flexible networks."

The bill also encourages other activities in support of key industries that directly empower networks:

? Focus groups to identify key issues and members;
? Support for the formation of industry associations, such as publication of directories;
? Help in establishing research consortia;
? Joint industry training and education programs;
? Cooperative market development activities;

? Analysis of the need for certification services; and

? Providing methods for electronic communication and information dissemination to facilitate network activity.[9]

Finally, the bill mandates an award program to encourage and recognize firms and groups of firms that employ "high performance manufacturing practices." Remarkably, the statute defines such practices as "methods for organizing work that devolve greater decision-making responsibility onto front-line workers." It sounds like a teamnet.

How is Oregon funding this unusual program? With money from the state's lottery and its Strategic Reserve Fund.

AUNTIE TRUST

The specter of large companies' working together can also suggest price fixing, collusion, and other not-so-aboveboard business practices. To date, there is no clear answer as to where companies cross into antitrust territory.

"Whenever competitors cooperate, it always raises the issue of antitrust," says Ron Katz, a partner with Coudert Brothers and former prosecutor at the U.S. Justice Department's Antitrust Division. "Antitrust is very fact-intensive. Everything is situational, so it's hard to make any general statements."

Rick Berenson, an attorney and former McKinsey & Company consultant, concurs. "Antitrust is entirely a matter of Justice Department policy. This is a leading-edge antitrust area and it's not that well litigated."

No-Frills Government Strategies

If alliances make good business sense from the point of view of an enterprise, eventually results will show up on the bottom line of each company. While that's great for the companies involved, from a

global view, the success of a few small company alliances causes not a ripple in a regional economy. The success of many networks of many small firms can have dramatic impact on a national or regional bottom line.

How can we develop successful strategies on a large scale? Combine practice and theory, examples of what works with concepts of networks. Combine forces in the private and public sector. Five suggestions follow based on Teamnet Principles for how to start successful regional networks:

THE BUSINESS JUSTIFICATION: MEET THE NEED

Rule 1. Target markets.

Business networks work because they meet specific needs of specific sets of people. To identify the critical "specifics," look to the markets. Firms identify with a specific industry—in policy parlance, an economic sector. So, target markets. This European lesson tracks with common sense. "Businesses in a single sector of the economy have common problems and opportunities, speak a common technical language, and have a base of affiliations that can promote effective teamwork. Sectors define network programs along the logic of the market instead of the logic of the bureaucrat," Cortright writes. [10]

Europe shows how targeting some traditional industries can leverage great economic effect. The older industries that benefit most quickly from networks are those where:

? The economies of scale and economies of vertical integration are limited; and
? The market requires flexibility and rapid response to changing needs.

Textiles, garments, metalworking, and woodworking—some of the most common foundation industries—fit this description.

Within an industry, the reasons why networks form and flourish vary from group to group. However, everybody needs to look for their own leverage points. A regional industry may have general needs that solved once can serve many, such as:

? The need to identify and adopt new technologies; and
? The ability to pinpoint markets globally, certify quality, and provide industry-specific training.

By targeting markets, that is, clarifying their purposes, large economic communities can focus their business development strategies.

TREATING MANY FIRMS AS ONE

Rule 2. Offer inducements to groups of firms.

To help jump a high early hurdle in regional networking strategy, Denmark and Oregon provide incentives to participation.

"Fiercely independent small entrepreneurs" top Cortright's list of similarities between Europe and America. On the European policy tour, participants repeatedly ask about small business people: "How independence-minded are they?" "Are they joiners'?" "What do they think of government interference?" Repeatedly, the Europeans assure them that small business people everywhere feel the same as American entrepreneurs.

Showing the benefits of cooperation to fiercely independent firms is a great hurdle no matter where networking works. The inevitable question is "Can it be done here?"

At the regional level, networks include agencies—both public and

private. Trade associations, businesses providing services to multiple networks, and motivated individuals all belong to regional networks. Prophetic local leaders, spark plugs for an industry, multiclient brokers, and other voices add texture and variety to the regional economic orchestra. The broader view from the regional perspective sees the overall system affecting the quality and quantity of jobs in the larger community, enabling everyone to take smarter actions.

Governments can boost a general economy by supporting an environment within which networks form and re-form easily. Groups of firms—alliances—are the units of network activity in a region or nation. Hundreds and then thousands of business alliances leverage the effect of flexible boundary crossing teamnets on a massive scale.

LINK AND LEARN

Rule 3. Facilitate communications and capture the learning.

What happens when not just a person or a company but a whole region learns? When firms jointly apply for services, they must interact: they communicate; personal relationships flourish; and businesses generate ongoing arrangements. By working with many interrelated groups, public dollars benefit the competitiveness of an industry as a whole, rather than simply bringing advantages to a few favored firms. European evidence shows that when governments work with groups of firms, they reduce costs. It "minimizes the considerable burdens of communication, marketing and administration, and in particularly successful instances harnesses firms to be one another's advisors."[11]

Just as there is advantage to individual firms banding together in networks, there is a higher-level competitive advantage to all from

an environment rich in networks. Richly connected competitive firms greatly facilitate the spread of new information—whether exposure to technology innovations or news of sudden market shifts. While individual firms and networks scramble to make use of the information and search for the next advantage to differentiate themselves, the regional industry as a whole pushes to higher levels of competitive excellence compared to distant global competitors.

As the physical channels of communication are a high practical concern for all boundary crossing teamnets, so are communications infrastructures a basic regional competitive advantage. There is a natural synergy between business networks and technology networks. In networks of all kinds, people exchange information. New technologies—ranging from the simple fax to local cable systems to far-flung computer networks—greatly aid the rapid communication of large amounts of complex information. Through international data highways, regions can export their brainpower and skills without having to build more airports to accommodate the ceaseless travel of international expertise. Technology networks are key drivers of the dynamics of global change and one of the major forces breaking down isolated hierarchical management structures.

STRANGE BEDFELLOWS

Rule 4a. Industry leadership is essential.

A fourth rule of regional strategies is to involve industry people. Let us be even more blunt. Industry needs to lead government, not the other way around. Specific business networks require business expertise. Business leadership is also needed at the government level. Easier said than done. By sheer luck in Denmark, the minister of industry at the time was a business person rather than a politician. Sometimes people take quite creative means to ensure that businesses control the networking process and find it useful.

"Industry leadership is mandatory for success," says Ray Daffner of the Oregon Wood Products Competitiveness Corporation, a state-funded organization whose Board of Directors comprises seven industry leaders with companies averaging sales of $5 million. Daffner's group doesn't even use the word "network," preferring terms that are "more familiar to business people, like joint ventures, alliances, and strategic collaborations."'[2]

While industry leadership is assiduously sought, European experience also provides a corollary to Rule 4, a role for public leadership:

Rule 4b. Provide the catalytic margin for success.

Small business networks, a way to acquire competitive advantages available to larger companies, face a daunting "chicken-and-egg" problem. Where do small companies find the marginal time and resources to explore cooperative alternatives that might eventually provide competitive advantages? Once a business network starts to generate tangible benefits, it becomes a self-sustaining economic activity. Small companies often need start-up help in multifirm collaborative arrangements. Big companies also can offer this help.

Without spending huge sums, public agencies can help create awareness about collaborative opportunities and processes, establish incentive programs to seed networks, provide staged support during formative phases, and encourage the development of brokers and other catalysts.

The catalytic margin is particularly acute in the early phases of network development. To establish credibility, new ideas cost money. The public sector plays an excellent role in showing how the idea has been successful elsewhere and what the problems are. Often, people need to be brought together to get up and over the cultural barriers to cooperation before they can get down to work on

their own joint solutions to common problems. Here, the public sector can play an all-important convener and facilitator role. In later stages of regional network development, the need for a catalytic margin recedes: the evidence of network success is all around.

It doesn't have to cost much. When the state of Montana balked at the idea of a $1 million network program, Bob Friedman, chair of the Corporation for Enterprise Development, proposed a low-cost alternative. "Why not sponsor a free lunch program? If four or more firms want to discuss a common opportunity, the state says, 'We'll buy lunch.' At $5 a lunch, that's $20 a cluster," he jokes. "It's a little tongue-in-cheek, but we need enough of a kick to get people out of doing business as usual."

ALWAYS BEGIN WITH PEOPLE

Rule 5. Seek to enhance the skills, experience, and creativity of people.

The food chain of levels of organization starts with people. Small businesses are enterprises, and they are also small groups. They bring us closer to the true source of wealth in the future economy — the skills and knowledge of individuals.

Networking releases people potential.

A comprehensive economic networking strategy stimulates boundary crossing teamnets in all industries. They offer flexibility and speed in response to change. Flexible business networks are but one type of boundary crossing teamnet transforming the business

world. They show that alliances are vital to small companies as well as large. In many ways, they complete the puzzle, also showing that the network advantage is available to a very wide range of companies, applicable to traditional industries as well as high-tech.

"The key is to figure out how to get to the threshold of momentum and publicity," Friedman says. "It won't take that much—in small states, perhaps several hundred networks; in large states, perhaps 1,000, but not 10,000 or 30,000."