

# Industry Clusters

## Do Birds of a Feather Still Flock Together?

Is it smart to move your business into an established industry cluster?

By Gretchen M. George, Senior Writer

**Q**uestion: Do you have to be in Milwaukee to make beer?  
Answer: Yes. In 1855.

In 1855 you had to be in Milwaukee to make beer because that's where the Germans were. Schlitz, Miller and Pabst were there. And in 1927 you had to be in Detroit to make cars. That's where Henry Ford was.

And in 1975, the telemarketing industry was beginning to cluster around Omaha, Nebraska because of the enormous telecommunications capacity made possible by the presence of the Strategic Air Command headquarters.

Does that mean that in 1995 you have to be in Silicon Valley to make computer chips? Or in Pennsylvania to make steel?

Not necessarily. Today, computer technology and advanced transportation systems make it possible for most industries to do business virtually anywhere.

But don't write off the cluster concept too quickly. When the cost of doing business comes into play, there are advantages and disadvantages to locating near the "other guys" in the industry.

Would your business be better off in

an industry cluster, or should you stay away from those geographic areas that already contain your competitors?

*Expansion Management* decided to investigate the concept of the industry cluster to find out if companies today would do better to go with the flow, or to take the road less traveled.

Louis is just one example.

Historically, industry clusters have formed for some of the same reasons.

Think about it and you can come up with many industry clusters of the past. Automotive in Detroit. Tires in Akron. Finance in New York City. Show biz in Hollywood. Furniture in North Carolina.

Apparel in Georgia and South Carolina. Steel in Pittsburgh. Wine in California. Agriculture in the Midwest.

On a global scale, the leading consumer electronics companies are in Japan. Many of the world's leading printing companies are based in Germany. Holland exports 60 percent of the world's fresh cut flowers. And virtually all of the world's leading software and biotech companies are American.

Each cluster was established for a reason.

### New times, new clusters

Clusters didn't stop forming 50 years ago.

There are younger industry clusters, and they tend to grow faster and have a more volatile life cycle.

The best known modern age industry cluster in the world is Silicon Valley, that stretch of Bay Area peninsula running from San Francisco through Santa Clara



There was a time when Akron, Ohio was the tire manufacturing capital of the country. Bridgestone/Firestone relocated its corporate headquarters to Nashville, Tenn., in 1992 to be near its two Tennessee manufacturing plants.

PHOTO COURTESY BRIDGESTONE/FIRESTONE

### What's in a cluster

Industry clusters form just like cities form. St. Louis didn't end up on the banks of the Big Muddy by accident. That river was the life line of the city — a precious resource that provided jobs, transportation and much more. But St.



## COVER STORY

County in northern California. Dubbed "Silicon Valley" by the editor of a small newsletter called *Micro-electronic News*, the name stuck as the area and its silicon-based electronic devices — and the software needed to make them perform — exploded from 1978 to the present.

Another computer-based cluster is Utah's "Software Valley," a 40-mile stretch between Salt Lake City and Provo that holds the world's second largest cluster of software and computer engineering firms. There, more than 1,120 information technology companies — ranging from Novell and WordPerfect to small multimedia startups — generate \$5 billion a year in sales, and are growing at a rate of 7 percent each year.

San Diego's biotech industry actually began in 1973, in San Francisco, when area scientists used recombinant DNA

**Would your business be better off in an industry cluster, or should you stay away from those geographic areas that already contain your competitors?**

methods to implant a foreign gene in a bacteria. Biotech has since matured into one of California's largest and most important growth industries. Research at several famous institutions — the University of California at San Diego, the Salk Institute, The Scripps Clinic and Research Foundation — has nurtured the rapid growth of biotech in San Diego.

Ohio's high-end composites and plastic polymer industry is also a cluster worthy of other states' envy. A combination of universities (such as Case Western Reserve and the University of Akron's School of Polymer Science), NASA's materials-oriented Lewis research facility, and the business needs of the nearby auto and aircraft parts industries has resulted in a concentration of industry knowledge and production.

Looking for a more traditional manufacturing cluster? Check out the Kingdom of Carpet. Actually, Dalton, Ga.,

# Tucson



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where more than 60 percent of the world's carpet is manufactured, hasn't given itself a name ... so we gave it this one. The people of Dalton, 54 percent of whom are in the carpet manufacturing business, chalk up their success to cheap power and abundant water.

#### To cluster, or not to cluster

But the question remains: In 1995, do you have to operate your business in an industry cluster?

The answer for the nation's carpet manufacturing industry is a resounding 'yes' ... except for those who answer with an equally resounding 'no.'

Jim Jolly, president of Georgia carpet giant J & J Industries in Dalton, Ga., says 'yes.'

"The trend seems to be that more and more carpet manufacturers are coming to Dalton," he said. "There is a small conglomeration of carpet plants just outside of L.A., many of which are closing down and moving to Dalton to find fewer environmental restrictions and cheaper operating costs. That's why you make carpet in Dalton."

Believe it or not, 60 to 70 percent of the world's carpet manufacturing takes place in Dalton, Ga., according to

**Big companies may not leave, but they may begin expanding into other areas to take advantage of a fresh, new work force and attempt to establish a new competitive advantage.**

manufacturing," said Dalton Chamber of Commerce's John Rhodes. "Dalton has cheap power and abundant water."

But Rhodes admits you can make carpet in Anywhere, U.S.A.

"You can manufacture carpet anywhere you want," Rhodes said. "But eventually you will travel to Dalton, Ga., to get technical assistance, or parts, or the latest equipment."

Dennis Whittle, vice president of Holyltex Inc., a carpet manufacturer in

petitive here. And labor costs are low. There's no reason we should operate our business anywhere else."

#### Now that's trendy

Gene DePrez and Saul Grohs of Location Advisory Services, a national corporate location consulting firm in Morristown, N.J., shared some of their ideas about recent industry trends relating to clusters.

"In this day and age, there seems to be less emphasis on the unified industry, and more emphasis on business needs and customer service," said DePrez, who's been in the location consulting business for over 25 years. "Companies want to get close to their customer base and farther away from their competitors. Many companies are stepping out of the shadow of their industry leader in order to establish their own identities."

For software giants Apple and IBM, it was an identity thing. Apple established itself as the cool, California-style industry leader on the West Coast. IBM was the structured, stuffed-shirt leader on the East Coast. Their identities are completely different, and so is their product, allowing each to be successful in its own right.

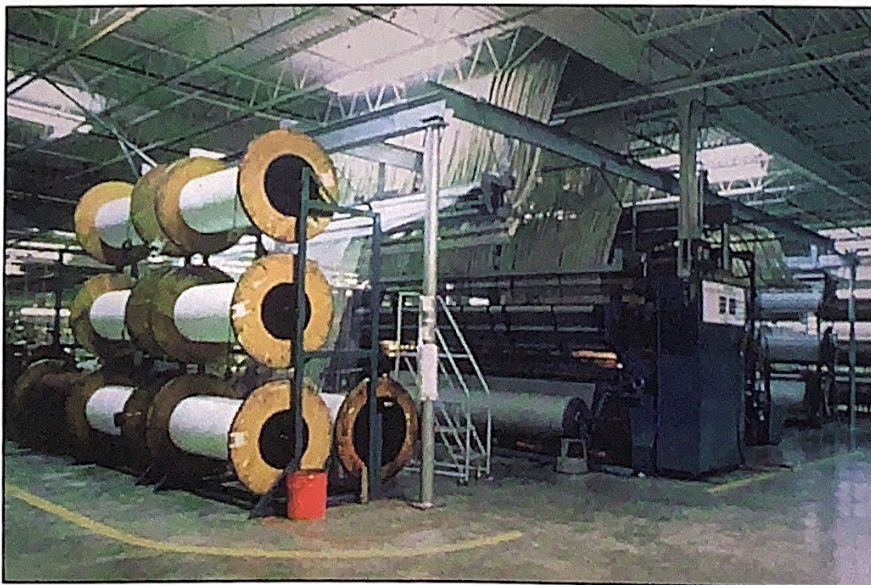
"Other types of clusters often are more useful and practical than industry clusters," added Grohs, an industry guru with 35 years under his belt.

Besides industry clusters, business conglomerations come in many forms.

*International clusters*, for example, form almost automatically. Japanese companies have clustered in cities like Honolulu and San Francisco not because they were all in the same industry, but because they knew other Japanese companies were moving there.

Attractive to them is the support system already in existence. Japanese schools, places of worship and cultural activities abound, making it easier for the Japanese to move their families and do business in the United States — or anywhere else groups of them may have inhabited.

There are *professional clusters*, too. As industry clusters decentralize, professionals and specialists follow. They have to move with the industry and groups of them cluster around their schooled profession. Research Triangle Park was no accident, with Duke University, North Carolina State and the University of North Carolina just a stone's throw from what is now one of the largest R & D



J & J Industries is one of the many manufacturers in Dalton, Ga., that produce 60 to 70 percent of the world's carpet.

PHOTO COURTESY J&J INDUSTRIES

Kathryn Wise of the Carpet & Rug Institute. And approximately 54 percent of Dalton's (Whitfield County) work force is engaged in carpet manufacturing.

"Power and water are critical to carpet

Anadarko, Okla., says 'no.'

"Sure, you find your raw materials in Dalton," he said. "But our Oklahoma location is more centralized to our customer base. Power and water are com-



centers in the country.

And then there are *supply clusters*. In the case of companies like Mercedes-Benz, suppliers rally around a larger industry to reap the benefits. The supply cluster that followed Mercedes to Tuscaloosa County, Alabama includes everything from dashboard manufacturers to a large tire company. These suppliers aren't in competition with each other. Rather they are feeding off the larger force.

*Global clusters* exist as industries branch out to other countries. It is most sensible to contain global operations in one region. For example, southern France is known for high technology; Scotland for electronic assembly; Ireland for software/telecom; Switzerland for pharmaceuticals; and Brussels for foreign corporate headquarters.

#### A day in the life

Historically, industry clusters run in

life cycles, much like that of a star. From its birth, an industry cluster slowly gains momentum before leveling out, and then plummets to its death.

"Whether it's the conglomeration of some natural resource, proximity to technical training and industry professionals, or the presence of industry pioneer, a business starts up and attracts others of the same industry to that area," DePrez said. "The oil business settled in Texas for obvious reasons. And the automobile industry got started in Michigan simply because that's where Henry Ford lived."

Eventually the success of that industry builds to a critical mass. Everyone is there — the companies, the industry professionals, the trained work force — everyone. The successful people split from larger corporations and start their own companies in same area. Such spin-off activity adds to the cluster. This is when the cluster shines brightest.

Then the cluster begins to level out and even decline. Due to the great

## The Good, the Bad and the So-so

**So, if an industry cluster eventually dies out, why do business there in the first place? Gene DePrez and Saul Grohs of Location Advisory Services outlined some of the pros and cons of industry clusters.**

- An industry cluster environment provides employers the ability to recruit industry professionals and trained workers from competitors. But just the same, your employees are prey for competitors who may offer better pay or more liberal benefits.
- The interchange of industry ideas and information is a major plus of industry clusters.  
"Trade associations and organizations provide an outlet for networking and sharing successes, as well as challenges," said DePrez. "On the other hand, it can be difficult to maintain confidentiality, as trade secrets can leak out to competitors."
- There's strength in numbers, as the old saying goes.  
"An industry cluster can carry a lot of weight with local government," said DePrez. "And the more dependent the local economy is on that industry, the more power that industry has over government regulation. But at the same time, an industry can become a target for local government."
- Locating in an industry cluster can provide a company with instant credibility. It positions you on the cutting edge of the industry. A company that's in the center of the action must be top-notch.
- An industry cluster certainly provides large, specially-trained labor force for a company to use.  
"And then there will be that pressure for companies to match the benefits and wages of other companies as well," said Grohs.
- Other advantages include networking opportunities, academic support from communities and the attraction of a large supplier base for the industry. True. There are more positives than negatives to locating within an industry cluster. "The negatives, though, typically are much more critical to a company's survival," DePrez said.

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demand, labor is stretched. Workers want more money. Operating costs are up. Competition is stiff.

"At this point, companies start rethinking their location," said Grohs.

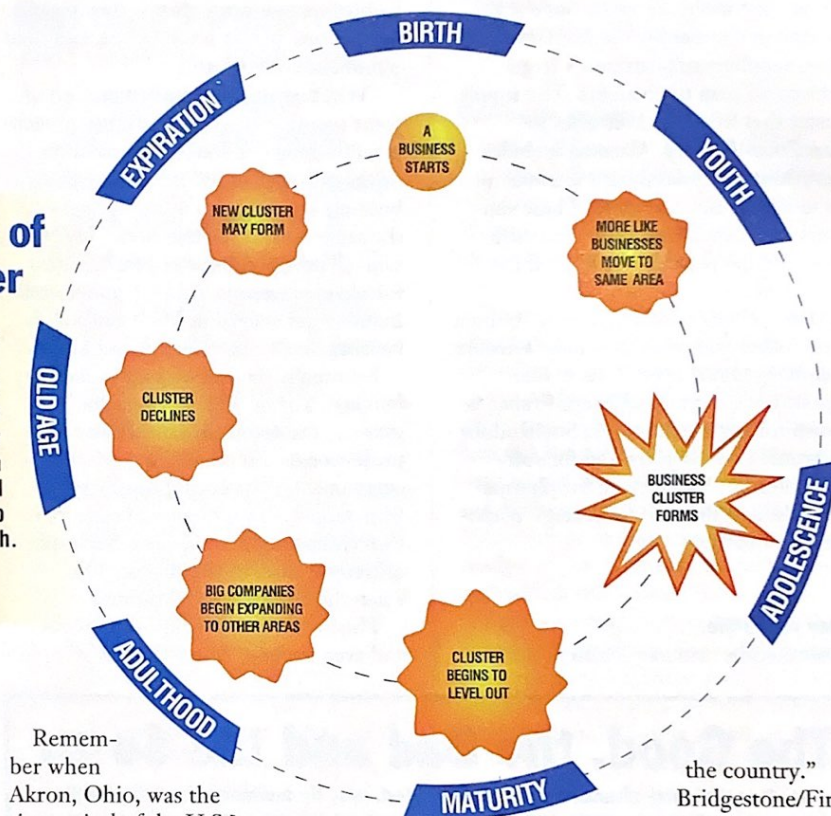
When a cluster loses its relative economic advantage, it's time to move on. Big companies may not leave, but they may begin expanding into other areas to take advantage of a fresh, new work force and attempt to establish a new competitive advantage. For companies looking for lower costs and proximity to their markets, expansion is a smart move.

Finally, like a star, the cluster declines and eventually burns out, leaving behind trained workers who are then picked up by some other company (in another industry) that can use their skills.

And, perhaps, a new and different cluster will form.

## Life Cycle of a Cluster

Industry clusters run in life cycles, not unlike that of a star. From its birth, an industry cluster builds to a critical mass and then plummets to its death.



Remember when Akron, Ohio, was the tire capital of the U.S.? Well, what happened?

"It's not really rubber that left Akron," said Sam DeShazor, economic development manager for the Akron Regional Development Board. "It's the manufacturing facilities that have spread out across

the country." Bridgestone/Firestone bolted for Nashville, Tenn., in 1992.

According to Bridgestone/Firestone spokesman John Taylor, the company relocated its national headquarters for several reasons.

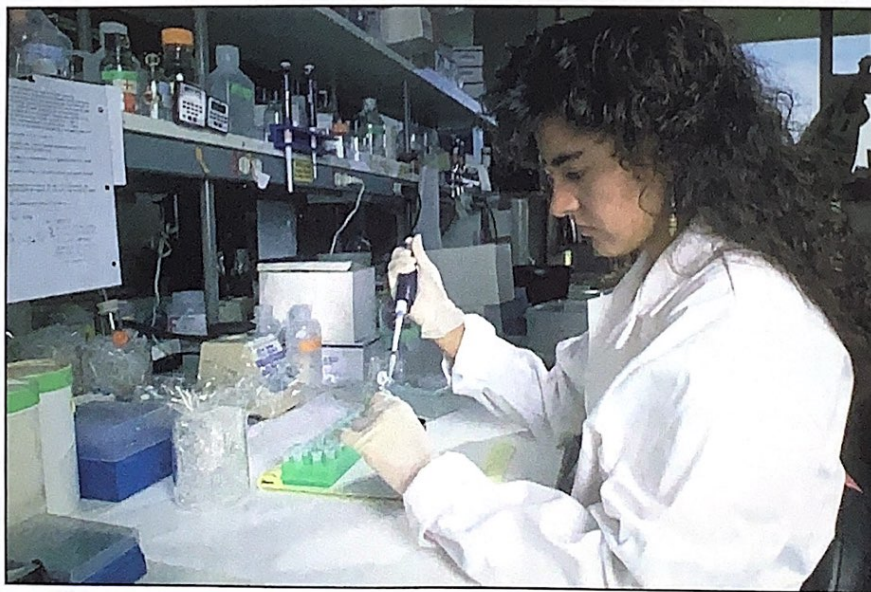
"Most importantly, we wanted a more centralized location relative to our customers," Taylor said. "We supply Saturn and Nissan, both of which manufacture in Tennessee. And we also wanted to be closer to our own two manufacturing plants in Tennessee."

The company was in the middle of downsizing at the time of the move. And Taylor said that making a clean break (picking up and relocating the corporate headquarters) helped Bridgestone/Firestone establish an entirely new corporate culture.

Taylor also noted that Bridgestone/Firestone's hundreds of company executives will make use of the American Airlines' Nashville hub for travel.

Michelin North America moved out in 1985. The company's relocation to Greenville, S.C., was followed by a mid-1995 move of its Michelin Americas Small Tires business unit from Akron, too.

"Basically, we moved the corporate headquarters to consolidate with our R & D facility," said Jim Morton,



The Salk Institute is one of San Diego's many biotechnology research centers. San Diego has taken aggressive action to ensure that, once the R&D phase is completed, companies remain in town to manufacture their products.

PHOTO COURTESY THE SALK INSTITUTE



## Stellar Strategies

Still, there are more questions to be answered. And, according to DePrez and Grohs, the answers to these questions can map a winning strategy for companies that are looking to expand and are considering doing so within an industry cluster.

### • Cost structure/financial condition

Are you the low-cost operator or is quality your main concern? To keep costs low, it may benefit you to stay away from the saturated market of an industry cluster. But if you're most concerned with quality, the benefit lies in staying near the best suppliers, services and industry professionals.

### • Corporate image/public posture

Are you recognized as the stable, conservative corporation of the industry, or as the cutting edge, new kid on the block? Old-timers are often reluctant to leave the nest, fearing a relocation to an industry cluster would shake their solid ground. Likewise, as an industry cluster surrounds that company, it will remain the anchor of the industry. Steering clear of a cluster allows younger companies to establish their own identities.

### • Internal corporate culture/management style

Are jackets required? Do your executives come to work clean-shaven and dressed in suits, or rugged in blue jeans? A lot depends on the city where you do business. In Santa Fe, N.M., many executives go to work prepared for a hike in the mountains at 5:00 p.m. But in Chicago and New York, executives are dressed to the nines. It has a lot to do with management style. But it also has a lot to do with location. It's doubtful the Santa Fe types would want to give up their casual attire for an industry cluster.

### • Centralization or decentralization

A centralization philosophy often is based on your service agenda. Does your company need the control of a home office atmosphere, or is it more important to have your people spread out, close to the customers?

### • Strategic relationships

Are customer and vendor relationships crucial to your business? Can these relationships be carried out over the phone, or is it necessary to call on your customers or vendors in person? This can be crucial in a location, or relocation, decision.

### • Human resources

Who are your employees? Do you train them yourself? Or hire them from your competitors? If you're willing to train people, you can go almost anywhere. There always will be people who need work. But if you want to hire highly trained workers, an industry cluster can provide an ocean of people to hire away from competitors. Of course, ability to offer competitive pay and benefits can make or break this strategy of opportunity.

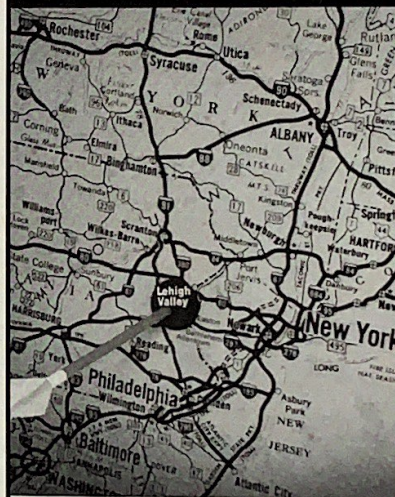
### • Unit operating requirements

What equipment do you need to run your operation? Do you have unique needs? Do you need access to certain natural resources? Without careful planning, getting your necessary resources can be as costly as moving your entire operation. For example, if your industry is a 'dirty' one, you might want to avoid the strict, costly environmental regulations of California. And if you need large supplies of water, stay out of the Mojave Desert.

### • Real estate management

Do you lease or own your property? Do you want to build your own facility? Or buy an existing one? Building in a cluster may cause your company to invest in some high-priced land, while leasing offers good opportunities to acquire well-suited space at bargain prices when similar firms fail.

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# When to Cluster, When to Not.

## The Editor's Do's and Don'ts

**1. DO.** If your business is innovation-based, join a cluster. If it depends on the exchange and fertilization of ideas, definitely locate in a cluster. The downsides, specifically the problem of employees stealing your innovations, is nowhere near as large a factor as the upside of having a virtually unlimited source of new ideas within a few miles of your facility.

**2. DO.** If your company is smaller than the average player, but involved in the high end of your industry, join a cluster. The dividends paid in contacts with other firms, as well as access to trained labor and established infrastructure, will probably outweigh the higher cost of wages and land.

**3. DO.** If your market is changing rapidly, join a cluster. In a fast-changing environment, subtle changes that would never appear in the industry press can become dinnertime conversation in cluster areas. The more important late-breaking information is to your company, the more likely you are to benefit from a location in or near a cluster.

**4. DO.** If the product of your business traditionally has been purchased by large companies in the past, and is headed for the consumer market, join a cluster. The sheer size of your industry group can help educate the market.

**5. DO.** If your company has had difficulty raising growth capital for new product development from banks and investors, join a cluster. The financial infrastructure present, even in a not-yet-mature cluster, will probably be better than where you are now. Keep in mind that this only works for solid companies with decent innovations. Me-too products without a major cost breakthrough won't stand up to the competition for investment dollars in a cluster environment.

**6. DON'T.** If your business is number one in your field and pretty stable, don't join a cluster. If you are in one, evaluate your position and consider how much your leadership might be pulling along your competition.

**7. DON'T.** If you make a commodity product where margins are thin and innovations are rare, don't join a cluster. You will be better off in a low-cost location where your money will go further. Keep up with the industry by traditional communication means.

**8. DON'T.** If you run your company with unskilled or low-skilled workers, don't join a cluster. The chief benefit of industry clusters are people who already know as much or more about your process as your current workers do. If that can't measurably help your company, stick to the community that can give you the best deal.

**9. DON'T.** If your company CEO is a charismatic visionary that people watch to track your industry, exercise caution before joining a cluster. Your CEO won't like the competition. Consider moving to a community that will partner with you to form your own cluster. Your CEO, as the first person to go there, will become an even more respected industry leader.

**10. Most of all, never ignore a cluster.** If you are in an industry which has formed or is forming into a cluster, get on top of it. Go there. Study it. Take it apart and put it back together again. You may decide to not participate in the congregation of your industry, but make that decision with all the facts, not from your gut.

— Jack Wimer

spokesman for Michelin. "It was a better location for us. There was no real reason for Michelin to be in Akron."

Akron certainly isn't the tire capital of the country anymore. But Goodyear still is headquartered there.

### The question is ...

Every company has different needs. "No company is exactly like another," DePrez said. "And so a company has to ask itself this question: How does my company choose to position itself in the market?"

If a company wants to be a low-cost producer in a low operating cost environment, joining a cluster probably is not the answer. But if a company assumes the

**Clear-minded analysis is necessary to determine if your business can find safety and prosperity in moving with the crowd without getting trampled.**

position of high-quality innovator, where cost is less of an issue, locating within a cluster can be extremely beneficial.

The answer to this question is based on many factors: industry, size, location, ownership, objectives, management style, culture, maturity, and whether you are private or public.

That's not to say these factors won't change as a company grows, matures, changes ownership and moves forward. Because these things most certainly will change over time.

### The bottom line

In conclusion, industry clusters can provide benefits that can't be found anywhere else ... for certain companies.

They also can provide unnecessary cost and distraction for others not suited to the cluster environment. Clear-minded analysis is necessary to determine if your business can find safety and prosperity in moving with the crowd without getting trampled. **EM**