

HE. IVING LOWPARY

by Arie de Geus

n the world of institutions, commercial corporations are newcomers. They have been around for only 500 years—a mere blip in the course of human civilization. In that time, as producers of material wealth, they have enjoyed immense success. They have sustained the world's exploding population with the goods and services that make civilized life possible.

If you look at them in light of what they could be, however, most commercial corporations are underachievers. They exist at an early stage of evolution, they develop and exploit only a small fraction of their potential. Consider their high mortality rate. By 1983, one-third of the 1970 Fortune 500 companies had been acquired or broken into pieces, or had merged with other companies.

How do we know that many of the deaths are premature? Because we have evidence of much greater corporate longevity. Japan's Sumitomo has its origins in a copper-casting shop founded by Riemon Soga in 1590. And the Swedish company Stora, currently a major paper, pulp, and chemical manufacturer, began as a copper mine in central Sweden more than 700 years ago. Exam-

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ples such as these suggest that the natural life span of a corporation could be two or three centuries—or more.

The implications of the statistics are depressing. The gap between the endurance of a Sumitomo or a Stora and the fleeting life of the average corporation represents wasted potential. Individuals, communities, and economies are all affected—even devastated—by untimely corporate deaths. The high corporate mortality rate seems unnatural. No living species suffers from such a discrepancy between its maximum life expectancy and the average span it realizes. And few other types of institution—churches, armies, or universities—have the abysmal record of the corporation.

Why do so many companies die young? Mounting evidence suggests that corporations fail because their policies and practices are based too heavily on the thinking and the language of economics. Put another way, companies die because their managers focus exclusively on producing goods and services and forget that the organization is a community of human beings that is in business—any business—to stay alive. Managers concern themselves with land, labor, and capital, and overlook the fact that *labor* means real people.

What is so special about long-lived companies? "All happy families resemble one another," Tolstoy writes in *Anna Karenina*. "But each unhappy family is unhappy in its own way." What I have come to call *living companies* have a personality that allows them to evolve harmoniously. They know who they are, understand how they fit into the world, value new ideas and new people, and husband their money in a way that allows them to govern their future. Those personality traits manifest themselves in behaviors designed to renew the company over many generations. Throughout, living companies produce goods and services to earn their keep in the same way that most of us have jobs in order to live our lives.

efore I discuss the characteristics of the living company in more detail, some background is in order. In 1983, a group at Shell set out to learn something about long-term corporate survival by studying companies older than Shell. Shell was about 100 years old at the time, so we looked for companies that already existed by the fourth quarter of the nineteenth century, that were important in their industries, and that still had strong corporate identities.

Our team found 30 companies scattered throughout North America, Europe, and Japan that met those criteria. The companies ranged in age from 100 to 700 years. And 27 of them had reasonably well documented histories, including DuPont, W.R. Grace, Kodak, Mitsui, Sumitomo, and Siemens. As we all know, corporate history mostly consists of self-congratulatory books and articles written by people in the company itself about the virtues of the chief executive. The data are not always reliable. Nevertheless, we believe that those histories gave us some insights and that we learned something valuable from our study.

The first thing we learned is that the average life span of a corporation is much shorter than its potential life span. We already had an inkling of that from studying the *Fortune* 500 lists, and we obtained confirming data from registries in North America, Europe,

and Japan. In most of those places, the law requires the births and deaths of companies to be registered. Through studying those registries, we acquired corporate "population statistics," which include three important bits of information: the birth rate, the death rate, and the total population. With those three pieces of information:

mation, we could calculate the average life expectancy of companies, and we found that across the Northern Hemisphere, average corporate life expectancy was well below 20 years. Only the large companies we studied, which had started to expand after they survived infancy—during which the mortality rate is extremely high—continued to live on average another 20 to 30 years.

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It appears that in the corporation we have a species with a maximum life expectancy in

the hundreds of years but an average life expectancy of less than 50 years. If this species were Homo sapiens, we could rightly say that it was still in the Neanderthal age—that it had not yet realized its potential. Neanderthals had an average life expectancy of approximately 30 years, but, biologically speaking, the human species has a maximum life expectancy of 100 years or more. That longevity gap is very similar to the one we found between shortlived and long-lived corporations.

The second observation from the Shell study is that living companies are very good at "management for change," as we say in modern lingo. Stora, the most dramatic example in our study, survived the Middle Ages, the Reformation, the wars of the 1600s, the Industrial Revolution, and the two world wars of the twentieth century. For most of its life, it depended on runners, horsemen, and ships instead of on telephones, airplanes, and electronic networks to carry messages. Stora's business shifted from copper to forest exploitation, iron smelting, hydropower, and eventually paper, wood pulp, and chemicals. Its production technologies changed over time from steam to internal combustion to electricity to the microchip. And Stora continues to adapt to an ever changing world.

hat do the extraordinarily successful companies have in common? To find out, we looked for correlations. We know that correlations are not always reliable; nevertheless, in the 27 survivors, our group saw four shared personality traits that could explain their longevity.

Conservatism in Financing. The companies did not risk their capital gratuitously. They understood the meaning of money in an old-fashioned way; they knew the usefulness of spare cash in the kitty. Money in hand allowed them to snap up options when their competitors could not. They did not have to convince third-party financiers of the attractiveness of opportunities they wanted to pursue. Money in the kitty allowed them to govern their growth and evolution.

Sensitivity to the World Around Them. Whether they had built their fortunes on knowledge (such as DuPont's technological innovations) or on natural resources (such as the Hudson's Bay Com-

pany's access to the furs of Canadian forests), the living companies in our study were able to adapt themselves to changes in the world around them. As wars, depressions, technologies, and politics surged and ebbed, they always seemed to excel at keeping their feelers out, staying attuned to whatever was going on. For information, they sometimes relied on packets carried over vast distances by portage and ship, yet they managed to react in a timely fashion to whatever news they received. They were good at learning and adapting.

Awareness of Their Identity. No matter how broadly diversified the companies were, their employees all felt like parts of a whole. Lord Cole, chairman of Unilever in the 1960s, for example, saw the company as a fleet of ships. Each ship was independent, but the whole fleet was greater than the sum of its parts. The feeling of belonging to an organization and identifying with its achievements is often dismissed as soft. But case histories repeatedly show that a sense of community is essential for long-term survival. Managers in the living companies we studied were chosen mostly from within, and all considered themselves to be stewards of a long-standing enterprise. Their top priority was keeping the institution at least as healthy as it had been when they took over.

Tolerance of New Ideas. The long-lived companies in our study tolerated activities in the margin: experiments and eccentricities that stretched their understanding. They recognized that new businesses may be entirely unrelated to existing businesses and that the act of starting a business need not be centrally controlled. W.R. Grace, from its very beginning, encouraged autonomous experimentation. The company was founded in 1854 by an Irish immigrant in Peru and traded in guano, a natural fertilizer, before it moved into sugar and tin. Eventually, the company established Pan American Airways. Today it is primarily a chemical company, although it is also the leading provider of kidney dialysis services in the United States.

By definition, a company that survives for more than a century exists in a world it cannot hope to control. Multinational companies are similar to the long-surviving companies of our study in that way. The world of a multinational is very large and stretches across many cultures. That world is inherently less stable and more difficult to influence than a confined national habitat. Multinationals, like enduring companies, must be willing to change in order to succeed.

These four traits form the essential character of companies that have functioned successfully for hundreds of years. Given this basic personality, what priorities do the managers of living companies set for themselves and their employees?

he manager of a living company understands that keeping the company alive means handing it over to a successor in at least the same health that it was in when he or she took charge. To do that, a manager must let people grow within a community that is held together by clearly stated values. The manager, therefore, must place commitment to people before assets, respect for innovation before devotion to policy, the messiness of learning before orderly procedures, and the perpetuation of the community before all other concerns.

Valuing People, Not Assets. This inversion of traditional managerial priorities is supported by a surprising finding in our study: each of the 27 long-lived companies changed its business portfolio completely at least once. DuPont, which is approximately 200 years old, started out as a gunpowder company. In the 1920s, it was the major shareholder of General Motors, and now DuPont is a specialty chemical company. Mitsui, which is about 300 years old, began as a drapery shop. It then became a bank, went into mining, and at the end of the nineteenth century, the company moved into manufacturing.

Those histories tell me that such companies are willing to scuttle assets in order to survive. To them, assets—and profits—are like oxygen: necessary for life but not the purpose of life. Stora was in copper in order to exist; it did not exist to be in copper. These companies know that assets are just means to earning a living. A company run according to a different model scuttles people to save its plant and equipment, which it considers the essence of its being. If such a company were in the car rental business today, for example, it would see itself as existing to rent cars. The company's fleet would be considered its primary asset, and its purpose would be to make profits for shareholders. If such companies find themselves in trouble, they get rid of people.

Loosening Steering and Control. If long-term corporate health and survival across generations require a willingness to change the business portfolio, managers must heed the opinions and practices of other people. The organization must give people the space

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to develop ideas. They must have some freedom from control, from direction, and from punishment for failures. In other words, managers must put the principle of tolerance into practice by taking risks with people and looking in new places in search of fresh ideas. Perhaps the best way to illustrate that notion is through the metaphor of rose gardening.

If you're a gardener, every spring you must decide how you will prune your roses: hard or long. Pruning hard means that you select three

of the plant's strongest stems and cut them down to three or four growth buds. That technique forces the plant to channel all its resources into a relatively small number of growth buds. Why would you prune your roses in that way? Because you want the biggest roses in the neighborhood in June.

I don't prune hard. Why? Because it's a high-risk strategy. Where I live, the most terrible things can happen to my roses. I live on a hill, where night frosts in April or even early May are not uncommon. Also, many deer roam freely on the hill, and they love to eat rosebuds. If I prune hard and the nights are frosty and the deer are hungry, I might have no roses in June at all. So I prune long: I leave between five and seven stems on each plant, and on each stem I leave between five and seven growth buds. As a result, the plant is allowed to spread its resources over many growth buds. I have never had the biggest roses in the neighborhood, but I do have roses every June.

And something else happens when you prune long for a number of years: you get surprises. In two or three years, some of the

spindlier stems have grown much stronger and have begun producing buds, and some of the old stems do not produce roses anymore. So what do you do? You remove the old stems and encourage the new ones. A tolerant pruning policy gradually renews the rose portfolio.

The gardening metaphor also helps resolve one of modern management's dilemmas: how to diversify without courting disaster. A policy of tolerance allows the rose and the environment to engage each other continually without endangering the rose's capacity for growth.

Organizing for Learning. There are times when a company's know-how, product range, and labor relations are in harmony with the world around it. The business situations are familiar, the company is well organized, and employees are trained and prepared. During those times, managers do not need to develop and implement new ideas. Their job is to allocate resources to promote growth and development, channeling capital and people to the parts of the organization best positioned to benefit from the current state of affairs. Those parts of the organization then become larger, better established, and more powerful.

But just when the company has organized itself, outside circumstances may change. New technologies come on the scene, markets shift, interest rates fluctuate, consumers' tastes change, and the company must enter a new phase of life. In order to stay in sync with the outside world, it must be able to alter its marketing strategy, its product range, its organizational form, and where and how it does its manufacturing. And once a company has adapted to a new environment, it is no longer the organization it used to be; it has evolved. That is the essence of learning.

How does an organization – as distinct from an individual – learn? Birds can help us answer that question. Consider the work of Allan Wilson, the late professor of biochemistry and molecular biology at the University of California at Berkeley. According to Wilson's hypothesis, an entire species can improve its ability

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to exploit the opportunities in its environment. Three conditions are necessary. First, the members of the species must have and use the ability to move around, and they must flock or move in herds rather than sit individually in isolated territories. Second, some of the individuals must have the potential to invent new behaviors – new skills. Third, the species must have an established process for transmitting a skill from the individual to the entire community, not genetically but through direct

communication. The presence of those three conditions, according to Wilson, will accelerate learning in the species as a whole, increasing its ability to adapt quickly to fundamental changes in the environment.

To test his hypothesis, Wilson revisited a well-documented account of the behavior of titmice and red robins in Great Britain. In the late nineteenth century, milkmen left open bottles of milk outside people's doors. A rich cream would rise to the tops of the bottles. Two garden birds common in Great Britain, titmice and red robins, began to eat the cream.

In the 1930s, after the birds had been enjoying the cream for about 50 years, the British put aluminum seals on the milk bottles. What happened? By the early 1950s, the entire estimated population of one million titmice in Great Britain, from Scotland to Land's End, had learned to pierce the seals. The robins never acquired that skill.

Why did titmice gain the advantage in the interspecies competition? Remember that Wilson identified the conditions necessary for learning to take place in a population: numerous mobile individuals, some of whom are innovative, and a social system for propagating innovation. The red robins lacked such a social system. Of course, robins sing, have color, and are mobile – they can communicate. But they are fundamentally territorial birds. Four or five

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robins live in my garden, and each has its own small territory. There's a lot of communication among them, but what they usually have to say to one another is, Get out. Titmice also love my garden. They live together in pairs in May and June. By the end of June and July, you see the titmice in flocks of 8, 10, and 12. They fly from garden to garden, and they play and feed.

Birds that flock learn faster. So do organizations that encourage flocking behavior. Any organization with several hundred employees is bound to have at least a couple of people curious enough to poke their way into new places, like titmice finding their cream. But keeping a few innovators on hand is not enough to ensure institutional learning. The organization must encourage those people to interact with others. Skunk works are an example of that phenomenon.

Management development programs are also an excellent opportunity for flocking. Shell, for instance, spends about \$2,400 per employee each year on training that helps employees advance in their fields, move into new endeavors, and develop new skills. Even more significant, most of the training is collaborative. It is very important for teams of disparate people to undergo intensive training together at regular intervals. Such an experience helps disseminate knowledge across an organization and brings together people from various cultural backgrounds and professional and academic disciplines. The flocking is intensive. Course attendees nearly always report afterward, "It was not so much what I learned in the official sessions but what I picked up from my colleagues during the breaks that was important."

Shaping the Human Community. Managers must decide how to position the human element in their companies. They can choose to produce wealth for an inner circle of managers and investors, or they can develop an organization that is a community. The choice they make plays a large role in determining whether a company will outlive its founders. Managers who want to build an organization that can survive many generations pay attention to the development of employees above all other considerations. They give a high priority to questions such as, How can we organize for continuity from one generation to the next?

In organizations in which benefits accrue to only a few people, all others are outsiders, not members. According to their underly-

ing contract with the company, those outsiders trade their time and expertise for money. As ample evidence from the organizational behavioral sciences shows, that type of contract does not inspire people to give their all or to feel much loyalty to the enterprise or its managers. Recruits understand that they should work with their eventual exit in mind. Succession in those companies is difficult and costly. The company's continuity over generations is not ensured.

To me, a company whose purpose is to produce wealth for a few people is like a puddle of rainwater—a collection of raindrops that pool in a cavity or hollow. The drops remain at the bottom of the cavity. When it rains, more drops may be added to the puddle and its field of influence may broaden, soaking the ground around it. But the original drops remain in the middle.

Stasis can lead to vulnerability. Puddles of water cannot survive much heat. When the sun comes out and the temperature rises, the puddle starts evaporating. Even the drops in the center are in danger of going up in vapor.

The company whose purpose is survival is more like a river. Unlike a puddle, a river is a permanent feature of the landscape. Come rain, the river may swell. Come shine, it may shrink. But it takes a long and severe drought for a river to disappear. From the point of view of the drops of water, the river is quite turbulent. No drop remains at the center for long. From one moment to the next, the water in one part of the river changes. New water drops succeed old ones, and they all are carried forward.

The river lasts many times longer than the individual drops of water it comprises. The river is a self-perpetuating community with its own built-in guarantees for the continuity and motion of water within its banks. A company, by initiating rules for the continuity and motion of its people, can emulate the river's longevity and power.

The living company is a river company. In such an organization, managers regard the optimization of capital as no more than a necessary complement to the optimization of people. To build a company that is profitable and will live long, managers take care to create a community. Processes are in place to define membership, establish common values, recruit people, develop employees, assess individual potential, live up to a human contract, and establish policies for graceful exits from the company.

Above all, in the living company, members know "who is us," and they are aware that they hold values in common. They know the answer to the definitive question about corporate identity: What do we value? Whoever cannot live with the company's values cannot and should not be a member. The sense of belonging pulls together even the most diverse members of the company.

In the living company, the essence of the underlying contract is mutual trust. Individuals understand that in exchange for their effort and commitment, the company will help them develop their potential. Money is not considered a positive motivator in a river company. If money is insufficient, people will become dissatisfied, but adding money above the threshold of sufficient pay will not motivate people to give more to the company. Before they will give more, people need to know that the community is interested in them as individuals, and they themselves need to

be interested in the fate of the enterprise. Both the entity and the individual need to care more about each other.

Part of that caring is making sure that people enter and exit the company with the right understanding. Recruits are judged as much on the basis of their fit with the company's values and principles as they are on their ability to fulfill the technical requirements of the job. People are hired into a living company with the understanding that they are there to develop their potential. This does not mean that they have a contract for life. If people don't pull their weight or share the community's values, they must move on. And when they reach a certain age, it is time for them to go. Leadership in living companies is the opposite of that portrayed in the old cartoon that shows 12 geriatric board members nodding slowly to the chairman, who is proposing to extend the retirement age by one year.

One benefit of strict exit rules is that management becomes stewardship. Just as you took over from somebody, you will pass the baton to someone else. Your legacy at the company will depend on how well you carried out your stewardship.

any shareholders and senior managers are not interested in building a self-perpetuating work community. They prefer the company to remain a moneymaking machine for the benefit of an inner circle. Theirs is a perfectly legitimate choice, but those who make that choice must realize that there is no free lunch.

More and more companies operate in a world they do not control. The chances that a company can influence today's world to its benefit grow smaller every day – as banks, insurance companies, telecommunications companies, and software makers are finding out. Why? Because global competition is forcing companies to move out of their regional or national niches into less familiar territory. Even companies that do not expand find the outside world invading their turf. In the global village, it is increasingly difficult to find niches or hide behind barriers. In short, corporate money machines risk becoming an endangered species capable of living only in protected national parks.

Living, learning companies stand a better chance of surviving and evolving in a world they do not control. They make sense, especially because success now depends on mobilizing as much of the intelligence at a company's disposal as possible. The high levels of tolerance inside the living organization create the space for more innovation and learning. Creating that space is vital for brain-rich, asset-poor companies like law and accounting firms, credit card companies, and financial services companies, whose success depends on the quality of their internal communities. But even the old type of asset-rich company, such as oil and car companies, need much more knowledge embedded in their products and services now than they did 20 years ago.

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