## The Living Company: A Recipe for Success in the New Economy

What distinguishing features characterize the New Economy? Is it a mere wave of new technology, or should we look deeper? Does it threaten only the weak and the meek? Or have the basic conditions to achieve long-term business success changed dramatically?

In the early 1980s, several large companies began to worry about the "post-industrial society." Would they have a place in this new society? Would economic growth occur in services, or in their bread-and-butter industrial products as well? In those days, these questions translated as a vague feeling of unease—nothing more serious.

Since then, the words "post-industrial society" have gone somewhat out of fashion. Today's headlines announce that we live in an idea-driven world: We have moved into the "Information Age" and entered the "Knowledge Society." These headlines remove a little of the unease. They somehow suggest that the worst that is happening is a passing of a new wave of technology. It makes the problem, if there is one, sound slightly less dramatic. Nothing that should worry a well-established, solid business. Any company more than 100 years old has experience in absorbing new technologies. The internal combustion engine replaced horses, electricity replaced steam. Technology changes spell dangerous times, but they do not lead to rephrasing the basic questions of business.

So, we must see behind the feeling of unease and explore the distinguishing characteristics of the New Economy. In doing so, I suggest using the language of economics. It may help us to discover if there is, indeed, a New

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Economy and, if so, whether its characteristics raise important questions about the sources and the nature of success in business.

The science of economics describes the production of goods and services (in other words, what most companies do) as a matter of combining three production factors: natural resources, capital, and labor. The science of economics does not say in most text books that, over time, these three production factors did not have equal weight in this process of producing goods and services. On this point, however, historians can greatly enrich the language of the economists.

In the primitive Western world of a 1,000 years ago, humanity produced its material wealth in a way that considered land and natural resources the most important production factor. The dominance of land in producing goods to sustain the population had highly visible consequences in early medieval society: Those who had land were rich and powerful, and those who did not were poor.

Then, starting some 500 years ago, people began gradually to add more and more capital to this process of producing goods and services. Historians

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like Simon Schama and Fernand Braudel describe in vivid detail what happened toward the end of the Middle Ages in regions like Northern Italy and in Flanders. In those societies, poor though they were, production had begun to exceed the immediate needs for consumption. A modest portion of the population began to accumulate savings which then, surprisingly perhaps, found its way into productive processes, rather than into the lifestyle of

the ruling, land-based elite. We all know the results: Ships became bigger, voyages longer, and mines deeper, and machines were added to the laborers in the textile ateliers that began to replace the workshop of the medieval tradesman.

This shift in the mix of production factors paralleled a quantum jump in technology. Johannes Gutenberg's invention of the printing press made possible a manifold increase in the speed and precision of the transmission of human knowledge, which in turn had spectacular results in economic terms. Both this new technology and the introduction of more capital to natural resources greatly increased output. Not surprisingly, demand for capital increased quickly and exceeded available savings. Capital became the scarce production factor and, at the same time, the factor most critical for success in the production of goods and services. Capital began to command the maximum remuneration. That had consequences in society as a whole:

Those who had capital were rich and powerful, and those who had not were poor. The Capitalist Era had begun.

The rise of capital as the critical production factor also gave birth to the modern commercial company. The people who had access to this scarce and critical production factor became the founders and the leaders of these companies. As leaders, their top managerial priority became the optimization of capital, meaning making the maximum use of it to remain competitive and assuring the greatest return—the maximization of its remuneration—to maintain access to it.

This situation lasted some 500 years and, in essence, still existed when I was a student in the years immediately after World War II. But, from then on, the world entered a period of unsurpassed capital accumulation. Institutions and banks built up a financial resilience unknown until then. Individuals in many parts of the world began to accumulate savings and investments. Technology increased the velocity with which money circulated through society.

Now, 50 years later, capital is no longer scarce. For that same reason, it is no longer critical for success in the production of goods and services. Supply of capital has begun to exceed demand. Banks actively compete to give established businesses all the capital they want and offer more money—through credit cards—than most people could ever repay. Governments found trillions of dollars to finance their spend-happy ways without raising the price they had to pay much more than 1 percent or 2 percent above real interest rates.

By the 1980s, the world's financial resilience had become so great that several shocks and capital-destroying events that, each, would have produced the 1929 depression, passed without plunging the system into a crisis. Just think about the 1982 Mexico crisis, the 1986 oil price collapse, and the October 1987 crash of the New York Stock Exchange. The Capitalist Era had finished!

With capital easily available, in the language of the economists, the critical production factor has shifted to people. But it did not shift simply to "labor." Instead, knowledge displaced capital as the scarce production factor—the key to commercial success. That has consequences in society as a whole: Those who have access to knowledge and know how to use it will be the New Rich, and those who have not will be the New Poor.

We have not yet digested the real meaning of these consequences. Society continues to speak of its Poor in terms of the Capitalist Era: unemployed, jobless, poor in money. It still tries to resolve the societal tensions of this inequality in terms of the solution developed in the nineteenth century to deal with the tensions of the capitalist world: by redistributing money.

And at the same time that Japanese car companies increase the recruitment threshold for assembly-line workers to 16 years of formal education, the West wonders why its social safety net cannot return a whole layer of the population back into the production process.

Until we develop a new language in which to think about the realities of our present society, we will not be able to deal with its tensions. Redistributing money no longer provides a complete answer. Nothing is easier and, at the same time, nothing is more difficult than to redistribute the scarce production factor of today: Knowledge. It is easy and cheap to give, but its redistribution requires not so much the act of giving, as the willingness and capability to receive it.

Also in business, the shift to knowledge has monumental consequences. As was the case 500 years ago, a quantum jump in technology has accompanied the shift in the critical production factor. The megatechnology based on the microchip has revolutionized the production of goods and services. In business, in the same way as in society at large, we see new winners and new losers. During these last 50 years of transition, the new winners in the business world became visible in the rise of capital-poor but brain-rich companies and partnerships: international auditing firms, law firms, advertising agencies, and the news media. Lately, the explosively growing software and information technology (IT) companies have eclipsed even these firms.

Managers cannot run these brain-rich companies in the old capital-oriented style. They have had to change their priorities. Instead of running their companies to optimize capital, they must find a way to optimize people. Their companies have hardly any capital. Their people carry the knowledge and, therefore, the source of competitive advantage. Today even the old type of capital-rich company, such as oil and steel firms, need much more knowledge embedded in their actions and in their products than they did some 20 years ago.

So, the science of economics does help us to see some of the distinguishing characteristics of the post-industrial society. Unfortunately, economics is less helpful in examining the question, "How does one make a business successful in this new world?" Where economists talk about business, their language is stuck in the Capitalist–Industrial world of a half-century ago. Witness the description of what one might call the "economic company," which I learned 50 years ago and that today's business school student can still recognize:

The production of goods and services takes place in organizations which are called companies. They produce goods for which other people are prepared to pay a price. Companies produce those goods by trying to find the optimum combination of the three production factors: labor, capital, and land. These three are substitutable, meaning for example that capital can

replace labor. The optimum combination of the production factors is the one at which the company produces goods and services at minimum costs to be sold at maximum price for the maximization of profits.<sup>3</sup>

This description, which dates from the Capitalist period, ignores the economic realities of today. Capital is no longer scarce, nor is it the critical source of commercial success. Yet, this description still defines "success in business" as the maximization of profits and, by implication, says that managers' number one priority should be to maximize shareholder value. Understandably pleasant as this definition is for shareholders, it also has an undeniable appeal for managers. The economic definition has great clarity, because, basically, it says that the Economic Company is

- rational—it aims to maximize profits by minimizing costs;
- calculable—you can express this rational in figures; and
- controllable—the interchangeability of labor and capital creates the illusion of managerial control, at the same time as it obeys the tenet of corporate success (that is, maximum profits).

Attractive though it may seem, the economic definition points toward a dangerous course to sail. The modern brain-rich company is in the first place a community of people that, to succeed, must maximize its available brain capacity. Creating a community and, then, creating the conditions that will make maximum use of the combined intelligence of the community

members, is neither easy to control nor calculable (certainly not *a priori* and not in the short run), and it is not rational in the same sense as is maximizing profits.

With the shift in the critical production factor from capital to knowledge comes a shift in the priorities of management. From making the maximum use of capital and assuring the greatest return on capital, the top priority now turns to shaping the work community and creating the conditions for the maximum use of the available brain capacity.

Today's top business priority is shaping the work community.

To understand how that works, biology, especially evolutionary biology, provides us with a more effective language than economics. Research by three American evolutionary biologists is particularly illuminating. In the course of their work on the (different) speeds of evolution between species, they began to suspect that certain species were better at "learning to develop a new skill to exploit the environment in a new way" than were competing species.<sup>4</sup> That is a neat way to express the relationship between "learning" and being successful in a competitive world. It is, surely, not dissimilar from the way that, for example, Microsoft would define its competi-

tive behavior. So, how do biological species develop these superior competitive abilities to improve their chances of survival and further evolution?

According to Allan Wilson and his two colleagues, accelerated evolution occurs in species with numerous mobile individuals, some of which can innovate. But the species as a whole must have an effective way to propagate those innovations. When these three conditions are present, the scientists' hypothesis predicts accelerated learning in the species as a whole, meaning better and faster adaptation to fundamental changes in the environment. To find evidence for their hypothesis, they turned to a well-documented case in the United Kingdom.

In the nineteenth century, the British dairy monopoly introduced a countrywide distribution system that deposited milk bottles at the door of every house. Originally, these bottles had no seal. Two species of English garden birds, titmice and red robins, learned to feed from the rich cream in the top

A lasting work community requires its management to think in terms of generations.

of these open bottles. In between the two world wars, the dairy system put aluminum seals on the bottles, closing the access to this new food source. Many accounts report that by the 1950s the whole titmice population, estimated at some 1 million birds, from the North of Scotland to Land's End, had learned how to pierce the aluminum tops and to regain access to the rich cream. In contrast, even now, red robins, as a species, have not regained access and remain at a competitive disadvantage. Individual red robins do occa-

sionally learn how to pierce the seals, but the species as a whole has not gained from their knowledge.

But why? Both species have numerous mobile individuals, of which some have the capacity for innovation. The difference in "institutional" learning, as opposed to individual learning, between the species must lie in different systems of social propagation. And, indeed, a fundamental difference does exist between titmice and red robins. The latter are territorial birds. The males divide the garden in distinct territories and although red robins have the same rich gamma of communication as the titmice, they use it primarily in an antagonistic manner across the boundaries of their territories. In short, they tell the other members of their species, "Keep out of here!" This is not unprecedented in the corporate world, where many of us have experience with companies that have divided their corporate garden into spheres of influence. The amount of learning in the board rooms of those companies quite often compares with that of the red robins.

The lessons we can draw from Wilson's research are basic: Birds that flock, learn faster.

The implications of that conclusion for those managements that set out to organize their company as a community of people are quite evident. It would certainly be interesting to begin to think in what way Wilson's three conditions—mobility, innovation, and propagation—can be translated by management into a corporate community. But before we do that in more detail, we should examine some other conditions of a successful community which are inherent in the biological approach.

As a group, titmice are recognizable to themselves and to others; they have similar patterns of behavior and they try to survive from generation to generation over as long a period as is possible. To put that in more abstract words: Species strive for continuity, show cohesion, and have a sense of identity. Research done in the Royal Dutch/Shell group of companies and, more recently, a study by Stanford professors James Collins and Jerry Porras, give strong evidence that companies that have been successful in terms of growth and longevity demonstrate similar characteristics. What do we mean by "continuity" and what should managers do to build that trait into their work community?

A long-lasting, continuous work community requires its management to think in terms of generations. The company should still be there, and thriving, when its founders have died. The company becomes like a river. A river—of which the water drops that form it continuously change—is itself a constant feature in the landscape. New drops join the river all the time and run its length, regularly moving position until they end up in the sea. A river is a continuous community with a changing population that is constantly mobile.

The image of the river begins to give us clues of what needs to be done to create a corporate work community. Management will have to organize the continuous entry into and exit from the corporate river. The entry—what we normally call "recruitment"—is how new members join the work community. We test whether potential members have the abilities to function in this community; we decide whether they have sufficient potential to flow the length of the river; and we ascertain whether they exhibit a sufficient compatibility of values to maintain the cohesion of the community. At the same time, strict exit rules govern the regular outflow of the river. Management should not dam succeeding generations behind a wall of individuals who consider themselves irreplaceable. Thinking in generations is good for humility—leadership becomes stewardship.

Recruitment to create a community differs greatly from recruitment in an Economic Company. In the latter it involves finding the people to fit the as-

set base of the company. This view is strongly embedded in the English language. We speak of labor in terms of "cogs" or "hands." People are but the hands to operate the machine. We decide how many to recruit based on the needed capacity—if the demand for our products exceeds the company's capacity to produce, we add machines and labor. This depersonalizes recruitment to finding "skills," not admitting "members." The underlying contract between the company and the hands that bring the skills is one of "delivering the skill against the payment of a remuneration." Money serves as the dominant element in the labor contract.

In contrast, in a "river company," recruitment aims at the creation of a corporate work community. Remuneration is the hygiene factor that A. H. Maslow described some 30 years ago. The underlying contract between company and member is based on a well-understood mutual self-interest of both parties: The company undertakes to develop the new member's ultimate potential, because both parties know that the devel-

Helping individuals develop their full potential elevates the company's innovative potential. opment of the members' potential creates the corporate potential.

Clearly, setting out to create continuity—thinking in generations—already produces a strong element of mobility. Fulfilling the conditions of the underlying contract—"helping the individual to develop to the ultimate of his or her potential"—elevates the innovative potential of the company at the same time as it improves the system of social propagation in the community. Knowledge travels with people, not on paper! Corporate training and

management development have proven track records in this respect. And so have systems of job rotation and career development—if management sees them as a priority and applies them actively.

None of these techniques is new. What is new is the growing understanding that in the modern world these techniques are the way into and the basic conditions for a company's long-term success. Of course, a company may not want to have long-term success. Next quarter's profit figure may be set, by the company or by outsiders, as the company's top priority. And that is fine, but there is no free lunch.

Because such a policy forces the company to operate "skills-for-money" contracts, which lower loyalty and mutual trust, the result is less commonality of goals and reduced levels of trust, which then require a management style based on stronger hierarchical controls. Stronger controls reduce the space for innovation and lead to lower learning abilities of the company as a

whole. Lower levels of learning in the post-industrial society reduce a company's life expectancy in a world in which success depends on the ability to maximize the use of the available brain capacity.

On the other hand, creating the conditions of mobility, the space for innovation, and an effective system of social propagation—recruiting with cohesion and continuity in mind and developing the ultimate potential of the community's members-creates the conditions for faster institutional learning in the New Economy in which success depends on that learning.

Every management team has a choice.

## Notes

- 1. See Simon Schama, *The Embarrassment of Riches* (Berkeley and Los Angeles: University of California Press, 1988), and Fernand Braudel, *The Wheels of Commerce*, vol. 2 of *Civilization & Capitalism 15th–18th Century* (Berkeley and Los Angeles: University of California Press, 1992).
- 2. Michael L. Rothschild, Bionomics (London: Futura Publications, 1992), pp. 8–10.
- 3. Taken from Wilhelm Röpke, *Die Lehre von der Wirtschaft* (The Handbook of Economic Science), (Zürich: Eugen Rentsch Verlag, 1946).
- 4. Jeff S. Wyles, Joseph G. Kimbel, and Allan C. Wilson, "Birds, Behavior and Anatomical Evolution," *Proceedings of the National Academy of Sciences*, (Washington: NAS Press, July 1993).
- See A. P. de Geus, The Living Company (Boston: Harvard Business School Press, 1997).
- 6. James C. Collins and Jerry I. Porras, Built to Last (New York: Harper-Collins, 1994).