BOOK REVIEW

Charles Sirois
Organic Management, Creating a Culture of Innovation
Toronto: Telesystem, HarperBusiness, Harper Collins, 2000

Reviewed by Eleanor D. Glor

In my last Review Essay, on creativity enhancement books, I complained about the lack of vision in the books reviewed. This book has plenty of vision.

Charles Sirois is a reflective private sector manager and former founder, chairman and CEO of Telesystem Ltd., a private equity company involved in wireless communications. He outlines a picture of the past, present and future benefits of innovation.

His book caught my attention for two reasons. First, it was recommended by a friend. Second, it uses a catchy metaphor, *organic management*. This is a metaphor I have also been working with, so I wanted to see how the author used this concept to build his concept of a culture of innovation. What would Sirois tell me about culture? My interest in what Sirois had to say was kindled.

Unfortunately, his billing was better than the reality. Sirois writes with the unconditionally positive stance of a successful private sector innovation leader and salesman. He has a total vision of a world that is in the process of revolutionary change. Based on the machine, with its linear, logical and mechanical thinking, he begins with the industrial revolution, passes through the current transitional age of information, and leads us toward a new age of creativity. The industrial age was driven by its technologies: the steam engine, the internal combustion engine, electricity, the assembly line, mega-production facilities, unwieldy bureaucracies, full employment, vertical and hierarchical management, mass media, mass information, mass thinking, and multinationals. Similarly, the information age is animated by exponential growth in capacities, and thus in the pace of change.

Three revolutionary forces are at work–information technology, communications and biotechnology. While radio took 38 years to reach 50 million people, TV took thirteen, and cable TV took ten, the Internet only took five. Similar exponential growth has occurred in the scope, scale and capabilities of the new technologies. The speed of digital transmission through fibre optic networks is an example. By 1998, the Canadian Network for the Advancement of Research, Industry and Education (CANARIE) had provided Canadian researchers and educators with nation-wide, high speed Internet capabilities through fibre optic transmission at 750 times its 1993 speed by 1998. Undersea telephone cable circuits cost 1/135 of their 1992 cost in 2000, and carried 343 times the number of calls (page 5). Computing capacity also increased at exponential rates, and has drastically reduced the numbers of people required to do tasks. Repetitive white-collar clerical functions have been almost completely displaced. Blue-collar workers, too, have been replaced by robotics, the combination of automation and intelligent machines, while the jobs that remain demand more creativity and initiative. More interestingly,

"In terms of productivity gains, worker-generated innovation and thinking could account for as much as, or more than, innovations in automation. While computing and robotics have forced us to rethink and reinvent the very idea of work," (pp. 6-7) workers' contributions are measured less in hours of work and more in results achieved.

Sirois goes on to say that in the new global economy, knowledge is the common currency. Investment in knowledge is outpacing investment in physical infrastructure. A disproportionate number of new jobs are in high-knowledge sectors of the economy. The proportion of white-collar jobs increased in Canada by 15 percentage points from 53% to 68% from 1971 to 1995 (p. 9). He does not mention, however, that some analysts say the size of the middle class declined by a substantial amount during that period.

At the same time, General Motors has cut 100,000 jobs (p. 10), and would need to cut an additional 40,000 to compete with Ford. The primary and secondary manufacturing sectors have moved to programmable tools and continuous-process technology. Skilled trades have been lost: machinists have become quality-control specialists, the printing trades have disappeared. The white-collar workplace, too, has been radically transformed.

As employment patterns have changed, the new job opportunities are for engineers, analysts, technicians and supervisors. The phenomenal growth in the telecommunications sector, computing and related information technology such as muti-media has increased the numbers of high value-added jobs, increased productivity, changed the notion of work, and broken down barriers to knowledge. Sirois sees humans as liberated from the tyranny of work and now empowered and enabled:

> to think freely, to change, to transform, to develop, to communicate and interact, to add to the overall store of knowledge and to share it. These functions and abilities are at the heart of what it is to be a living, breathing organism, the nexus of our very humanity. (Page 14)

The liberation of change is built on digital transmission and switching technology, the horizontal exchange of knowledge (instead of vertical), the insignificance of distance, the disappearance of borders as transparent networks are created [for good and bad], mass communications that are more intimate, and organic encounters. The moving bits of information circulate constantly within interconnected and interdependent networks that take on the nature of living cells, transforming themselves and the other bits they come into contact with, exchanging, interacting, transmitting (page 15). The significance of time and space have changed. "Time/space is no longer either tangible or palpable." (Page 16).

The Internet, the network of networks, is analogous to a system of living cells. Each party is both a receiver and a transmitter. The Internet's spontaneous, unpredictable and uncontrollable development would have been considered profoundly undesirable in a mechanical world. In an organic context it is completely comprehensible. Sirois believes our world is "evolving to be more and more organic, changing naturally with the needs of people and communities. (Page 16)

Not only have technologies changed, but so have values and the way we think. Traditional values have been superseded. Our organic world is in constant flux, frequently moving quickly in unexpected directions.

> We can no longer predict the behaviour of people or organizations with any reliability, because their interactivity on the network renders their behaviour random and chaotic ... Change is coming quickly and from every direction; it cannot be monitored, managed or controlled. (Pp. 17-18)

Along with IT and telecommunications, biotechnology is the third driver of change. Biotechnology is bioengineering, the application of engineering principles and processes to living matter, often at the cellular level. It is *live robotics*. Thanks to new knowledge of genetic sciences and human biology, life span has been increased, progress has been made against cancer, and new medications have been developed. The average time to develop and market drugs has not declined, however.

These technologies have given rise to new ethical dilemmas and trade-offs. Bioethics issues have been of prime concern in the food industry, while they have played a less important role in health and environmental research. Ethical issues are also important concerning population considerations, the unemployment created by economic changes, and the reduced capacity of our social safety net. The implications of the intergenerational transfer of financial burdens are also important. Sirois flags a looming crisis of will to pay for services for the baby boom generation. At the same time, he sees our transformed world, a world marked by a move away from control, as one of hope. It will be a world of a new society, new organizations, new governments, and new lives.

Having created a comprehensive vision of the past, present and future, Sirois goes on to describe the new economy. He sees it having shifted from supply-driven to demand-driven, from driven by process to driven by innovation. The democracy of demand is linked to globalization, involving (1) fewer restrictions on the free flow of goods and services, due to multilateral agreements, (2) lightning-like acceleration of trade, an increase in choice and consumer power. "The distribution of goods and services has replaced production as the driving force behind economic and, arguably, social progress worldwide." (P. 39). This has also produced a major advance in living standards across the planet. At the same time, economic cycles have become less predictable and major influences more broad-based. (3) Governments and private sector organizations alike are affected. (4) Globalization was initially fuelled primarily by private sector organizations attracted by the opportunities created by privatization and deregulation [Isn't this an interesting statement! Is there the potential for a precipitous drop as this process ends?] (5) Removing state-imposed restrictions has led to greater competition. (6) Privatization and deregulation have led to abandonment of centralized control. (7) Decentralization of the new production practices is in part due to the increasing availability of skilled labour in Asia, Africa and South America. Small and medium-sized companies play a more important role in supplying larger companies, and create more jobs. (pp. 39-45)

There is no longer a single flagship of economic growth (the big corporation). Increased complexity in the economic environment has required organizations to become more adaptable to their internal and external environments. While creativity and innovation sow the seeds of imbalance, they are also the keys to the future, and our ability to create an environment to foster them.

Sirois moves next to explore the organic metaphor. Just as living cells and organisms grow and respond to a changing environment, organizations must learn to do so as well. A company is like a living organism, in which employees are cells, departments organs, divisions systems, and the CEO the central nervous system. The company, an ordered, complex structure, must react, adapt and evolve. In this model the economy is an ecosystem, that defies systematic control, but responds to outside forces, shifts direction, and evolves. Financial markets are equally unpredictable. At the same time as attempts to control products such as copper and silver failed, the Asian financial crisis of the mid-1990s spilled over into the global economy. One out-of sync element created an uninterrupted succession of imbalances that affected the whole economic organism. Imperfect and hard to control as it may be, the market economy ecosystem has facilitated expansion of the global economy and broader distribution of wealth, according to Sirois.

He believes governments need not intervene as system agents, though they have a role in creating and preserving a socio-economic environment conducive to sustainable growth and development. Knowing how to read the ambient environment is perhaps the most important skill of an organic style of management (Burke identifies this as the crucial skill of the CEO). Most important is a capacity to react and adapt, not forecast and plan. Everything is unpredictable. Management is about adapting to multiple variables. The skill is to be able to identify and isolate the most important changes, with lasting impact, and to react accordingly. Adaptation and creativity are the key to the survival and viability of all organizations today. The more creative acts, the faster the pace of evolution. (P. 75)

The last part of Sirois' book is an even more political and social treatise, that recommends less government involvement and less government control in general. At the same time, he recommends much larger amounts of spending on education and training, in order to increase employability, and introduction of a guaranteed minimum income for everyone, that is higher than current social programs but less than minimum wage. He believes this would lead to more responsible, free, and more self-reliant citizens. He favours deregulation and privatization. He also expects government to become a sound manager of economic drivers.

Comment

Although this is a simplistic, naive and somewhat contradictory assessment, Sirois' book is an interesting exploration of the organic metaphor that acknowledges the wrenching change and upheaval we are experiencing world-wide today. His bottom line is the primacy of individuals over social groups and organizations. The authority, direction and power of the industrial age is

giving way to power in the hands of individuals who are creative and innovative. Freedom and democracy, he believes, should be the big winners.

I am not at all sure he is right, on two counts. The rich and powerful have always tried to concentrate power, and it has been the role of the other groups in society to restrict and control their greed and lack of regard for others. The powerful are not, in fact, usually the most creative, only the most wily. No society should allow them free reign. Secondly, since September 11, 2001, the capacity of the new technologies to be used for greater control has become more explicit.

Despite his new metaphor, Sirois' vision is conservative. He emphasizes the ability of living beings to adapt and evolve, but does not seem to understand the way in which they do so–in nature, individual creatures adapt but they do not evolve, it is through genetic change that they evolve. They are hence only capable of changing fundamentally in a new generation. Moreover, the rate of evolution is not constant, and ongoing or even frequent, but rather occurs most fundamentally through punctuated equilibrium. Adaptation and evolution occur only when they must, when they are imposed, and then relatively rarely. In the human context we can make choices–to change or to remain the same–but this too usually occurs with new generations. Sirois, moreover, ignores the main function of societies, to keep things as they are, to protect powerful groups, and sometimes, to protect groups that are in need. Humans have been trying to move away from lives that are subject to the vagaries of the overly powerful and imposed change. Sirois supports the return to this chaotic state, and its benefits.

Although he uses a new analogy, Sirois' conclusions are the same as those of the neo-liberal economists, whose vision has been dominant these last twenty years. Economics first emerged during the early capitalist, pre-mechanistic age, and its adherents today do not even agree with all of the areas for government action supported by Adam Smith. Smith was not an apologist for unregulated business enterprise. He acknowledged economic advance can have undesirable social consequences, and that unproductive labour can be beneficial to society at large. Modern, neo-liberals like Sirois see the economy as driven by insatiable demand. Yet the consumer society emerged during the mechanistic age that he sees as completely outdated. He notices the demand-driven role of the consumer, but ignores the demand created by government, which represents anywhere from 30 to 60 per cent of the economy in Western countries.

Sirois has an unreasonably optimistic vision of free competition. His is an almost entirely economic treatise, based on an interesting metaphor. Almost nothing is said of individual people and of the social. What is said about them paints a far less optimistic picture–unemployment, modest gains in health care at (admittedly) far greater cost, big increases in food production (Yet the gains in food production happened during the 1960s with introduction of the widespread use of fertilizers, herbicides and insecticides, not because of the introduction of industrial farming or biotechnology. The latter link is erroneously implied. A bloated population size is the unintended consequence.) No mention is made of increasing epidemics; loss of the effectiveness of antibiotics, one of the key factors in recent improvements in health, because of misuse and lack of control; widespread and intensifying damage to natural ecologies because of uncontrolled

economic activity; larger populations and increased poverty; greater inequality in developed and underdeveloped countries alike. The middle class has declined in size in Canada since the 1960s. Finally, Sirois' enthusiasm for current market conditions ignores the decline in the quality of service that has accompanied the spawning of numerous companies in, for example, the telecommunications field and electricity generation and distribution. Monopolies, whether private or public sector, produced more reliable and often cheaper services, but they produced fewer models.

I find a number of other things about Sirois' book troublesome.

Use of statistics. Sirois' use of statistics supports his case, but his presentation is not balanced. His comment about how long it took for the radio, TV, cable TV and the Internet to disseminate to 50 million people is a case in point. He uses this comparison to make the point that growth is exponential. Because he is discussing phenomena over a substantial period of time, to make claims about the meaning of his statistics Sirois would need to assure his figures are adjusted to be comparable. He might, for example, have scaled the figures to the number of potential users in order to do so. Without such an effort, figures can be misleading. The kind of acceleration in the speed of adoption that he suggests is not supported, for example, by reference to Everett Rogers' research on adoption of technological innovations. Rogers found that on average new technologies take 15 years to disseminate to half the potential users (as compared, for example, to educational innovations, which take 50 years on average). The dissemination of the Internet to half its potential users did indeed take about 15 years, as predicted. The more important issue is why some social innovations take so much longer than technical innovations to disseminate.

Sirois' *sources of information*, when they are given, are often industry sources: the sources for his figures on transatlantic cable transmission technology, for example, are the Washington, D.C.-based research group TeleGeography, Inc. (www.telegeography.com), the research division of Primetrica, Inc.) Another source is Teleglobe also a private sector firm. This is not, in other words, public domain information, a crucial requirement for valid information.

While Sirois has created a broad vision, it is *not a well-supported vision*. Although I cannot review all of his many claims, let me demonstrate this statement by looking at a few that interested me particularly. While I would like to agree with him about the potential productivity gains from worker-generated innovation, I cannot tell how he came to that conclusion. I would like to know–it's important support for bottom-up innovation, if it is true.

Sirois uses regular doses of *hyperbole*. Is all the growth exponential? Have white-collar jobs really been *almost completely displaced*? Do all the blue collar jobs that remain really demand more creativity and initiative?

Another problem is Sirois' use of *jargon*. It is time we put some meat on the bare bones of *less in hours of work and more in results achieved*, for example. A cynic might suggest (and some have) that this is just another way of saying that work hours are being increased. As a CEO Sirois might be in a position to demonstrate a statement like this: Here proprietary information

might be of value, but it is not offered. Where is the demonstration of these all-too common claims?

Sirois relies on *generalizations*. Most changes that Sirois describes are not ascribed to any specific technology, although almost totally to technology. I wonder, though, whether the cuts to companies like GM and Ford are primarily about technology. The big three North American car manufacturers have lost half of their market to Japanese cars. I am aware that Japanese car makers were earlier adopters than the American car makers of some sophisticated technologies such as robotics, but they also adopted social innovations such as quality circles much earlier, and invented new cost-saving inventory techniques such as just-in-time delivery. Techniques such as just-in-time delivery are relatively easy to implement in the Japanese context, where industry is highly centralized in the Tokyo area, usually in high rise factories, co-located with research and development functions. What have been the implications of adoption of this innovation in the North American context, where car manufacturing plants are more distributed? This technique makes North American car makers much more reliant on the transportation system, and thus more vulnerable to greater costs and periodic breakdowns in these systems. Have American vehicle manufacturers realized the same kind of benefits from the adopting Japanese innovations? If GM needs to reduce its costs (cutting an additional 40,000 workers is only one possible approach to its budget problems), in which directions is it looking? Why did the American vehicle industry take so long to adopt total quality initiatives? Are we really talking about a culture of innovation? If so, whose culture?

Sirois' talk of changes in *values* is similarly general and abstract. What are the traditional and new values to which he refers? How have they changed? These are important questions. If he is going to talk about the transformation of values, he needs to get specific.

Although he does not say so, perhaps Sirois is mainly talking about the types of technologies he emphasizes: information technology, communications and biotechnology. He is presumably correct that this is where a substantial portion of the new jobs were created during the 1990s, and that the best jobs in these industries were for engineers, analysts and technicians. But this is not the whole story. He describes them as if they were the only jobs created. He does not acknowledge that some folks went to new jobs in the fast food industry and security. While the jobs he describes are white collar jobs, some argue the middle class has shrunk substantially at the same time. While a few argue about definitions, it is also true that new jobs do not pay well, are part-time, and are contract positions. Moreover, Sirois gives no details of the negative consequences of technologies themselves, other than loss of jobs. Concerning the creativity of work, for example, in contrast to Sirois, some people argue that blue collar jobs are being eliminated while the creativity of white collar jobs is being reduced, not increased. The labour process school, arising out of Braverman's work in the mid-70s, for example, makes this point about the "Taylorization" of the pseudo-professions such as teaching and nursing. Moreover, hours of work have increased. This is not humans liberated from the tyranny of work according to my definition. Sirois has sanitized the effects of the changes wrought by these technologies to the point of misrepresenting them. Or, as someone said to me, "Methinks Sirois is either selling snake oil or is out of his mind."

Sirois' is a gung-ho, best of all worlds kind of book. He does not even acknowledge that some people react differently to what has been happening, and have been badly hurt by it. Sirois has not created a vision, but a utopia, or perhaps a dystopia.

About the Author

Eleanor Glor is an active promoter of effective, positive innovation. She does this by convening the Innovation Salon, editing The Innovation Journal (www.innovation.cc), offering workshops, and writing about innovation. Her most recent book is Is Innovation a Question of Will or Circumstance?, published by The Innovation Journal.