

**THE EVOLUTION OF BUSINESS:
LEARNING, INNOVATION AND SUSTAINABILITY IN THE 21ST CENTURY**

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ABSTRACT

This paper – as part of a broader evolutionary inquiry toward human fulfillment, societal wellbeing, and environmental sustainability – explores new frontiers for business. In a rapidly changing global environment, corporations can become evolutionary change agents for the creation of a sustainable global civilization by fostering financial, social, and environmental results.

The contemporary metaphors used to describe the business world can be limited in times when an emergent paradigm calls for new visions and actions. An evolutionary understanding, grounded in evolutionary systems theory, can open possibilities for leadership and innovation toward sustainability. Complex systems, such as organizations, need to learn to learn in harmony with the dynamics of their milieu in order to co-evolve and create value. The paper concludes with a reflection on the implications of the evolutionary paradigm for business education.

Keywords: business, evolutionary paradigm, learning, design, innovation, sustainability.

BEYOND THE BOTTOM LINE

*“If we do not change direction,
we are likely to end up where we are headed”*

— Chinese Proverb

The business of business is business. This has been the premise upon which the business world has been operating in the struggle toward market domination and profitability. Contemporary societies and the business world are inseparable. But so are all human beings and the planet. From a systems perspective, all human institutions, individuals and the environments in which they live and operate are inextricably interconnected in a complex and elegant web of mutually influential relationships. And yet, this understanding is hardly reflected in the functioning of the business world.

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Business life, as a legitimate money making practice, it is not the “universal human activity it is sometimes thought to be. It is, instead a remarkably modern and culturally peculiar phenomenon” (Solomon & Hanson, 1983, p. 34) whose infancy was triggered by the industrial revolution during the 18th century and supported by individualism and the Calvinist Protestant ethic. From an evolutionary perspective, it is not inconceivable to consider the transformation of the ends and means of business.

“For thousands of years, business existed only at the fringes of society. Society thought little of people in business, and people in business expected little of society. Profit was their only reward because power, social status, and even social acceptability were closed to them. In this context,... the idea that making a profit was the only goal of business might have some sense” (Solomon & Hanson, 1983, p. vii). But in a time when the values of the business world largely influence the values of society as a whole and the possibilities of future generations, the purposes and goals of business need to be questioned and expanded.

Merchant (1996) makes a useful distinction between different ethical approaches. She explains the paradigmatic assumptions of three kinds of ethics—egocentric, homocentric, and ecocentric ethics. Her framework helps to identify the dominant ethical stance of modern business: the egocentric ethic. In this approach, the wellbeing and happiness of the individual is sought. It encourages the individual to act in ways that brings about the personal good, assuming that a society constituted of fulfilled individuals equals the collective good. However, there are some pitfalls to this ethical position. “Because egocentric ethics is based on the assumption that the individual good is the highest good, the collective behavior of human groups or business corporations is not a legitimate subject of investigation” (Merchant, 1996, p. 521). Also, “it includes the assumption that humans are ‘by nature’ competitive and capitalism is the ‘natural’ form of economics” and as a result “ecological effects are external to human economics and cannot be adjudicated” (p. 521). The point is that the trickle down economic theory does not work in reality. Rich people become richer while poor people become poorer. That is, the egocentric ethic does not bring about social good. Another possibility is the homocentric ethic, which goes beyond individualistic self-interest in order to promote the collective good. However, it assumes that humans have a special place in the universe and this entitles them to exploit the rest of the world for their own purposes. So the homocentric ethic is good but not good enough as a new business ethic. The ecocentric ethical approach is the one that can bring a balance between human progress and preservation of the natural world. The ecocentric ethic embraces a systems view of the world – in contrast to the ego and homocentric ethics which are rooted in a reductionistic and mechanistic paradigm.

Koestenbaum (in Labarre, 2000) points out that “an evolutionary transformation of who we are, how we behave, how we think, and what we value” (p. 226) is necessary to resolve the paradox between business as usual and the contemporary global challenges that call for social and environmental responsibility. He connects this evolutionary

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transformation to the basic human quest for meaning, purpose, and fulfillment which have been left behind in the hectic life style of industrial societies. Unless such issues of purpose and meaning are addressed, humans cannot make intelligent decisions come Monday morning – much less develop a long term strategy toward sustainability. Human depth makes business sense, he argues, and it is precisely the depth required to move from the egocentric business ethic to a broader perspective that advances the wellbeing of individuals, societies, ecosystems *and* future generations. “The more you understand the human condition, the more effective you are as a business person” (p. 224). And the more we understand the interconnected nature of the universe, the more competent we are as shapers of sustainable and evolutionary organizations. To focus beyond the bottom line does not implies forgetting about the “profit motive” but transcending it toward a mode of wealth creation that pursues personal, social and ecological gains in addition to financial results. “The gift of working for sustainability is its meaningfulness” (Paul Hawken in Natrass & Altomare, 1999, p. 203).

METAPHORS AND IMAGES OF BUSINESS

*“No problem can be solved from the same consciousness that created it.
We must learn to see the world anew”*

– Albert Einstein

The business world is heavily influenced by images and metaphors that shape the strategies, structures and processes of organizations. Solomon (1999) analyzes common metaphors that he considers ways *not* to think about business. “How a person thinks about business – as a ruthless competition for profits or as a cooperative enterprise whose aim is the prosperity of the community – preshapes much of his or her behavior and attitudes toward fellow employees or executives, competitors, customers, and the surrounding community” (Solomon, 1999, p. 11-12).

“It’s a jungle out there” is one of the most pervasive metaphors that brings into business the classical Darwinian view of the survival of the fittest where the rule is kill or be killed. But this metaphor is grounded on fundamentally wrong scientific premises. Evolutionary systems theory (Laszlo, 1996) shows that cooperation is an essential strategy in nature, and the jungle metaphor completely ignores this fact. Closely related to the jungle metaphor is the conception of business as war and the marketplace as the battlefield. “Military metaphors are intrinsically nationalistic, alarmist, pessimistic, conservative, and authoritarian. This has grim implications for the mental health of a productive organization. Paranoia is not usually conducive to creativity or competitiveness” (Solomon, 1999, p. 15).

Less violent but as dehumanizing as the jungle and war metaphors is the idea of business as a money-making *machine*. Mechanistic thinking is reflected in many management methodologies and approaches (Jackson, 1991), and the machine metaphor “transforms everything human into something cold and mechanical. Emotions, affections, and

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relationships disappear, to be replaced by mere causes and effects” (Solomon, 1999, p. 18). The ideals of efficiency and control, two of the most appealing concepts for managers and planners, are derived directly from Newtonian physics while more holistic and organic concepts are revolutionizing contemporary physics and engineering themselves (p. 17). The machine metaphor has not been replaced but rather “improved” through information technologies. The information processing capacity of computers has over-excited managers and made them forget that what we need is not more information but more wisdom which requires human experience and ethical sensitivity.

What is common to these metaphors are the assumptions that match what Eisler (1989) has called the dominator model of social organization – a win-lose paradigm that involves ranking, power over others, hierarchies of control, competition and the institutionalization of violence. Unless we transcend the dominator paradigm, which seems to permeate the thinking and actions of people in Western civilizations, it will be difficult to come up with alternative metaphors and new visions to guide the evolution of the business world and the emergence of evolutionary corporations.

The new sciences, also known as the sciences of complexity, offer new insights that support the idea of an interconnected, collaborative, participatory, and creative universe (Goerner, 1994). New metaphors and powerful images are being born as this new scientific understanding spreads. For instance, Moore (1997) introduces the powerful idea of business ecosystems as a metaphor for the new type of cooperative *and* competitive relationships that take place in today’s business world. He argues that our traditional understanding of competition – from a dominator model point of view – is no longer adequate to the new realities, and that an ecosystemic understanding of business interactions has profound implications for corporate strategy. “We have only just begun the process of discovering and inventing the new organizational forms that will inhabit the 21st Century. We need the courage to let go of the old world, to relinquish most of what we have cherished, to abandon our interpretations about what does and doesn’t work” (Wheatley, 1992).

LEADERSHIP AND INNOVATION FOR SUSTAINABILITY

*“We cannot direct the wind,
but we can adjust the sails”*

— Contemporary Western Proverb

The challenge for the evolution of the business world is clearly articulated by Nattress and Altomare (1999) who explain that “it is no longer sufficient to be a smart organization, one that can scan the commercial environment, detect variations, and react accordingly. If we restrict ourselves to reacting to signals when it comes to human impact ... we may well end up focusing our organizational resources just on minimizing the pain of irreversible damage. Our business organizations need to become conscious of the evolutionary role business plays in the future of the planet and to take responsibility

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for that role.” Following the image of a business ecosystem embedded and entangled in a socio-cultural and bio-physical context, we can appreciate the need to move from reactive and even proactive organizational strategies to an *interactive* mode involving co-evolution.

The economy is one of the most relevant aspects of the socio-cultural context in which business operates. From a systems perspective, the economy cannot be detached from society and the natural environment. Such an integrated view of economy, society, and nature is encompassed in the notion of a sustainable economy which, according to Milbrath (1989, p. 82), is one that preserves and enhances a well-functioning ecosystem; provides humans with the products and services necessary for a good and dignified life; provides opportunities for fulfilling work and self-realization; achieves and maintains economic justice; and utilizes resources at a sustainable rate that does not deplete future generations. Some organizations are taking the lead by creating business opportunities through the creation of a sustainable economy.

An extraordinary example is the well-known case of Interface, Inc. They have introduced innovations such as the lease of carpet tiles that allows them to be in charge of the whole life cycle of their products, eliminate waste, reduce costs, inspire personnel, and protect the environment. Interface is living up to its goal of becoming one of the first names in industrial ecology (Interface, 1997). Their vision, as articulated by their Founder, Chairman and CEO, Ray C. Anderson, says it all:

Interface will be environmentally sustainable. But our mission is larger. We will also be financially sustainable, for the simple reason that our corporation must survive and that we must assure the livelihood of our associates and the investment of all our stakeholders. We will be socially sustainable, respecting the communities in which we work, positively influencing all those whose lives we touch, and taking care not to deplete the human spirit on which we depend... Our sustainability goals – financial, social, and environmental – are inextricably bound together, which is why we make such a point out of doing well by doing good (in Nattrass & Altomare, 1999, p. 101).

When reviewing the case of Interface with my executive MBA students, I hear mostly comments that show incredulity. They see the detailed and comprehensive changes implemented by Interface to fulfill its vision as an exception to the business world. However, there is enough evidence of the move toward sustainability that if a corporation or institution does not pay attention to the revolution of “natural capitalism” it will lose competitive advantage. “The move toward radical resource productivity and natural capitalism is beginning to feel inevitable rather than merely possible” (Hawken, Lovins, & Lovins, 1999, p. xiii).

Paul Ray (2000), in his sociological studies, has identified a fast growing segment of the US population – currently 50 million people – that embrace a social and ecological consciousness. He calls them the “cultural creatives.” These are the individuals who are willing to live and act in ways that bring about a sustainable culture. There are businesses that understand the implications of the emergence of this segment and in the last decades

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new products and services have been developed to satisfy the needs and support the values of the cultural creatives.

A clear case is the relatively new family of funds aimed at individuals who want to make money while making a difference. Socially responsible investing (SRI) does not seek moral perfection but tries to affect positive change and promote best practices (*The Economist*, 2000, p. 70). The growth and performance of SRI supports the argument put forward by Hawken, Lovins, and Lovins (1999) in terms of the inevitability of the move toward sustainability because it makes business sense. Many pension-fund managers believe that they cannot take an ethical stand because of their fiduciary duty to their clients. However, socially and environmentally responsible stock indexes are outperforming their ethically neutral counterparts. Environmental and social issues can have profound impact on a company bottom line. “Virtue... can bring more than its own reward” (*The Economist*, 2000, p. 70).

Some of the rewards received by companies engaged in sustainable practices include (Nattrass & Altomare, 1999, p. 192-198):

- Increase in eco-efficiency (the ability of doing more with less) that impacts the bottom line;
- Attraction of talented people as well as generation of employee commitment and motivation;
- Innovation of new products and services that meet environmental criteria as well as of production processes that close the loop;
- Development of the knowledge base and core competencies for the market of the future;
- Improvement of relations with local residents concerned with the wellbeing of their communities;
- Promotion of industry-wide self-regulation and impact on legislation;
- Achievement of quality standards under ISO and the International Chamber of Commerce environmental criteria;
- Inclusion in socially and environmentally responsible mutual funds and investment portfolios;
- Attention to media and activist pressures that affect consumer’s perceptions; and
- (last but not least), the reward that comes from knowing that it is the right thing to do.

There are many business opportunities still unexplored in the challenge of sustainability. Those companies that are willing to engage in processes of learning, innovation and management of complexity – the processes of adjusting the sails to the uncontrollable winds of change – are the ones with the greatest possibilities of profiting from the sustainability trend.

KNOWLEDGE, LEARNING, AND COMPLEXITY

“We’re not machines, we’re human social systems.”

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Our knowledge management strategies should be crafted accordingly”

— Mark McElroy

Knowledge has always been relevant for the good performance of business. However, the kind of relevant knowledge to develop and maintain competitive advantage has changed over time (see figure 1). During the first half of the 20th century, successful companies focused on improving their internal processes – production and managerial operations needed to be efficient. Scientific management, as developed by Frederick W. Taylor, is an example of business knowledge of the first kind. But increase in competition and expansion of the economy made it necessary to focus beyond the enterprise itself in order to learn more about the market, the industry, the consumers. Business knowledge of the second kind, therefore, is contextual. The work of Michael Porter on competitive advantage is a quintessential example of this kind of knowledge with great impact in the 80’s. These two stages of business knowledge reflect a reductionistic and mechanistic scientific paradigm that is portrayed in the outdated-but-still-in-use business metaphors of the jungle, war, and machine. The companies of the 21st century, the emerging evolutionary corporations, transcend that. Business knowledge of the third kind comprises an understanding of the socio-cultural and bio-physical dynamics of the organizational environment and draws insight from the sciences of complexity to infuse strategy and tactics for innovative value creation.

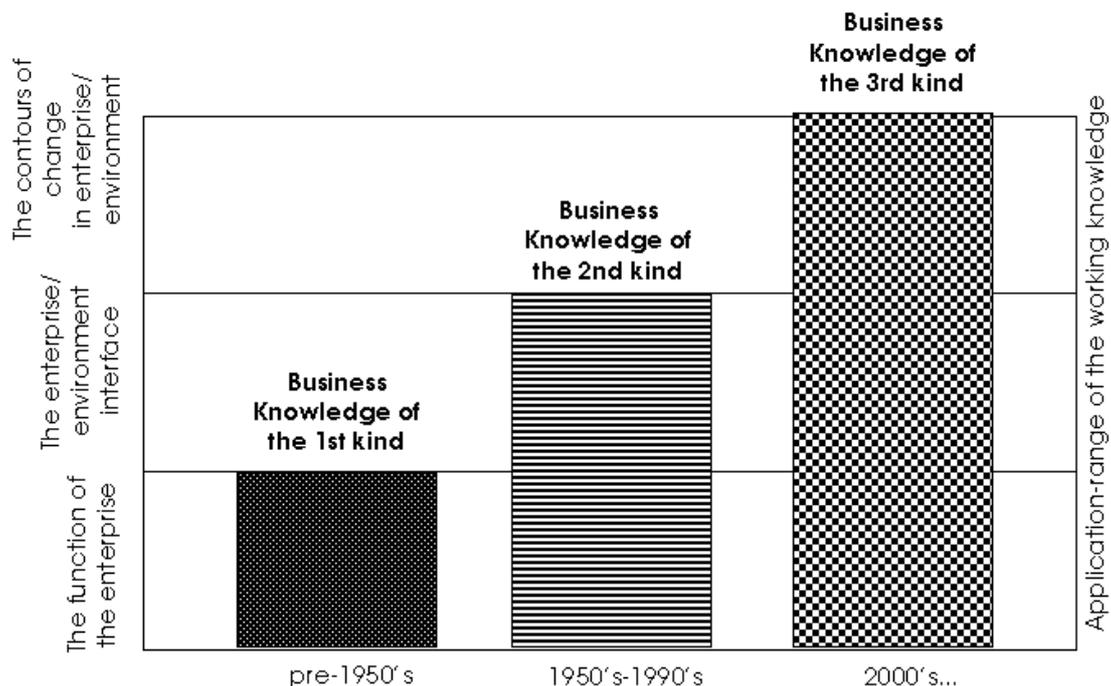


Figure 1. Business knowledge for evolutionary management (adapted from Laszlo & Laszlo, 1997).

The centrality of knowledge in contemporary management brought into being the thriving field of knowledge management (KM). Mark McElroy (2000) has described two

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generations of knowledge management. First generation KM focuses on knowledge *sharing* – how to distribute existing organizational knowledge, usually through technology – while second generation KM focuses on knowledge *creation* – how to satisfy organizational needs for new knowledge, usually through processes of learning and innovation. Learning has become one of the main sources of sustainable competitive advantage (Senge, 1993, p. 3).

But it is not simply learning processes the ones that create value in the business world. It is learning through collaboration – that is, organizational learning. Knowledge and innovation are the result – the byproducts – of ongoing collaborative processes that create the conditions for creativity and synergy. This is the vision of a learning organization, which, in words of Peter Senge (1993), is a place where

people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together (p. 2).

The machine metaphor applied to an organization removes its human character and makes it a static and sterile system. The fact is that organizations are human activity systems that reflect the purposes, values, expectations and emotions of the people that comprise them. A more appropriate metaphor for the organization is a living organism – an image that makes explicit the dynamic complexity of organizational life.

Complex systems are evolving systems. A living organism is capable of self-maintenance, self-renewal, and self-transcendence (Capra, 1996). Evolution is a process of self-organization into higher levels of functional and structural complexity (Laszlo, 1996). These features of complex evolving systems offer new insights for the design of organizational strategies, structures, and processes. “The company that acts like a living organism will naturally be a learning organization absorbing and reacting to information in an evolutionary manner. Companies that are conceived of as machines, rather than living organisms, are unlikely to be aware of external shifts in public opinion or be sensitive enough to their key relationships, because they will not be sensitive to the unexpected” (McIntosh, Leipziger, Jones, & Coleman, 1998, p. 74-75).

LONG-TERM AND BIG PICTURE REDEFINED

“Think big picture....

“The more you try to grasp, the more possibilities you have”

— Allan Weisman

The vision of a sustainable future is compelling, inspiring, meaningful. It is also critical – the wellbeing of future generations depends on our ability to live in partnership with Earth. But there is even more depth to the sustainability challenge. It is evolutionary.

The evolutionary perspective can be adequately thought of as the “big picture” – but it is not a static and permanent image of the larger context of our human existence, but rather

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an understanding of the dynamic processes of change of which we are a part. In this sense, evolution is the big *moving* picture and we humans are key actors.

How long is long-term in the business world? Five, ten, twenty years... Regardless of the exact variation, in evolutionary terms, it is very short. Long-term for the Iroquois Indians is seven generations. This is closer to the long term required for evolutionary change agency in which humans, individually and collectively, need to engage.

Our planet was formed 4.6 billion years ago. Humans have lived on Earth for about 2.5 million years. Civilizations developed about 10,000 years ago and written histories only cover 5,000 years approximately. In the last 200 years (0.00000044% of Earth time), humans have brought more change on the planet than in the past billion years. An analogy may help gain perspective on these time spans (Milbrath, 1989, p. 2):

Imagine a movie that runs a full year representing all the time since the origin of the earth. Each frame in the motion picture is the equivalent of one year of real time. The normal movie speed of twenty-four frames a second has to be increased about six times to 146 frames (years) per second to fit this movie into a single year. That means that 8.752 years of real time would flash by during each minute of the movie.... A day of the movie would represent 12,602.240 years. Imagine that the movie begins on January 1, coinciding with the origin of the earth, and ends with our present time at New Years' Eve the following year. As the movie runs for weeks, no sign of life is seen. The first glimmers of one-celled microbial life do not develop until March....

In our year long movie, more complex life forms... do not develop until August and September. Larger and still more complex multicellular organism do not appear until November. Dinosaurs appear about December 13th and become extinct after about thirteen days. Mammals appear about December fifteen. The genus *Homo* does not develop until five hours before midnight on December 31. *Homo sapiens sapiens* (modern humans) developed only 100,000 years ago; eleven minutes before midnight. Civilization does not appear until one minute before midnight. A lifetime of a modern human would be only one-half of a second.

The industrial era has lasted about two seconds. During that era, humans have used up and scattered a large proportion of the resources in the earth's crust, altered and exploited ecosystems to serve strictly human needs, held all other species at their mercy, and driven many species to extinction. They are now well on the way to poisoning the biosphere and changing the earth's climate. In comparison to the dinosaurs who survived on the planet thirteen days, can *Homo sapiens* last even one day? Microbes that long precede us will still be here long after we are gone.

Banathy (1996) provides a historical view of societal evolution (see figure 2). Each stage of societal evolution builds on another. Technological innovation can be seen as one of the motors of change, moving from technologies that allow us to survive and satisfy our basic human needs to technologies that expand our physical and cognitive capacities. Figure 2 illustrates the acceleration in the rate of change, the trend toward global integration, and the emergence of the systems paradigm. Each one of these stages represent periods of relative stability. However, the transitions from one stage to another are periods of utter confusion and chaos in which the status quo cannot be maintained given the changes in the environment. During these transitions – or bifurcation points – the next stage of societal evolution cannot be predicted.

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Stage one	Stage two	Stage three	Stage four
hunting gathering	agricultural society	industrial society	post-industrial society
half million years	ten thousand years	five hundred years	fifty years
speech	writing	print	electronic communication
wandering tribes	communities city-states	nation states	regional/global societies
magico-myth paradigm	logico-philosophical paradigm	deterministic scientific paradigm	systems paradigm
survival technology	fabricating technology	machine technology	intellectual technology

Figure 2. A historical view of societal evolution

Chaos theory, one of the pillars of the sciences of complexity, describes a phenomenon called the butterfly effect: in bifurcation points, the turbulent conditions in a complex dynamic system make possible the overall transformation of the system through small changes (Laszlo, 1996, p.46). Individuals and organizations may ask themselves “what difference will I make if I behave ethically in society?” and the thought of a single initiative of social and environmental responsibility against all the unsustainable practices of society at large seems to discourage ethical and innovative initiatives. The popular quote from Margaret Mead, “never doubt that a small group of thoughtful, committed individuals can change the world; indeed, it’s the only thing that ever has,” gains new meaning through the lens of the sciences of complexity. Prigogine, in his work *Order out of Chaos* expresses this idea in the following way:

The threat lies in the realization that in our universe the security of stable, permanent rules are gone forever. We are living in a dangerous and uncertain world that inspires no blind confidence. Our hope arises from the knowledge that even small fluctuations may grow and change the overall structure. As a result, individual activity is not doomed to insignificance” (quoted in Banathy, 1996, p. 313).

Contemporary global societies are currently experiencing another bifurcation. A new stage in societal evolution is about to be born. The key difference from the previous transitions from one stage to the other is that this is the first time in human history that we are able to explain what is happening while it is happening (Mead in Montuori, 1989, p. 27). This gives us an unprecedented opportunity. With the new understanding of evolutionary dynamics and systemic approaches to the participatory design of strategies, structures and processes, our species can stop drifting upon the currents of change and begin to adjust its sails in view of sustainable evolutionary futures.

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There are many indications that the new evolutionary stage could be labeled “sustainable society” – but in evolution there are no guaranties, and devolution or extinction are always possibilities. “We can take responsibility, individually and collectively, for the conscious evolution of our human systems. We can hold others – individuals, corporations, and governments – accountable as well. It no longer matters “who is to blame”; what matters is that we all take responsibility for the direction and impact of our society. In this generation, in our era, humans have become integral agents of evolution. More than that, we are evolution becoming conscious of itself” (Natrass and Altomare, 1999, p. 199).

IMPLICATIONS FOR BUSINESS EDUCATION

*“Tell me, I forget;
Show me, I remember;
Involve me, I understand”*

— Ancient Eastern Proverb

The creation of the evolutionary corporations that will bring about a sustainable society is a task that begins today. Organizations can begin doing things in new ways, to design new strategies, to implement new processes and structures. But these actions require capable people that understand the challenges, that embrace the new scientific paradigm, that can think long term, that are committed to the creation of meaning. “An actual change to a more sustainable way of life... require(s) a degree of change in understanding and attitudes. Education is one of the ways in which moral values and positions are developed in society. A transition to sustainability may therefore require some change in current educational programmes” (Clayton & Radcliffe, 1996, p. 237).

Bowers (1993) considers that educators are not yet aware of the cultural myths and assumptions that underlie their practice. Most educational innovators are still “caught in the myth of an anthropocentric universe.... The avalanche of information on the human impact on the environment is now so great that it is almost inconceivable that it is still being ignored by people who represent themselves as the leaders in education. But unfortunately this is the case” (Bowers, 1993, p. 115).

Unless business education, dedicated to the development of the talent for the business world, reflects the emergent evolutionary paradigm both in processes and contents, companies will continue to respond to new realities with old approaches. An essential task in business education “would be to develop a wider concept of social and environmental responsibility” (Clayton & Radcliffe, 1996, p. 237).

Contemporary business education fails to help business students achieve sufficient educational breadth, particularly with regard to their role and responsibility in an increasingly interconnected planet. “By developing curricular projects linked to community needs, [business] faculty can further their students' technical skills when

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helping them simultaneously develop greater inter-personal, inter-cultural, and ethical sensitivity” (Zlotkowski, 1996).

Evolutionary corporations have strong and explicit core values that embrace sustainability; recognize the business benefits of sustainability; are committed to organizational learning and to the human development of their people; understand the evolutionary systems perspective; have an expanded sense of responsibility & accountability; seek financial robustness; and accept their role as agents of socio-cultural evolution (Nattrass & Altomare, 1999, p. 189-191). Business education needs to facilitate the development of the knowledge, skills, values and attitudes that will cover the spectrum of evolutionary management, bringing a more balanced perspective to the overly emphasized financial bottom line.

Banathy (1996, p. 318-319) differentiates between maintenance and evolutionary learning. The first is adaptive. It involves the acquisition of fixed viewpoints, methods, and rules of dealing with known and recurring events. It maintains the status quo, and it is appropriate during periods of socio-cultural stability. In contrast, evolutionary learning is innovative. It enables the learner to cope with uncertainty and change, renew perspectives and creatively design co-evolutionary human systems. It is a more appropriate learning approach during bifurcation points. Educational systems in general (and business schools are not the exception) have been focused primarily on maintenance learning and the creation of *knowers* that know a lot about existing business knowledge and approaches. But new realities and global challenges call for evolutionary learning and the empowerment of *learners* capable of generating new knowledge and processes to respond to the changing socio-cultural and bio-physical environment.

Milbrath (1989, p. 110) suggests that educational institutions need to reorient their efforts toward helping students learn systems thinking, futures design, probabilistic decision making, integrative analysis, creativity, values inquiry, and ethical reasoning. Following a similar perspective, the business education programs of EGADE¹ seek to elicit creative problem solvers, transformative agents, ethical visionaries, self-directed learners, managers of complexity, cross-cultural leaders, and technology shapers. This vision informs the contents and processes of the courses we offer in order to facilitate the development of competencies such as nonlinear systemic thinking, systems design, self-motivation, openness to change and uncertainty, empathy, and innovation. In our courses, we are introducing collaborative and self-directed learning methodologies and we encourage the adaptation and application of the knowledge covered in the active organizational contexts of the students.²

¹ The Graduate School of Business Administration and Leadership of the Monterrey Institute of Technology (ITESM) in Mexico. EGADE has been ranked for three consecutive years as the best business school in Latin America.

² Two MBA courses that are being offered with a purposeful focus on these aspects are “Strategies, Structures and Processes of Organization” and “Organizational Learning and Development” that Dr. Alexander Laszlo and I team teach.

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Business education need to include evolutionary systemic approaches and the vision of a sustainable economy. Ethical innovation cannot happen through a top-down mandate, but rather occurs as the result of self-organizing, collaborative and creative processes within an organization that has made explicit the values and the commitment to move toward sustainability.

CONCLUSION

The world is changing and the business world is a key shaper of emergent possibilities. The evolution of the business world and with it, the evolution of society, can be a conscious and purposeful process. Nevertheless, it will not be an easy transition. There is a huge inertia of modern industrial ways, and those taking the lead will find risks and resistance. As Machiavelli (1984) put it:

There is nothing more difficult to carry out nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all who profit by the old order, and only lukewarm defenders in all those who would profit by the new order. The lukewarmness arises partly from the fear of their adversaries who have law in their favor; and partly from the incredulity of mankind, who do not truly believe in anything new until they have had actual experience of it.

Although Machiavelli's perspective was not quite aligned with the evolutionary paradigm and the sustainability vision, the relevance of his statement relates to the perennial difficulty of creating new paths. And yet, there could be nothing more challenging and rewarding. Sustainability makes business sense.

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