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S.E.A. STRATEGIC EVOLUTIONARY ADVANTAGE

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ABSTRACT

The tides of change constantly surface new currents in the world of business. No longer is it sufficient to seek the static positional advantage offered by classical Porterian analysis in order for a corporation to develop with dignity. In fact, it is not enough even to learn to read the patterns of change that shape the organization in its environment, and which in return are shaped by it. Without a doubt, such business acumen is essential to contemporary change management leadership in the business world, but unless an organization is dedicated to evolutionary value creation, its ability to navigate the currents of change in life-affirming directions will be compromised.

This article explores the emerging direction of business strategy as expressed by the concept of *evolutionary advantage*. It begins with a backward look at the major forms of business knowledge as they developed over the last century, turning subsequently to consideration of mainstream frameworks for strategic analysis, and offering, as a compelling alternative, the emerging notions of evolutionary development and its corollary, evolutionary leaning. Through application of the praxis known as Evolutionary Systems Design, it is shown how an organization may cultivate strategies for sustainable success. Such strategies, based on a redefinition of that which constitutes success, foster dynamics of organizational change that reinforce patterns of syntony over positions of power for both internal and external clients. The implication, therefore, is that these notions form the emerging basis for sustainable value creation in the context of twenty-first century organizational dynamics.

Keywords: Competitive advantage, evolutionary advantage, business sustainability, evolutionary learning, syntony.

INTRODUCTION

Business challenges of the 21st century are complex. Societies all around the world are currently experiencing a period of rapid and extensive transformation. The signs of change are pervasive, and the rate of change is itself changing and accelerating, speeding contemporary societies toward a critical threshold of stability and engulfing the corporation in a confusing blur of strategic choice. Global flows of information, energy, trade, and technology are swept up in massive economic reforms and political reorientations with the result of creating a disorienting and disrupting vortex of political and economic change on both local and global levels.

Humanity is poised to transit to a new kind of society, one that is as different from the society we leave behind as the grasslands were from the caves or the settled villages of antiquity from life in nomadic tribes. However, the countervailing tendencies in this dynamic are strong given the atavistic attraction for those in positions of political and economic power to keep things just as they are. And yet, as a species, we find ourselves in the position of conscious choice – of being able to leave behind the geo-political system of nationally based industrial societies created at the dawn of the first industrial revolution in favor of an interconnected socio-economic system created by the growing impact of information, the globalization of business and government, and the ever greater demands on an increasingly over-burdened and fragile terrome. All that is needed is a new vision of the world, different premises of what constitutes sustainable value creation, and a more socially, environmentally, *and* financially attuned basis of value exchange.

Patterns of existence have seldom changed in any single lifetime as significantly as they are changing now. Today, anyone who has reached mid-life will have witnessed the aftermath of a world war, the coming of the information and communications age, the shift from a bi-polar superpower dominated world to a uni-polar hyperpower dominated world, and the opportunity to replace a world dominated by the polarization of military-might with one led by an economy with intensifying coepetition for information, technologies, and markets. However, this opportunity has its dangers, and they are only now starting to be both incontrovertible and ineluctable.

A WORLD IN TRANSITION

There are three main dimensions of change that characterize the global transition. One is the dimension of communication or information processing capacity; the second is the dimension of business and government in the expression of individual and collective self-organization; the third is the dimension of planetary life support systems that are being steamrolled by the pressures of a burgeoning humanity. And like it or not, at the dawn of the 21st century we're experiencing 3-D change with all three dimensions going global as the rules of the game that define the nature of power, wealth and sustainability change and become redefined.

Power can no longer be legitimized simply by the authority of an office or organization, and wealth is shifting away from such tangible items as gold, money, and land. The emerging basis for both power and wealth is more flexible and intangible than ownership of position or of material; it is being formed around the power and ownership of know-how, know-why, and care-

why — in short, of knowledge management. The transition toward a knowledge-based society is felt in all domains of existence — in politics and in business, and even in private life. The impacts are due to the way we are now accessing, processing, and transmitting information. Indeed, the fact that information can be so quickly transmitted and processed from anywhere in the world to anywhere else has changed the horizons of time and space in the context of our social interactions.

Along with the rise in information processing capacity, we are witnessing a rise in business enterprises and international and intergovernmental organizations that span the globe. As a matter of fact, the globalization of business (that has developed in direct relation to the globalization of communication and information processing technologies) has done the most to change the way we interact as companies, nations, and regions. Until the last few decades, governments were the principal, if not the only, actors on the global scene. Today, things are quite different. The approximately 180 national governments and roughly 10,000 international or intergovernmental organizations are joined by a thousand or more business corporations as major global players. The fact is that the leading domestic industries of the 1950s have grown into the multinationals of the 1960s and '70s and the transnationals and globals of the '80s and '90s. Since growth is no longer the new frontier for business or government (unless we choose either political parasitism or corporate cannibalism as empire expanding tactics), new dimensions of progress in the 21st century will, of necessity, be along the lines of sustainable development, or more precisely, of evolutionary development.

The actual extent of globalization in the business world is seldom fully recognized. The confluence of production, commerce, the technologies of control and information, and the changing political scene have provided major industrial and financial enterprises with the opportunity and the means to span the world. The globalization of leading manufacturing enterprises was accomplished by the globalization of trade and service companies and paralleled by financial markets operating “round the clock and round the world.” The exchange market has become the most global of all business sectors, with worldwide rates, instantaneous electronic banking and arbitrage, and a daily turnover estimated easily in excess of US\$700 billion (Laszlo, 2002).

The challenges of information and knowledge management have become global, not only for business and government, but for education, extended families, and any sort of geographically disperse community. The challenges come both in terms of the volume and relevance of information among those who have ready access to the increasing number of channels of information flows with ever increasing width and flow rates, and to those who do not have ready access to these major arteries and the pressure this puts on a global civilization to maintain cohesion. Such issues relate to the long-term sustainability of current patterns of production and consumption and spill over into deeper questions of planetary well-being.

3RD GENERATION KNOWLEDGE MANAGEMENT

There is little question as to the fact that today, more than ever, business is a key shaper of the emerging global society. In this context, the relevance of knowledge and the need for

approaches to manage it have become critically apparent in the business world. In fact, in a survey of chief executives, knowledge management was put second on their “must do” list after globalization (TFPL, 1999, p. 3).

Knowledge has always been relevant for good business performance. However, the kind of knowledge relevant to the development and maintenance a healthy competitive edge has changed over time (see figure 1). During the first half of the 20th century, successful companies focused on improving their internal processes since production and managerial operations needed to become more efficient. The principles of Scientific Management, as developed by Frederick W. Taylor and disseminated in his widely influential 1911 book by that name, provide an example of this type of Business Knowledge of the First Kind – what we call *atomistic business knowledge*. But increases in competition and expansion of the economy made it necessary to focus beyond the enterprise itself in order to learn more about one’s market, one’s industry, one’s consumers. This is Business Knowledge of the Second Kind – *egocentric business knowledge* that is contextual and that uses benchmarks and best practices as references points for “dog eat dog” strategic positioning. The work of Michael Porter on competitive advantage is a typical example of business knowledge of the second kind with greatest impact in the 1980’s. These two kinds of business knowledge tend to use metaphors that refer to business as a jungle (i.e., survival of the fittest; eat or be eaten), warfare (i.e., war room strategy, guerrilla tactics), and the machine (i.e., efficiency and efficacy at any cost; humans as replaceable parts) (Solomon & Hanson, 1983), all of which derive from a reductionistic scientific paradigm.

The challenges and opportunities emerging from a rapidly changing global environment demand that we go beyond these conceptions. Knowledge, and the processes of its acquisition, generation, distribution and utilization, has become the main source of value creation in the world today. But science, as a knowledge creation enterprise, is itself evolving and transcending reductionistic and mechanistic conceptions. For this reason, it is important that contemporary knowledge management be grounded in the most recent scientific thought – in particular, in the sciences of complexity (such as chaos theory and complexity theory, and general evolution theory and dynamical systems theory) which provide the foundations for a new understanding of how complex dynamic systems *evolve*. What we see emerging now is an *evolutionary business knowledge* that constitutes a Business Knowledge of the Third Kind in going beyond the two previous types of knowledge by involving a systemic understanding of the socio-cultural and bio-physical dynamics of the global environment. It is this type of business knowledge that is best able to give rise to the evolutionary corporations of the 21st century (Natrass and Altomare, 1999).

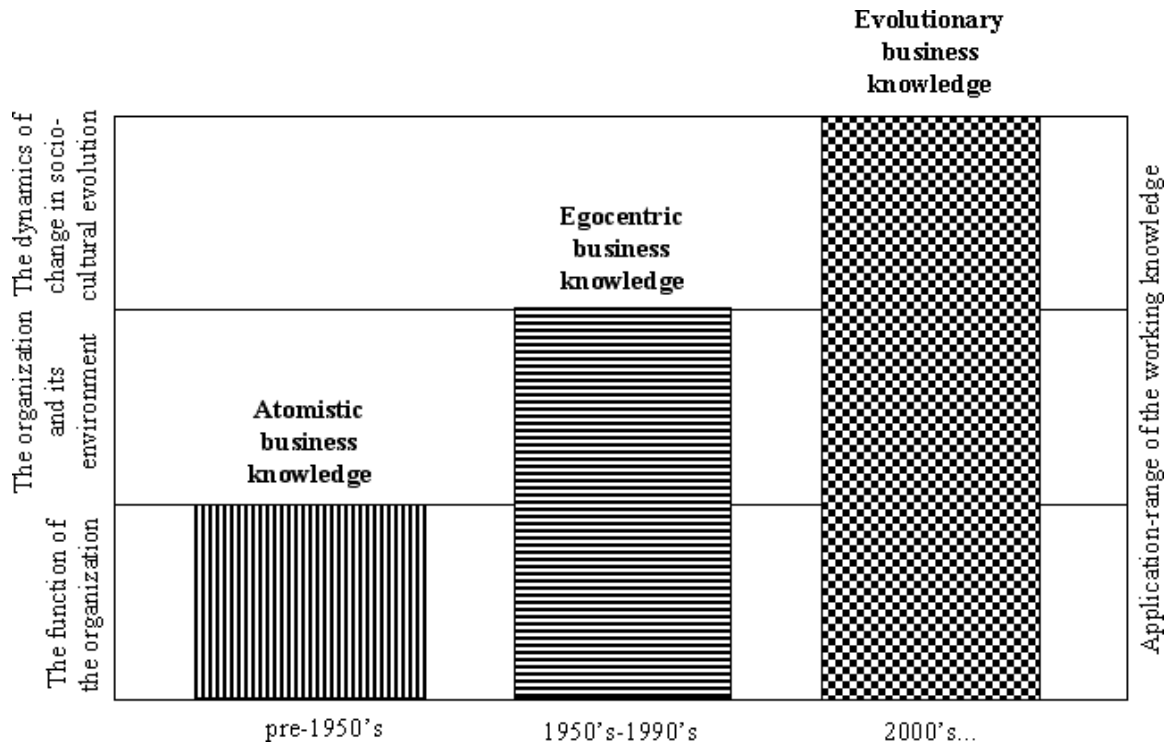


Figure 1. Business knowledge for evolutionary corporations

(adapted from Laszlo & Laszlo, 1997).

Mark McElroy (2000) has pointed out the differences between what he has identified as two generations of knowledge management (KM). First generation KM focuses on *knowledge sharing* – on how to distribute existing organizational knowledge, usually through technology. In contrast, second generation KM focuses on *knowledge creation* – how to satisfy organizational needs for new knowledge, usually through processes of learning and value creation. In other words, first generation KM is about imitation (focusing on standards and benchmarks) while second generation KM is about innovation. This second generation is linked to the convergence that McElroy noted between first generation KM, organizational learning, and complexity theory as applied to business: all three areas have individual developmental paths but they share similar and complementary goals. And as Senge (1993) and others have pointed out, the process of learning has become one of the main sources of sustainable competitive advantage.

However, it is a particular mode of learning that is especially valuable for knowledge creation and innovation: learning through collaboration, which in the business world has been adapted and applied as “organizational learning.” The view of the organization as a machine in which humans are replaceable “resources” deadens the human spirit – the emotive, intuitive, and moral aspects of being – from organizational life and assumes this corporate machine to be a static and sterile system. And yet, the fact is that organizations are human activity systems (Checkland, 1981) that, like any other form of community or society, reflect the purposes, values, expectations and feelings of the people who comprise them. A more appropriate metaphor for the organization – and for society as a whole – is that of a living ecosystem: an image that makes

explicit the interdependencies of multi-organismic processes, the sentient nature of life in community, and the overall dynamic complexity of organizational life.

Appreciation of the corporation as a complex evolving meta-organism offer new insights for the design of strategy, structure and processes organization. “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). This appreciation manifests as corporate citizenship (McIntosh, Leipziger, Jones, & Coleman, 1998), a concept that is gaining more weight as a performance benchmark among global enterprises. It is an important illustration of how Business Knowledge of the Third Kind includes issues of socio-ecological responsibility in corporate strategies that ensure thriving and robust business ecosystems. We are not talking about information for the sake of compliance, here; we are talking about knowledge for the purpose of innovation.

In a highly interconnected world, the field of knowledge management faces the challenge of making concrete and relevant contributions for the betterment of society and not only for promotion of competitive advantage for business. This involves a research agenda through which, first, KM can foster Business Knowledge of the Third Kind for the expansion of a corporate citizenship agenda and the emergence of evolutionary learning corporations; and second, KM can make significant contributions for the creation of human, social, and environmental capital required for evolutionary development.

Departing from McElroy’s descriptive scheme for defining first and second generation KM (McElroy, 2000), we have proposed a third generation of KM that is no longer descriptive, but rather, prospective (Laszlo & Laszlo, 2002). We suggest that KM involve an exploration of *what should be* presented as a provocative invitation to engage in the purposeful and conscious evolution of knowledge management as a future creating activity. This prospective and somewhat prescriptive suggestion responds to the need for ethical social innovation with explicit commitment to evolutionary development (see figure 2).

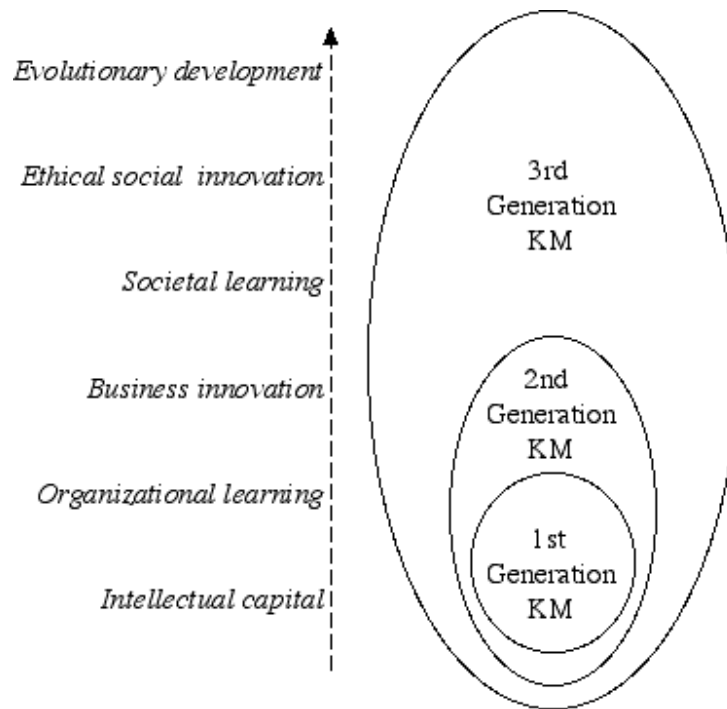


Figure 2. Evolving KM

Third generation KM is relevant both within and beyond the sphere of business. And yet, it is correlated with the need for Business Knowledge of the Third Kind to support the evolution of business, the development of strong corporate citizenship, and the emergence of thriving business ecosystems (K.C. Laszlo, 2003). Given that global business operations are changing the world, the idea is that this change be for the good.

Essentially, Third generation KM is about the democratization of knowledge, about citizen involvement and the expansion of the boundaries of what traditionally has been considered education in order to give rise to an authentic learning society at both regional and global levels. It is not so much about the accumulation and application of knowledge through know-how anymore, but more about the creation of shared meaning through know-why and care-why. It is based on a new way of thinking, informed by a planetary ethic and a different way of living from what it is now favored by mass media commercialization. In the final analysis, KM has both the potential and the responsibility to contribute to the emergence of a sustainable global civilization. But is it the business of business to engage in this dimension of KM? Without a doubt, the answer is yes – provided business is considered a part of, rather than separate from, issues of our planetary well-being and global welfare. But before considering the big-picture implications and the long-term consequences of the role business plays in a world in transition, let's take a more in-depth look at how business is being affected, and stands to affect, the contemporary global macroshift.

THE BUSINESS OF BUSINESS

The fact that business is going global as our information processing and communication powers span the world is a necessary outgrowth of the linear evolution of consumer culture. Isn't the universal objective of corporate marketing departments to sell you something you don't yet know you need? Unfortunately, the question of How Much is Enough has become drowned out in the clutter of overstimulation. In a 1992 book by that name, Alan Durning notes that, "measured in constant dollars, the world's people have consumed as many goods and services since 1950 as all the previous generations put together." (p.38). Clearly, there is no denying that the way of life under materialist consumer-based capitalism is wasteful. Durning (1992) calls on Victor Lebov who, in the years immediately following the end of the Second World War, commented on how

our enormously productive economy ... demands that we make consumption our way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption. ... We need things consumed, burned, worn out, replaced, and discarded at an ever increasing rate. (pp. 21-22)

Already in the 1950s, this pattern, this defining but defaming profile of the contemporary human being, emerged and caused Lebov and others to take pause. More than half a century later, some of us are *still* waking up to this reality, although many more of us are in deep (and usually highly remunerative) denial. Like Lebov and Durning, Pierre Pradervand of *Vivre Autrement*, has called for simpler living. The contribution of simpler living to the emergence of a new, more syntonious culture — one of the sort Paul Ray's Cultural Creatives (Ray, 2000) could bring forth — is a sobering yet vitalizing antidote to the ills brought on by ever more powerful information processing and communications technologies coupled with engulfing global business dynamics. Ills? Are "competitive advantage" and the profit motive it supports *ills*?! "Heresy!" they cry from the pews of capitalism, pointing the finger of the Invisible Hand damningly at us. (Unfortunately, due to it's invisibility, they haven't yet figured out that it only has one finger – a middle one that it gives to all but the wealthiest...)

But is it really heresy or is there more to it than meets the eye? Let's look a little closer. What about the third dimension of the global transition we reviewed earlier; ecological sustainability? All these facts and figures about the Global Problematique, with those "signs of change" that include new and disturbing phenomenon like acid rain, all sorts of pollution, disappearing habitats and with them, the extinction of species "at an alarming rate" — even the threat of globally decimating devastation from either accidental or purposeful misuse of the tens of thousands of today's actively armed weapons of mass destruction (be they biological, chemical, or nuclear) — aren't they all linked to the business and information explosion? The fact is they are, but there's more to it than that. It's the way business is conducted, and the way information is harnessed and put to use, that helps create these evolutionarily dissonant and unsustainable patterns of existence.

Brian Nattrass and Mary Altomare (1999) note that business, information, and environment can all get along — provided we get our act together:

The emerging conflict of humanity with the rest of the natural world need not be inevitable if we use our insight, muster our forces globally, and act now. A small yet growing number of leading business people from around the globe have heard and understood the warnings of our cultural look-outs, those scientists, shamans, and other people of wisdom, whose vision can pierce the mists of the future more clearly than most of us. It is these perceptive business people who have made a remarkable discovery: if we align the business economy with the economy of nature, there are still great profits to be made — profits made in ways that enhance rather than endanger the future of life on Earth. (p.4)

According to Nattrass and Altomare, these new ways of aligning the business economy with the economy of nature, of enhancing the future of life on Earth, involve new business acumen:

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 on the natural environment, 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 for that role. (p.13)

So it seems that business need become conscious of the evolutionary role it play as change agent in our socio-cultural and bio-physical environments and as shaper of possible futures. Laszlo and Laugel (2000) stress that “seeing the whole and understanding the dynamics of change in complex situations is fast becoming a business imperative ... it requires being a good ‘evolver’” (p. xiv). Leadership along these lines is taken “by declaring a future others may not see as possible, and get[ting] alignment in the organization so that actions forward that future” (p. 124). To gain this type of business acumen, old ideas about what constitutes good business practice need be reconsidered. For example, another aspect of interaction that is being redefined and even re-invented along the lines of “power” and “wealth” discussed earlier is the notion of what constitutes *success* in the business world. Corporate success, it would seem, is an unquestioned objective. Robert Theobald (1997) begins *Reworking Success* with the familiar cliché, “You cannot argue with success.” For many, if a company is among the Fortune 500 or Global 2000 it is clearly successful, but even if it is a household name, we rarely consider what constitutes success, let alone how it is defined and measured.

Theobald (1997) points out that many people see corporate behavior as a serious national problem in the US. He presents data in which *only* 22% of those surveyed think that competition motivates corporate behavior, while 70% think greed is the motivating factor – a finding of the sort to which David Korten gave voice in a 2002 article called “From Mindless Greed to Civil Society: Restoring an ethical culture and challenging a world consumed with the love of money” (Korten, 2002). Business practices in the United States have been going through numerous changes in past decade ... from the rapid growth and subsequent crash of the dotcom bubble, to

the scandals of Enron, Arthur Anderson and others, to terrorists attacks that crippled the US economy. Undoubtedly, success is not as simple a concept as used to be thought.

From a classical Darwinian perspective, the criteria by which to differentiate one corporation from another in terms of success would come down to which business showed evidence of an expanding market share, or a faster and more consistent rising stock price, or a larger profit margin. Under criteria such as these, the most financially profitable corporation with superior market domination would be seen as most successful.

But Darwin is dead and his theories, while never having been legitimately applied to the sphere of social dynamics, are now clearly no longer valid. The bottom line is that “a series of random genetic mutations is not likely to have produced all the complex species indicated by observation and the fossil record within the time that was available for biological evolution on this planet. . . . In any case, if random mutation and natural selection require more time to produce viable species than the fossil record indicates, then Darwin’s theory, if not quite mistaken, is at least incomplete” (E. Laszlo, 2000, 23). Nevertheless, “in our day the consequences of social Darwinism go beyond armed aggression to the more subtle, but in some ways equally merciless, struggle of competitors in the marketplace. . . . States and entire populations are relegated to the role of clients and consumers and, if poor, dismissed as marginal factors in the equations that determine success in the global marketplace” (E. Laszlo, 2001, 51). Fortunately, these equations are changing. 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 transformation to the basic human quest for meaning, purpose, and fulfillment which have been left behind in the mad dash toward a mechanized nirvana. 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 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.

Solomon (1999) suggests that certain myths and metaphors about the roles of business present negative stereotypes that are commonly used not only by an unreflective consumer base, but also by strategically minded business people. A win/lose premise coupled with the profit motive have lead to a single bottom line criteria for measuring success: financial gains. Not any more, though. The emerging metric, an example of 3rd generation KM informed by Business Knowledge of the Third Kind, suggests a triple bottom line: financial profits, social profits, and environmental profits – equally considered and equally emphasized. To focus beyond the bottom line does not necessarily imply forgetting about the “profit motive.” However, it does mean transcending it toward a mode of wealth creation that pursues personal, social and ecological gains in addition to financial results. Ultimately, “the gift of working for sustainability is its meaningfulness” (Paul Hawken in Nattress & Altomare, 1999, p. 203). For organizations that begin to raise their sights to the horizon of corporate citizenship, success is a desirable

pattern to be pursued more than a desirable end state to be obtained. As a result, corporate strategy is reformulated to include planning cycles that extend somewhat beyond the next fiscal quarter. To this end, strategy can best be defined as “the art of bringing values and resources together to influence and shape the future” (Moore, 1997).

Now Michael Porter has a lot to say on the subject of strategy. Unfortunately, most of it is framed in Business Knowledge of the Second Kind and couched in Darwinian terms of corporate rivalry and survival of the fittest. The notion of competitive advantage as presented in his widely read books of the 1980s seems to confer what Hao Ma has called positional advantage, in contrast to kinetic advantage (Ma, 2000). Positional advantage relates to the assessment that a corporation will make of its strengths, weaknesses, opportunities, and threats in relation to what it perceives to be its direct intra-industry rivals. However, as Porter points out, “the more benchmarking that companies do, the more competitive convergence you have – that is, the more indistinguishable companies are from one another.” As an alternative, he goes on to suggest how “Strategic positioning attempts to achieve sustainable competitive advantage by preserving what is distinctive about a company. It means performing different activities from rivals, or performing similar activities in different ways” (Porter, 1996, p. 2). What Porter describes as “sustainable competitive advantage” has little to do with the notion of sustainability in terms of the triple bottom line as considered by the evolutionary corporation. In fact, it amounts to little more than a strategy for “sustained (not sustainable) competitive advantage” exclusively in terms of financial profits. Likewise, his concept of strategic positioning is little more than a dynamic form for obtaining positional advantage through a series of steps of the sort described by Constantinos Markides in his article on “A Dynamic View of Strategy” (Markides, 1999, p. 62). Markides summarizes these steps as follows:

Find a unique strategic position in your current industry
 Compete in this position by becoming better than your industry competitors
 Search for new strategic positions
 Manage old and new positions simultaneously
 Make transition from your old position to the new position
 Compete in this position by becoming better than your industry competitors
 Jump into a different industry — repeat the process.

Kinetic advantage, then, is what we want. Actually, no, it isn't. It falls short, as well. The fact is that kinetic advantage is only a category of which Porter's notion of strategic positioning represents one form. According to Ma, it relates to an action oriented ability that allows a firm to function more effectively and efficiently, conferring an advantage that gives a company an edge in what it actually does by allowing the company to perform its value-adding activities more effectively and/or efficiently than its rivals (Ma, 2000). In other words, it turns out to be a type of dynamic strategy along the lines considered by Markides.

So, within the framework of Business Knowledge of the Second Kind, static or competitive advantage is seen to be conferred upon companies that pursue relativistic jostling strategies for positional advantage or, in the case of dynamic or sustained competitive advantage, that pursue effort optimizing strategies for kinetic advantage. In either case, corporate strategy leaves 3rd generation KM pristine and untouched. What these approaches are missing is a framework that

confers evolutionary advantage on the corporation that pursues the sustainability in terms of the triple bottom line.

EVOLUTIONARY ADVANTAGE

The dynamic patterning process of change management initiatives that embrace evolutionary advantage are essentially future creating. By drawing on 3rd generation KM within a framework of Business Knowledge of the Third Kind, evolutionary advantage holds implications for corporate survival beyond those conferred by reliance on either the static or dynamic strategic positioning initiatives of popular orientations that seek to establish competitive advantage.

Strategic evolutionary advantage incorporates notions that promote collaboration over competition, linking rather than ranking, power to empower instead of power over others, and win-win rather than conquest and dominate relations. These are not antithetical to the fundamental axioms upon which the business is based (if one can abstract to a common set of characteristics that inhere in the concept of “business culture” in its most generic and pervasive form). The fact is that competition makes sense under conditions of unbounded independence, but when there are no more new frontiers into which to expand, no more countries to colonize or people to conquer, then conditions of interdependence and mutual interest promote cooperation above and beyond (though not to the exclusion of) competition. In business, as in nature, community means that “every species ... directly or indirectly, supplies essential materials or services to one or more of its associates” (Dice, 1962, p. 200). Such a conception of community brings with it deeper insights, such as “... the notion of life as self-directed movement. Nature is not at war, one organism with another. Nature is an alliance founded on cooperation.” (Augros & Stanciu, 1987, p. 129). Ruthless competition never was the law of nature. If it had been, we would never have witnessed the rise of multi-cellular organisms. Similarly, in a world of great interrelations, tight interconnections, deep interdependencies and among and between businesses, it makes just as much sense to take a cold and calculating “survival of the fittest” attitude to the international market place as it does to let the cells in the toes of an infected foot struggle to survive as best they can. The pretense of such attitudes is that if we help those in need it will only weaken the entire system, but as we clearly know, not taking care of the overall health of our body leads to certain disease and probable death. Life in our global village is no longer akin to that of independent amoebae in a vast sea of possibility. Our shared resources and common destinies have woven us into a geo-political body whose every move affects all of its constituents.

In essence, strategic evolutionary advantage seeks to situate the corporation in a flow of value exchange that both nourishes society and the environment in which it is embedded and is nourished by them. It is built on the foundations of Natural Capitalism, as described and championed by Paul Hawken and others (Hawken, Lovins, & Lovins, 1999). The notion of sustainability to which it adheres is not the linear conception of being able to continue doing what you are doing for longer than any of your competitors. That, in fact, is not sustainability but sustained ability – a different beast altogether! In other words, to sustain something is to keep it in existence, as in a note that a singer is able to sustain (until they run out of air), whereas to engage in a strategy for sustainability is to learn how to play improvisational jazz through

listening, responding, improvising, innovating, actively learning and interactively creating (a process which never need run out).

Alfonso Montuori (1989) helps us understand why the new realities of the evolutionary corporation might suggest competencies closer to those of the jazz player than the orchestral musician: “everything an artist produces, how s/he shapes the silence, and our interpretation of it, is a product of a historical period, which both enriches and constrains” (p. 145). Nowadays, organizations that make a difference in this world tend more often to be ones that explore opportunities to create new patterns and processes as they appear, rather than ones that *only* know how to sustain a pattern or process that already exists. Gordon Rowland (1992) reinforces this point by suggesting how this stylistic difference in musical metaphor relates to ways people work together within organizations. He notes that “teams resembling jazz ensembles are more capable of meeting today’s challenges than teams resembling orchestras” (p. 19). According to Rowland, we are living in a world that more and more demands the ability to work flexibly and loosely together in ways that combine rational thought, technical skill, creativity and intuition. Rather than “following the score” that is handed to us, the challenges of sustainable survival in the business world more frequently asks us to improvise around a basic theme.

Strategic evolutionary advantage involves new vision, a new ethos, and new leadership skills. Take, for example, the new shared leadership that project-based work teams display. To describe it, we use a set of images presented in a televised corporate advertisement. The commercial begins with a classical music quintet performing a beautiful piece of chamber music. The black of the tuxes, gowns, and music stands of the two violinists, violist, cellist, and flutist created a nice contrast with the all white space in which they played. And they played beautifully, weaving their melodies together in a harmony of classical counterpoint. Then, all of a sudden, a basket ball came sailing in from off stage, bounced once, and landed right in the cellist’s lap! The startled cellist stopped playing immediately as did the other musicians who all stared incredulously at the basket ball. The cellist looked at his companions, shrugged once, got up and began dribbling the ball. The other musicians glanced at each other briefly, put down their instruments, and got up to join the now former cellist. They all moved off to the right, their instruments and stands quickly forgotten and fading out of view. Soon the five of them were passing the basket ball back and forth in ways that would have made the Harlem Globe Trotters green with envy. As when they were playing music, their motions seemed to flow in a graceful harmony of interdependence and partnership. Then, just as they were really getting into it, a trapeze bar swung in from off stage and almost hit the former flutist in the head, but in the last minute she reached up and grabbed it. The others stopped to look at her, the one with the basket ball just letting it drop and roll off. She looked back at her partners, shrugged once, and began to swing, and as she did, the others moved with her as one, the scene fading out as the commercial ended.

This little story illustrates the phenomenon of “syntony” within a group – an idea central to evolutionary advantage, meaning to tune in and consciously align oneself with the evolutionary flows of one’s milieu. All five “players” acted in unison, although each did their own thing. And when something in their environment changed, they neither ignored nor reacted against it, but instead immediately adapted to it. They didn’t have to stop for long discussions of the pros

and cons of one course of action or another, to analyze, plan, or argue the strengths and weaknesses of one option over another, and they didn't have to go off to training seminars to learn how to deal with change. They learned together, "on the job" as it were, and in dynamic interaction with each other and their environment. Wouldn't it be wonderful if corporations and business units were able to cope with uncertainty and change like this group did? Actually, it wouldn't. You see, the people in that story demonstrated the essence of syntony — of harmonizing with, and tuning to, each other — but they did so only *among themselves*. They were totally out of syntony with their environment. Whenever they were challenged by a change in their environment, they simply shrugged and adapted *to* it. In short, they reacted. Where were they going with this pattern of adapting to anything that came their way? While they may have been very much in syntony with each other — fluidly co-creating consonant patterns of behavior among themselves — they did not go the extra step required of true systems of syntony: they did not co-create *with* their evolving environment. In short, they had no strategy to secure evolutionary advantage, and this story is typical of most organizations pursuing strategies of competitive advantage.

In terms of the strategies involved, evolutionary advantage emphasizes the triple bottom line as a standard according to which seven dimensions of capital are generated. These are:

- Natural capital (the raw materials we use as input in our industrial processes)
- Manufactured capital (the finished products to which we ascribe market value)
- Intellectual capital (the knowledge and know-how that generate innovation)
- Human capital (the health and well-being of a productive population)
- Social capital (the coherence and functionality of relationships in a community)
- Environmental capital (the biodiversity and ecosystemic robustness of a bioregion)
- Evolutionary capital (the potential for a course of action to be opportunity increasing)

By and large, classical conceptions of competitive advantage focus on the generation of manufactured capital, occasionally including intellectual capital in its purview. Evolutionary advantage, by contrast, considers all seven dimensions. For example, Electrolux is an industry leader in the manufacturing of water and energy efficient appliances, including solar-powered lawn mowers, and dishwashers that use only 15 liters of water per cycle compared to 40 liters in most conventional machines. The company constantly sets waste reduction goals, such as, in 2002, to reduce waste by 35%, water usage by 25%, and to cut emissions significantly by the end of 2002 (Makower, 2002, p.1). This example serves to highlight the feasibility of keeping sight of the triple bottom line in the cultivation of a sustainable survival strategy: not only did the company increase its overall profit margins, but it did so in a way that gives back to the environment and is socially responsible through its concern for future generations.

The pursuit of evolutionary advantage is already being observed in more mainstream companies such as Toyota. Toyota's hybrid car, the Prius, is an example of a product that is 'green' without compromising product use or functionality. It was launched in the US market in 2000, representing an energy efficient car that is best used for city driving where pollution is worst (Makower, 2002, p.7). The marketing strategy used by Toyota is low-key. They are a generally quiet company, not making a big splash about their sustainability drive. They pursue a more

results oriented type management style than in-your-face image projection that is ahead of (and possibly detached from) true corporate identity.

Interface, the carpet company that has set for itself the goal of becoming the first name industrial ecology, is another excellent example of the successful pursuit of evolutionary advantage. Their mission statement suggests that they will “lead by example and validate by results in profits, leaving the world a better place than when we began and we will be restorative through the power of our influence in the world.” (Interface Inc., 1997). They truly walk their talk by even having an environmental position statement. The company has set a continuous improvement goal for 2005 to reduce energy consumption per unit of production by 15% from their 1996 baseline, as well as to reduce the consumption of raw materials in operations by reusing rather than disposing of byproducts and recycling whenever reusing is not possible, thereby striving to approximate zero emissions in their operations. This is clearly a company that has taken their sustainability goals seriously and makes every effort possible to achieve those goals through company policies and practices. They follow James Moore’s previously mentioned definition of strategy as “the art of bringing values and resources together to influence and shape the future.” However, the issue of how to set one’s sustainability goals and in what direction to influence the shape of the future remain key issues in the pursuit of sustainable evolutionary advantage. The key lies in the pattern to which sustainable evolutionary advantage gives rise. Being able to identify this pattern requires a basic evolutionary literacy, and being able to articulate strategy that forwards it results in sustainable evolutionary development.

CONCLUSION

Sustainable Evolutionary Advantage is the best hope for corporate strategy beyond issues of either survival or domination. Evolutionary development processes must be able to provide ways of “doing more with less” — by increasing the abilities of organizations to resourcefully adapt with their environments in ways that change as their environment changes — but that remain constant in their maintenance of viable environments in which to operate. In order for this concept of evolutionary development to be equally in service of business, humanity, and the ecosystems of our planet, it must assure that both the products and the processes of change are:

- E. Socially desirable
- F. Culturally acceptable
- G. Psychologically nurturing
- H. Economically sustainable
- I. Technologically feasible
- J. Operationally viable
- K. Environmentally friendly
- L. Generationally sensitive
- M. Capable of continuous learning

By monitoring all these aspects simultaneously, a process of development (individual, corporate, or societal) can be said to be evolutionarily sustainable if it involves a co-adaptive strategy that ensures the continual maintenance of an increasingly robust and supportive environment. This is

the very essence of evolutionary development, and through it, an organization may sustain a pattern mutual adaptation in interaction with its socio-cultural and bio-physical environment that confers strategic evolutionary advantage.

Key to strategic evolutionary advantage are three sets of threes:

1. The triple bottom line (social, environmental, *and* financial profits)
2. Business Knowledge of the Third Kind (evolutionary business knowledge to complement organizational and competitive business knowledge)
3. 3rd Generation KM (know-how, know-why, and care-why applied to future creating ethical social innovation)

Strategies for sustainable evolutionary advantage that draw upon and combine these three sets of threes must seek to identify opportunities for increasing corporate dynamic stability and self-sufficiency in interaction with the broader set of components of its particular time and place. In the final analysis, strategic evolutionary advantage asks us to think and care beyond our egocentric frames of reference. It asks us whether – normatively speaking – the way we do business is as it should be; whether current patterns of interaction with the world are best – not only for business, but for society, for nature, for the future, and for you and me. In the business world, the ability to answer these questions involves strategies of syntony that confer strategic evolutionary advantage. For them to constitute a sustainable pattern of business that truly furthers the evolutionary corporation, they must always indicate areas of evolutionary potential to be developed to the advantage of the complex dynamic systems involved in ecosystemic interaction, now and into the future.

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