

# **EVOLUTIONARY APPROACHES TO ORGANISATIONAL STRATEGY: ADDRESSING BUSINESS DYNAMISM**

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## **KEYWORDS**

**Theory of evolution, organisation management, global environment, biological perspectives**

## **ABSTRACT**

*Evolution is the change in characteristics as exhibited by organisms in a population and natural selection is the mechanism by which evolution occurs. Evolution is not unique to biology, it can be found in other system too (Mende and Kennedy, 1999). However, all these systems are evolving through the same mechanism as in biology: variation, inheritance and selection. A company or an organization can be treated as a living system, using evolutionary theories to understand and perhaps influence how the organization changes over time. The global environment is relatively turbulent and it is important that business needs to evolve, learn and innovate to survive. Organizations that do not change are victims of the natural selection in the market place. This paper sets out to examine the potential contribution of the evolutionary approaches to organisational strategy and how strategic dynamism can be addressed. In order to place the discussion in right perspective the authors have adopted a simple scientific working definition of evolution. The main focus of the paper is on both the biologist and geologist outlooks of evolution. While the biologist view of evolution dwells on genetic competition, the geological view presents evolution as a historical phenomenon. The main assumption here is that some metaphors of evolution have a lot of implications for organizational strategy and for generating corporate strategy to get sustainable competitive advantages.*

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## **INTRODUCTION**

According to Morgan (1997) all humans, in all aspects of life define their reality in terms of metaphors and then proceed to act on the basis of these metaphors. Thus, every individual set goals, make commitments, implement plans and draw inferences on the premise of how she/he partly structure her/his experience by means of metaphors. This theoretical stance is in clear conformity with that of Lakoff and Johnson (1980) `Metaphors We Live By` which was cited in Lawley (2001), and the ideas of many other eminent writers on organizational theory and practice. The rational behind this

proposition is that as soon as an aspect of life is given a metaphorical definition, by an individual or a group of people, a line of thinking towards that particular aspect of life emanates. This could either be a conscious or unconscious activity.

A typical example is the famous metaphor in organizational theory that 'an organization is like a machine' (Morgan, 1997). In the light of this metaphor, management thought with regards to organization has been in terms of inputs and outputs, the adoption of assembly line production system and efficiency as the driving force behind organizational performance. It has in many instances led to the establishment of human resource department that primarily recruits to fill vacancies and there is always an attempt to quantify or measure everything. The merits, demerits and the consequential challenge posed by this particular management concept are obvious in modern management. However, it must be emphasized that there are numerous images and metaphors of organizations that have been used by different organizational experts to shape management thoughts over the years. There are various examples of metaphors of organizations to brains, political systems, organisms, cultures, and others. It follows from the above discussion that metaphors form a strong base in the formulation of organizational and management theories. It could also be speculated that metaphors influence the components of organizational structure (complexity, formalization and centralization). Metaphors play a constitutive role in science (Hodgson, 2000). The history of modern biology and economics suggest that a metaphor works at a deep level in science, affecting its progress in ways that its practitioners are not always aware of. As Klammer and Leonard (1994) put it, "Science needs a metaphor since it provides the cognitive means to chart the unknown".

In spite of the fact that no single metaphor could provide all-purpose point of view, and could also distort organizational thought, they do indeed create insight. Thus, this paper sets out to examine the potential contribution of the evolutionary approaches (metaphors) to organizational strategy and how strategic dynamism can be addressed.

It is important to place the discussion in the right perspective by adopting a simple scientific working definition of evolution. According to Barnes and Curtis (1989) evolution is 'any change in the frequency of alleles within a gene pool from one generation to the next. The two key conditions that explain this phenomenon are that (i) there is a change in the frequency of genes in a population; (ii) the change is heritable in successive generations.

Normally, new organism is created through natural replications of genes to project their kind in future generations in an environmentally stable system. This is a biological process called reproduction. On the other hand, evolution is a process that is stimulated by environmental change and reproductive isolation. It is obvious that, these two distinctive processes do have survival undertones. But a critical consideration of the evolutionary process connotes gradually, but consistently evolving better adaptive features to survive in an unstable environment.

Actually, the business environment is characterized by changing technologies, transforming economies, shifting demographics, changing consumer preferences, dynamic competition etc. Again, surviving the competition generated by these changes

is every manager's objective. It could be inferred that evolution is a natural phenomenon of surviving competition. It thus appears to indicate a natural model for market competition (Moore 1993). From a biological aspect, successful genetic strategies, which allow their reproductive vehicles to compete for resources, will survive and evolve; others are history. Successful corporate strategies that allow the companies some advantages in their market place will survive, while unsuccessful strategies are history. But an organization must learn from its past and needs to consider the historical dimension. The nature of competition is changing with time. As the market place becomes more complex and chaotic, new technologies and new resources open new economic opportunities and introduce new competitive factors.

The main thrust is that in addition to operational systems and controls, an organization is linked to a self-organizing component that evolves through learning to survive in a dynamic environment. Evolutionary approaches (metaphors) therefore, could provide great insight to market competition and could be of value to business strategy. The focus of this discussion is on both the biologist and geological outlooks of evolution. While the biologist view of evolution dwells on genetic competition, the geological view presents evolution as a historical phenomenon. Specifically, the biologist view advocates a steady background change as a result of continuing natural selection. But the geological view stipulates an acceleration of the selection process producing new species in situations where reproductive isolation occur (Eldredge 1991 and Price 1995)

## **EVOLUTION: CONCEPTS & PRINCIPLES**

Interest in evolutionary approaches to strategy by academics and professional has earned good reputation and produced a vast literature. Over the last few decades, Boyd and Richardson (1985), Hodgson (1995, 2002); Dawkins (1986), Dephew and Weber (1995) and Dennet (1995) have provided vast explanations of evolutionary thinking. Nelson and Winter (1994) has applied evolutionary ideas to economic change. Although in eighteenth century two great evolutionists Jean Baptiste de Lamarck and Charles Darwin have used this word in their writings but it was Albrecht Von Haller who used this word first time in 1714. However, the word evolution is widely known or popularized by Herbert Spencer who understood evolution as a process. Spencer (1892) defined evolution as "a change from an indefinite, incoherent homogeneity to a definite coherent heterogeneity through continuous differentiation". According to Spencer evolution means progress and growth of efficiency from worse to better and change comes with new forms.

In contemporary word evolution mainly associated with the Charles Darwinian idea of natural selection. Darwinian meaning of evolution is fundamentally different from that of Haller and Spencer. Darwinian biological evolution that is a gradual adaptation through natural selection is a process consisting of three principles: variation, inheritance and natural selection. As mentioned earlier the authors will apply the simple definition of evolution which has stated above and given by Barnes and Curtis (1989).

### **The natural selection: a biologist view of evolution**

Darwin's most important insight was a new concept of selection that could explain evolution in terms of the effect of selection by natural forces that caused gradual changes of phenotypic traits in a biological population (Richards, 1987). Stewart (1977) sees natural selection as the driving force behind the evolutionary process.

The philosophy behind this approach is 'survival at the fittest'. That is within a competitive environment, the organism that has superior traits survives to perpetuate its kind in subsequent generations. Obviously, the one with relatively weaker traits is naturally selected out.

It is important for the sake of this discussion to expatiate on the biological process of imparting building block codes (genetic codes) to new organisms. Additionally, a review of strategic management concept from a historical perspective would create the perfect scenario to draw a parallel between natural selection process and organizational strategy. By taking a retrospective view of strategic management since 1900s an indication of the evolution of management systems could be seen. Management strategies like budgeting (from 1900s), long-range planning (1950s), strategic planning (1970s and strategic market management 1990s) have emerged. Daft (2000) describes seven distinctive management perspectives over the period of 1970-2000 and a prediction to 2010. The sequence starting with the oldest to the most current are as follows: classical perspective, humanistic perspective, management science perspective, system theory, contingency views, total quality management and the learning organization.

A historical perspective of management innovations also reveals a myriad of management fashions and fads including learning organization, enterprise resource planning, and knowledge management among others. The changing systems and innovations could be seen as extensions of the immediate strategy and a single most important factor that has engineered such transformations is the changing business environment. From the above discussion, it is evident that drawing a parallel between natural selection evolutionary approach and organizational process has a lot of insights for managing organizational learning. The link is very direct, and that is, whereas successful genetic codes that build reproductive vehicles (phenotypes) that better compete for resources will eventually survive, corporate strategies that allow organizations relative advantages in the business environment will also survive. The market selects corporate strategies that prove unsuccessful out and these companies do not survive. It follows that; organizations that select successful strategies tend to dictate the rule in their respective industry of operation. The caution here is, market competition is dynamic and therefore requires that successful corporate strategies at a given time consistently evolve to keep the upper hand in generating the future and not to react to it.

It is important to reiterate that organizational evolution theory based on genetic competition analogy is not very current (Chandler, 1977). Managing a learning organization has been topical for many years. What has really changed is the speed at which organizations ought to evolve to remain competitive.

## **SPECIATION AND STEP CHANGE: A GEOLOGICAL VIEW OF EVOLUTION**

As earlier indicated the geological view of evolution confirms the basic process of natural selection but further indicates that the process results in an abrupt step changes (biological innovations) and not a constant steady state variation. Comparing biological species from main land to offshore islands give a lot of credence to the fact that evolution thrives on reproductive isolation of small groups. The step change phenomenon (punctuated equilibrium) does manifests in organizations. Although the introduction of new management concepts, processes and capabilities result in a degree of consistent improvement, it is an undeniable fact that pronounced organizational innovations has occurred in relatively small groups (subsidiaries) and not in organizations head offices. According to price (1995) step changes and innovations occur when individual teams, or subsidiaries commit to a different set of results and this pattern closely minors evolution by punctuated equilibrium.

### **CONTINUOUS VERSUS DISCONTINUOUS CHANGE PARADIGM**

The two scenarios discussed raise a management dilemma. That is whether strategic changes should gradually evolve (in line with the biologist view) or be a marked radical departure (in line with the geological view) from the existing organizational strategy? This streams in the management debate on strategic change which Meyer and Wit (1999) calls `The Paradox of Revolution and Evolution`. Proponents of discontinuous change perspective, like Greiner (1972) argue that, the long-term trend of organizational change should not be gradual but episodic. This implies periods of relative stability are disrupted by a brief and dramatic periods of instability, within which revolutionary changes occur. This is directly in line with the geological view of evolution as a step change or punctuated equilibrium. This stance notwithstanding, advocates of this view also acknowledge the fact that a consistent instability would not lead to organizational success but a mess. However, they stress that strategic change require a sudden change from the status quo.

Conversely, proponents of continuous change perspective that is in line with the biologist view of evolution have argued on the basis that in an `evolutionary organization`, everyone is involved. That is strategic change should involve all employees and not only the top management. They further assert that strategic changes though, can be initiated from the top, it would not work when imposed. Hence, all-inclusive organizational developments stand a better chance of success than dictating organizational actions (Bourgeois and Brodwin, 1993). Their line of debate asserts that everyone in the firm must be (i) committed to continuously improve; (ii) motivated to continuously learn; and (iii) motivated to continuously adapt.

Some of the major issues backing their argument are:

- Revolution in most cases is a substitute for diligence (Meyer and Wit 1999)
- Preference for Revolution in most cases is an obsession with short term and not the long term (sustainability)

- Discontinuous change perspective has the propensity of eroding positive inclination towards change among employees. This is because they become conditioned to only wait to respond to the next sudden change.

Both schools of thought have credible basis and are equally revealing. In terms of theoretical stance, the two are perfectly contracting views. However, in modern management practice they both have important management implications.

## **EVOLUTIONARY APPROACHES TO STRATEGY**

The evolutionary approaches discussed have a lot of implications for organisational strategies. The fact of genetic competition and survival of the fittest implies that corporate strategies adopted by the organisation ought to be able to achieve a competitive advantage for the organization. Business in general and for that matter multinationals should be seen as self-organising entities and not just systems created to be controlled by managers.

Following the parallel drawn between genetic competition and international market competition, strategies that are selected by organizations should be able to create competitive advantages. It must also be emphasized that in formulating and implementing corporate strategies managers ought to realize that successful strategies in a given market also contributes a lot in shaping the future of the market. Organizations should therefore aim at strategies that would be successful and give them the edge in shaping/dictating future competition in the respective market rather than responding to a future dictated by competitors some other factor(s) in the business environment.

Evolution from the perspective of geology (step change or punctuated equilibrium) also provides a lot of insight to organisational strategy. Punctuated equilibrium calls entirely different rules from the existing ones in restoring the balance, It follows from this that existing corporate strategies may not be applicable in any market settings and this demand a high levels of flexibility in formulating strategies for branch offices and subsidiaries in new markets. Additionally, judging by the fact that corporate innovations are most likely to occur in smaller groups, developing different marketing niches in different markets has the potential of setting up or generating a whole new competitive order in an international settings.

Moreover, it is obvious from the discussions on evolutionary approaches that organizations that do not change are victims of the natural selection of the market place. It is also a fact that constant upheavals would only create chaos for the organization. It is therefore prudent to have a trade off between continuous and discontinuous change perspectives by given room for a contingency chance. In the light of this, the organization could develop adaptive capabilities for contingencies. This could be developed on the basis that an accidental capability today, could become a core competence to survive when the environment changes.

In the current global business arena the issue of terrorism for example should not be swept under the carpet. Businesses operating in markets around the world could develop surplus capabilities now so that they would be able to deal with similar disruptions in future. This could become the acid test by the market to will select out

organizations without good strategies. Developing strategic alliances or undertaken massive diversification may be the key here. One significant barrier to change is the self-stabilizing code (inertia) acquired as a result of operating within laid down organizational rules and systems for a long time. Organizations could take a cue from this and stay competitive, by seeking external consultants who have not internalized corporate ideas.

## **CONCLUSION**

The global business environment is relatively turbulent and it is imperative that businesses need to evolve, learn and innovate to survive. However, managers should be guided by the magnitude and the pace of change expected to develop appropriate corporate strategies. The real thrust is that in addition to operational systems and control, an organization is linked to a self organizing component that evolves through learning to survive a dynamic environment. Evolutionary approaches (metaphors) therefore, could provide great insight into market competition and could be of value to organizational strategy.

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