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Performance in the Chaordic Age: By Design or By Destiny?

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ABSTRACT

This paper discusses the challenge of performance in an age characterized by high levels of both organizational and environmental uncertainty. Today, business, not-for-profit, and governmental institutions all find themselves besieged by difficult-to-predict periods of disorder and relative certitude. A new structural form, called the chaordic organization, has arisen as one means of operating in such a turbulent and indeterminate environment. This article will consider the chaos - certainty question, examine the concepts of performance and potential, deliberate whether performance can be influenced by calculated design measures, and look at current thinking related to motivation and its relationship to organizational performance. Additionally, a model of performance efficacy will be introduced, lessons learned provided, implications for the future presented, and a look offered at what might come next.

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INTRODUCTION

So, just what is a chaordic age and why is performance important to it? Is the performance capable of being influenced deliberately by design or must it be left to environmental chance factors? What can we learn of chaordic systems as social entities that might have practical value? This paper will be an attempt to address each of these questions.

Dee Hock is the thoughtful and charismatic Emeritus Chief Executive Officer of one of the world's largest commercial enterprises. In his book *The Birth of the Chaordic Age,* he both coined the term *chaordic* and described a contemporary organization that represented it. This neologism or new word is a combination of the existing terms *chaos* and *order.* According to Hock [1] a chaordic organization is one that agreeably blends aspects of both disorder and order together in the same entity.

In originating and steering the credit card company VISA International, Hock exemplified a leader attempting to synergize intense internal and environmental forces. These powerful energies were simultaneously pushing his organization toward disarray and, at the same time, pulling it toward higher regularity. In the process of forming VISA he challenged fundamental tenets of economics, presuppositions about conflict, and prevailing organizational theory as well as philosophical presumptions about human nature. Additionally, Hock offers that many of today's organizations are primarily based on faulty premises that have been carried over relatively intact from the seventeenth century.

We appear to have arrived at the chaordic age through a circuitous route. This path consisted of passage through significant chronologically organized events, collectively identifiable as major patterns of social-technical change. Toffler [2] suggested that the historical record could be conveniently divided into three major eras that he likened to major groundswells or waves of change. His epochs included; the Agricultural wave, the Industrial wave and the Information wave.

Researchers appear to be divided about whether or not we are currently still in the waning aspects of the Industrial wave, mid-course in the Information wave, or entering into something beyond both. Coming down on the side of the beyond, business writers Richard Pascale, Mark Millemann, and Linda Gioja argue that we are now in an emerging life science model based on complexity science. Pascale, Millemann and Gioja [3] indicate that the industrial revolutionary model could be codified as: take, make, and break. Whereas, the life science model moves from innovate to proliferate to aggregate. Thus, the transition is from extracting raw materials from the earth, transforming them into products, and then discarding the products towards discovery of a new niche, reproducing quickly, and then dominating by strength of numbers.

DISCUSSION

Will it be Chaos, Order or Something In-between?

Chaos theory was initially popularized by science writer James Gleick in his bestselling book *Chaos: Making a New Science.* In particular, Gleick [4] alluded to mathematician Edward Lorenz's discovery of the Butterfly Effect. This phenomenon relates to the fact that in some complex systems tiny changes in input can rapidly translate into very large changes in output. Lorenz's practical example of the effect was that a butterfly waving its wings in Peking today could create a storm system the next month in New York.

Since its original conception arising from the study of difficult-to-predict, long range, weather patterns, chaos theory is presently being applied to such diverse fields as armed combat, social dynamics, medicine, computer science, management and organizations. Chaotic systems tend to be: temporary; exhibit behavior highly contingent on initial circumstances; have outcomes that are difficult to foretell; and are apt to operate in a non-straight line fashion. That is, change usually happens geometrically rather than incrementally. It appears, however, that even systems that exhibit simple order have outbreaks of chaos and chaotic systems occasionally show periods of order.

In his book *Life at the Edge of Chaos* author Mark Youngblood [5] suggests that the most successful organizations will employ principles that find correspondence to those found in Quantum physics. His examples include organizations that operate according to such values as: integrity, honesty, trust, participation and personal responsibility. He further indicates that organizations that will both survive and prosper in the current century will need to be fast, flexible, and resilient. Additionally, Youngblood contrasts more advanced Quantum-oriented organizations with those employing a more industrial age, Newtonian physics positioned, approach that focuses on dominance, control, and materialism.

Further elaborating on the Quantum organization, management professor Ralph Kilman [6] advises that to be effective leaders should create a unified slant to confronting the complications associated with todays multifaceted, highly interconnected, organizational world. Like Youngblood, Kilman identifies a set of rules that serve to underpin the traditional pyramidal model of organizations. These rules are seen to be founded on the basic laws of physics first expounded by Sir Issac Newton in the *Principia Mathematica* in 1687.

At a more practical level, management practitioners Suzanne Kelly and Mary Ann Allison attempt to show how the science of complexity can be used to better achieve peak organizational performance. Kelly and Allison [7] have developed a multi-stage "Complexity Advantage Evolutionary Fitness Model." The projected levels within the model range from unconscious self-organization to consciously competent self-reproduction. They also advocate using a series of discrete steps to success. Prominent among these stages are: creating a sense of urgency, driving out fear, building commitment and generating social capital.

The “something in-between” is for organizations to operate on the boundary between order and chaos. This position appears to combine the best features of both chaos and control. It necessitates a delicate comparison act and continuous adjustments. Like attempting to direct two horses pulling in opposite directions at the same time, it is much easier to say and extremely difficult to do.

Should the Focus Be on Performance or on Potential?

One possible definition of performance [8] is “An action process directed toward the accomplishment of individually or socially valuable outcomes.” Performance is usually past or present oriented. Performance is also typically connected with a specific point in time and delivered in a particular context. Potential, on the other hand, is a subjective estimate of currently latent performance deliverable at some unspecified point in the future.

Effective organizations appear to be able to focus both on present performance and developing the capacity to perform well in the future. They also are adept at being able to manage any tradeoffs between the present and the future. These organizations diligently work at managing the danger of over emphasis on either now or what might come. Excessive stress on present performance may result in an inability to build the capabilities needed to capitalize on future possibilities. While over-weighting future potential may detract from the organization’s current ability to survive and grow.

How Does Motivation Relate to Performance?

Social psychologists have proposed that performance can be considered a product of two basic factors: motivation and ability. Some beneficial approaches to understanding the elements of motivation have been developed by: McClelland (Achievement, Power and Affiliation); Herzberg (Hygiene-Motivators); Levinson (Ministration, Maturity and Mastery); Lawrence & Nohria (Acquire, Bond, Learn and Defend); and Pink (Autonomy, Mastery and Purpose).

Harvard and Boston University professor David McClelland [9] extensively studied both individual and organizational motivation. He was a pioneer in workplace motivational research having developed a well-known needs-based motivational model. McClelland’s model assumed that three basic needs were present in all individuals in different degrees. Further, that the strength of these needs could be used to characterize an individual’s style and behavior.

One such essential need is for achievement (n-Ach) associated with the drive to attain realistic but challenging goals, being personally able to influence outcomes, and obtaining immediate feedback on results. A second need is for power (n-Pow) or the drive to attain authority, exert control over others, make a strong impact, and increase personal status and prestige. The third motivator is the need for affiliation (n-Aff) connected with having friendly relationships, being liked, being held in high regard, and enjoying human interaction.

Frederick Herzberg [10] initially developed his hygiene-motivator theory by studying the performance of engineers and accountants when they were performing at both their best and their worst. He found that satisfaction and dissatisfaction were actually two distinct elements. Dissatisifiers or hygiene factors were associated with factors surrounding the job such as pay, benefits, work conditions, supervisory relationships, status, security, and relationships with peers and subordinates. Satisfiers or motivators were seen to be directly related to the work itself and included items such as achievement, recognition, opportunities to learn, increased responsibility, and advancement.

Organizational psychologist Harry Levinson is best known for his application of psychoanalytic theory to management and leadership. He propounded the “Great Jackass Fallacy” which illuminated significant problems associated with the prevailing workplace practice of relying on punishments and rewards to motivate workers. He suggested that workplace motivation could be better accomplished by considering the complex and unconscious nature of human motivation. Levinson [11] proposed this might be accomplished by appealing to worker needs for: ministration or being of service to others; maturity or psychological development; and, mastery or behaviorally demonstrating expertise.

Graduate business school researchers Paul Lawrence and Nitin Nohria sought an understanding of human motivation in a study of evolutionary biology and social science. They proposed that humans act as a result of conscious choices that are derived from an internal conflict between four subconscious brain-based drives. Lawrence and Nohria [12] declare these motivators to be: acquisition, or the drive to obtain objects and experiences that improve status; bonding, or the drive to associate with others in long term relationships of care and commitment; learning, or the drive to make sense of the world and ourselves; and, defense, or the drive to protect our loved ones, beliefs, and resources from injury.

Daniel Pink has recently updated motivational theory by suggesting that organizations don’t really apply what is known from research results about what works and what doesn’t. In particular, in many of today’s organizations, the use of the “carrot and stick” no longer works well with highly educated and more self-directed workers. Pink [13] believes three drives are paramount in motivating the current workforce: autonomy, or the drive to be independent and self-sufficient; mastery, or the drive to demonstrate personal knowledge or skill; and purpose, the drive to do work that is positively meaningful.

In What Ways Does Ability Influence Performance?

Ability relates to capacities, talents, and competencies. It appears to be affected by one’s genetic heritage (nature) as well as by environmental experiences (nurture). Current thinking among developmental psychologists puts the ratio at about 50%-60% nature and 40%-50% nurture. In any event, it seems to be possible to further enhance what nature has provided as well as to develop latent or non-natural tendencies.

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Psychologist Howard Gardner has proposed the concept of multiple intelligences or unique talents and abilities that evolved in human beings as a means to adapt to evolutionary challenges. Gardner [14] has identified seven such capacities. The first four of which are: *Visual-spatial*, thinking in terms of physical space and the ability to recognize and employ patterns of wide space and confined areas; *Bodily-kinesthetic*, the ability to use mental abilities to coordinate bodily movements and the effective use of the body or its parts to solve problems; *Musical*, skill in the performance, composition and appreciation of musical patterns; and *Interpersonal*, understanding the intentions, motivations and interests of other people as well as working effectively with them. The remaining three intelligences are: *Intrapersonal*, understanding one's own self, interests and goals and using them to regulate one's life; *Linguistic*, sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish goals; and *Logical-mathematical*, the capacity to think logically, analyze, and reason deductively.

Psychologist and science journalist Daniel Goleman has questioned performance researcher Anders Ericsson's contention that it takes about 10,000 hours of practice to be successful in any field. Goleman suggests that extensive practice is required, however, the benefits don't come from unthinking repetition but from deliberately adjusting performance as the desired goal is approached. Goleman [15] states, "Those at the top never stop learning: if at any point they start coasting and stop such smart practice, too much of their game becomes bottom-up and their skills plateau."

A Performance Efficacy Model

The Performance Efficacy model has been designed to integrate three basic concepts.

1. Performance Efficacy is concerned with both doing the right things (being effective) and doing things right (being efficient).
2. Performance behavior has to do with both intrinsic factors (internally related to individuals) and extrinsic factors (externally related to surrounding environments).
3. Motivation, ability and challenge are co-related in producing performance.

More recently it has been suggested that challenge is a missing element in the performance equation along with motivation and ability. Combining the three factors yields an equation for performance efficacy or PE= M x A x C. Where, PE is Performance Efficacy, M is motivation, A is ability, and C is the challenge or the opportunity or obstacle to be overcome. This formulation implies that extremely effective performance is a consequence of high levels of motivation and ability coupled with an environmental opportunity to demonstrate it. For, without the challenge offered by an opportunity to perform the other two factors are just unrealized potential.

The M factor, or motivation, provides the driving force for performance. To some extent high M can compensate for lower levels of ability. Low M will usually result in lower performance in spite of the availability of high levels of ability.

The A factor, or ability, can be an expression of natural capacity or a learned skill relevant to the performance task.

One of the confusing factors in measuring performance has been the tendency to confuse style with capacity. Kirton [16] has proposed that *Style* is the way or manner in which performance occurs and *Ability* is the actual level of skill or talent needed to complete the performance. He believes the two factors are independent of each other.

LEARNING

- Our organizations are primarily extensions of our current view of the world.
- Pyramidal organizational structures typically create work overloads and bottlenecks for those at the top.
- Motivation, ability, and challenge factors have a great deal to do with performance outcomes.
- Intrinsic (internal) motivation trumps extrinsic (external) motivation in organizations most of the time.
- One person's threat may be another person's opportunity.
- Many factors that determine performance are under direct control of organizational members.
- It's a combination of nature and nurture that influence our capacity to perform.
- The concept of Performance Efficacy is a viable and useful way to think about the success of a performance.
- Capacities can be developed through the use of a variety of techniques including: guided visualizations, regular practice, computer simulations, coaching and mentoring, creativity exercises, structured goal setting, and constructive performance feedback.
- The ability to synthesize may be as important as the ability to analyze in determining performance results.
- There are effectiveness tradeoffs between emphasizing current performance and building future potential.

CONCLUSION

What Should Be the Role of Leadership?

It appears that leaders will play a primary role in influencing performance by design rather than succumbing to the vagaries of chance in the chaordic age. Margaret Wheatley has written extensively about the use of ideas from Quantum physics and chaos theory to improve organizational performance. Wheatley [17] calls for free-flowing information, individual empowerment, relationship networks, and organic organizational change.

Leadership researchers Emmett and Mark Murphy in their book *Leading on the Edge of Chaos* advocate a number of critical success elements leaders can use to operate in a chaotic environment. They also suggest that *volativity* is the word that most closely defines today's environment. Among the Murphys' [18] more salient recommendations are: taking the time to identify values as the first thing, establishing a culture of commitment, cutting costs while maintaining value, and motivating people toward increased accomplishments.

Psychology of change researcher Daryl Conner advocates leaders adopt the concept of *human due diligence.* This idea focuses on resilience or the capacity of the organization and its members to successfully cope with ongoing external and internal turbulence. Conner [19] proposes an ongoing cycle of change that moves through a set of phases from control to predictability.

In a recent comprehensive study of humanitarian organizations entitled "Between chaos and control: Rethinking operational leadership" the author Paul Knox Clarke identified actions that could improve an organization's performance. Clarke [20] recommended that effective leaders should: take responsibility for decisions that impact the entire unit; enable sub-unit leaders to succeed; maintain a big-picture perspective; reflect the organization back on itself; and act as the link with other organizations.

What Are the Possible Implications?

Coping with uncertainty is a quandary that accompanies living in today's world. According to authors John Briggs and David Peat, chaos theory may hold helpful lessons of enduring wisdom. Briggs and Peat [21] have noted a number of these schoolings that can be attributed to an understanding of chaos. Their lessons for fruitful living focus on: creativity, going with the flow of events, focusing on artistic endeavors as well as task accomplishment, and effectively using time.

Physicist and futurist Theordore Modis believes that a key to future organizational success is a better understanding of corporate lifecycles. In his book *Conquering Uncertainty he* suggests that chaos may be seasonal and there is harmony in the repeatable swing from order to chaos and back. He proposes that this oscillation can be used to competitive advantage to prepare for future events. Specifically, Modis [22] indicates that low growth, seemingly chaotic days require more horizontal structures, entrepreneurship and innovation. Additionally, early growth needs investment. And, rapid growth needs a more vertically organized approach to inject more stability.

Strategic thinking is another area that may benefit from the study of chaos, complexity and change. Organizational consultant T. Irene Sanders has linked successful strategic planning with the new science of complexity and chaos. Sanders [23] in her work *Strategic Planning and the New Science* has recommended a set of principles related to effective strategic planning. These principles range from use of a whole systems perspective to observing that self-organizing change influences personal perspective when viewing chaotic events.

Additionally, applying the principles of chaos theory may enable more effective daily thought processes. Author James Mapes espouses "Quantum Leap Thinking" as a means for the mind to create positive change. Mapes [24] champions a number of theorems to support this idea. Some of his more important propositions include: turning fear into power, developing a personal vision, showing commitment, and seeking empowerment.

What's next?

A major challenge for organizations today and tomorrow is how to both survive and thrive in a highly unpredictable landscape**.** Eminent international management and space psychologist Philip Harris has considered how to best operate in this kind of chaotic environment. Harris [25] envisions movement toward a new sort of human emergence that results in the convergence of culture, change, choice and control.

Dee Hock, since retired as Chairman of VISA International, has created the Chaordic Commons infrastructure within the P2P Foundation. The Commons is designed to assist and support chaordic initiatives. It has developed a sequence of action steps to initiate a chaordic design process for an interested organization. The various stages focus on purpose, principles, concepts, and development; as well as on nurturing habits of innovation.

The idea of a chaordic organization that combines characteristics of both cooperation and competition is an inherently appealing one. However, chaordic organizations are also replete with paradoxes. They routinely deal with apparent contradictions such as: balancing individual versus organizational needs; focusing on the present versus the future; and matching the human spirit against the requirements imposed by the natural environment.

The success of the VISA notwithstanding, the real organizational challenge appears to be in both garnering widespread acceptance of the chaordic ideal and in revealing that it actually has pragmatic utility. The notion that both chaos and order can be successfully combined, as well as how the combination can be practically scaled for organizational implementation, is still being tested.

The concept of a *Teal* organization, that parallels that of a chaordic organization, has been advanced by organizational theorist Frederic Laloux. Building on the integral and historical stage-based philosophical ideas of philosopher Ken Wilbur, psychologist Claire Graves, and social psychologist Don Beck, he has proposed an organizational structure based on an advanced state of human consciousness. Laloux [26] associates three basic breakthroughs associated with this new type of organization: self-management, wholeness, and evolutionary purpose.

Self-management refers to an organizational system based on peer relationships, lack of a hierarchy, and advice-based decision making. Wholeness denotes bringing the "whole self" into the workplace and incorporates the emotional, intuitive, and spiritual parts of employees. Evolutionary purpose signifies the organization having an overriding life and direction of its own. Further, Laloux has extensively studied and reported on twelve organizations, ranging in size from 90 to 40,000 employees, which he believes exemplify the Teal ideals.

Somewhat counterintuitively, it has also been suggested that chaotic systems may be calmed by introducing randomness into them. Nassim Taleb, Professor of Risk Engineering at New York University, and an expert on the fragility (subject to disruption from volatility, stress, or disorder) of organizations, has contemplated the viability of complex systems. Taleb [27] has noted, "Ironically, the so-called chaotic systems, those experiencing a brand of variations called *chaos***,** can be stabilized by adding randomness to them."

Additionally, Taleb implies that through deliberately introducing randomness organizations may actually gain a degree of antifragility. This implies that a small degree of disorder may inoculate organizations from being subject to wide performance fluctuations and thereby reap the benefits of increased robustness, strength and unbreakability.

In Summary

The chaordic age seems to be a time that combines great turmoil with periods of relative stability. In such an epoch, where uncertainty reigns, sustaining organizational performance can be quite challenging. Attempts to deliberately influence events through design processes coexist with the occurrence of apparently random low-probability but high-impact happenings.

Our current understanding of chaordic organizations still appears to be somewhat indistinct and inchoate. Yet it is promising in its prospects. In thinking about the future, author Cindy Wigglesworth [28] notes, "Beyond religious and cultural differences, we do in fact have quite clear and remarkably congruent ideas about what higher human attainment looks like." As Hock, Laloux and others have shown in their research there are model chaordic organizations whose successes can serve as exemplars for others to emulate.

The joint exercise of human creativity may well be the way forward. Steven Johnson is the author of works that intersect science, technology and personal experience. He submits that the solutions to difficult, highly interrelated issues or "wicked problems" best occur in an environment that operates on a fine line between order and chaos. Johnson [29] firmly believes that innovation best happens at the edge of chaos.

Balancing on the edge between order and chaos, like walking on a tightrope suspended between buildings, may be a transient, scary and precarious place to be. And, it may also be our best hope to positively influence what comes next.

REFERENCES

[1] Hock, D. 1999. Birth of the chaordic age.

[2] Toffler, A. 1980. The third wave.

[3] Pascale, R., Millemann, M., and Gioja, L. 2000. Surfing the edge of chaos.

[4] Gleick, J. 1987. Chaos: making a new science.

[5] Youngblood, M. 1997. Life at the edge of chaos.

[6] Kilman, R. 2001. Quantum organizations.

[7] Kelly, S. and Allison, M. 1999. The complexity advantage.

[8] Forbes, R. 2012. Michalengelo's message. In Journal of Arts & Humanities.

[9] Herzberg, F. 1983. Herzberg on motivation.

[11] Levinson, H. 1981. Executive.

[12] Lawrence, P. and Nohria, N. 2002. Driven: how nature shapes our choices.

[13] Pink, D. 2011. Drive.

[14] Gardner, H. 2011. Frames of mind: the theory of multiple intelligences.

[15] Goleman, D. 2013. Focus.

[16] Kirton, M. 2003. Adaption-innovation: in the context of diversity and change.

[17] Wheatley, M. 2012. Leadership and the new science.

[18] Murphy, C. and Murphy, M. 2002. Leading on the edge of chaos.

[19] Conner, D. 1998. Leading at the edge of chaos.

[20] Clarke, P. 2014. Between chaos and control: rethinking operational leadership. In ALNAP Study.

[21] Briggs, J. and F. Peat. 1999. The seven life lessons of chaos.

[22] Modis, T. 1998. Conquering uncertainty.

[23] Saunders, T. 1998. Strategic thinking and the new science.

[24] Mapes, J. 1996. Quantum leap thinking.

[25] Harris, P. 2010. Towards human emergence.

[26] Laloux, F. 2014. Reinventing organizations.

[27] Taleb, N. 2012. Antifragile.

[28] Wigglesworth, C. 2014. SQ 21.

[29] Johnson, S. 2014. How we got to now: six innovations that made the modern world.

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