

Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012)

Volume 2
Number 1 *Journal of Business & Leadership*

Article 9

1-1-2006

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Recommended Citation

Crawford, Chris (2006) "About Synergy and Dissynergy: Change, Strategic and Chaotic Decision Choices, and Resultant Outcomes," *Journal of Business & Leadership: Research, Practice, and Teaching (2005-2012)*: Vol. 2: No. 1, Article 9.

DOI: 10.58809/HUCR9619

Available at: <https://scholars.fhsu.edu/jbl/vol2/iss1/9>

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ABOUT SYNERGY AND DISSYNERGY: CHANGE, STRATEGIC AND CHAOTIC DECISION CHOICES, AND RESULTANT OUTCOMES

Chris Crawford, Fort Hays State University

Change occurs at a rate quicker than most organizations can strategically respond. In fact, like any gambler, decision making in the current business environment is little more than playing the odds in some cases. Nonetheless, organizations attempting to succeed must try to minimize the chaotic element of decision making through the introduction of strategic thinking. Moving toward strategic thought can sometimes propel organizations into a synergistic spiral of decision making - where one decision reveals further opportunities. Likewise, organizations that fail to prepare for the chaotic will find themselves falling into a dissynergistic spiral where failure breeds even more failure. The paper addresses the basic concepts of organizational change and decision making theory, describes a model of strategic and chaotic change, and highlights the resultant synergistic and dissynergistic consequences.

INTRODUCTION

As a society we crave the possibility of winning and fear the sometimes larger probability of losing. Risks are an inherent part of the culture of our society. Gambling has had a substantial resurgence and is as popular now as it was a century ago, even though the house is strongly favored in most games. Many people habitually disregard traffic speed limits, though there is a risk of loss involved. Lots of trust and faith hold some people firm; learning from prior losses keeps others at the wheel of fortune. Even when loss occurs, nearly everyone comes back to the table again to try their luck.

At the heart of the issue rests the idea of choice. Many a great biologist has separated primates from humans by invoking the notion that humans have choice - they can choose right from wrong and act on it even when the immediate consequences might be aversive. The risk of loss, an immediate threat to drive satisfaction, is often outweighed by the need to rush toward that maximum benefit. In the corporate environment, this can take the form of rushing a product out the door before adequate testing. Risk of failure is far outweighed by the need to maximize the potential win, and our free will assures that this pattern will be repeated habitually.

The purpose of this paper is to discuss the two contradictory prototypic consequences emergent from organizational change. One consequence, synergy, builds stronger decision upon stronger decision in an effort to maximize the effectiveness of the organization. The second consequence, dissynergy, is a deescalating spiral of poor decisions ultimately leading to organizational failure. The relationship between planned change and outcomes will also be discussed. Finally, the implications for leaders will be addressed.

Consideration of Organizational Change

Change is the heart of organizational effectiveness and leadership. Without change, organizations are destined to status quo thinking in a climate once dotted with other extinct companies that refused inevitable change until it was too late. There are two forces acting on any organization at all times: inertia and entropy. Inertia is the ability of an object put into motion to sustain that motion. Many great ideas seem to take on a life of their own once the idea has been shared with a critical mass of people. Inertia is countered by an equal force, entropy. Entropy, the constant running down of a system, occurs in a system where positive motion cannot be sustained, the system stagnates or dies if no positive force intervenes to help move the organization out of the status quo. It nearly goes without saying - healthy organizations have inertia, organizations that fail do so because of entropy.

Perhaps the best known change theory comes from Lewin's Field Theory (1951) where he contends that change is a multi-stage process that includes:

- Disconfirmation
- Induction of guilt of survival anxiety
- Creation of psychological safety or overcoming learning anxiety
- Cognitive redefinition (Unfreezing)
- Imitation (Change)
- Scanning: Insight or trial and error learning
- Personal and relational refreezing (Refreezing).

Lewin's model of change has become the seminal model of organizational development and has influenced much of the current theory on the subject, though the model is largely individual in focus. Lewin's influence is

evident in later change writings, like Schein (1996) and Kanter (2002).

John Kotter has become perhaps the most noted expert in recent times on organizational change. Kotter (1990) suggests that leading change requires the following elements:

- Establishing direction
- Aligning people
- Motivating and inspiring.

Kotter impresses the point that leadership is the process of engaging in adaptive change rather than “orderly results” (p. 7). In later works, Kotter describes the organizational transformation process as including the following elements:

- Establishing a sense of urgency
- Forming a powerful guiding coalition
- Creating a vision
- Communicating the vision
- Empowering others to act on the vision
- Planning for and creating short-term wins
- Consolidating improvements and producing still more change
- Institutionalizing new approaches

Kotter’s framework for change places distance between the type of change that managers direct and the type of evolution that leaders facilitate.

Quinn (1996) discusses the distinction between deep change and incremental change. Quinn’s basic position is that most people are not willing to commit to the necessary deep change needed to help their organizations. Incremental change, or basic organizational response/adaptiveness, is commonplace in a business environment that needs deep change. Quinn (1996) asserts, “Deep change differs from incremental change in that it requires new ways of thinking and behaving. It is change that is major in scope, discontinuous with the past and generally irreversible. The deep change effort distorts existing patterns of action and involves taking risks. Deep change means surrendering control. Making a deep change involves ...walking naked into the land of uncertainty” (p. 3). Quinn further asserts that taking risks is the essential part of what leaders must do, suggesting that if leaders are not risking their job then they are not doing their job.

Godin (2002) rightly asserts that the business environment is more chaotic than ever, making evolution a much trickier endeavor, “Managing during turbulent

times becomes far more complex because of the Russian nesting dolls of evolution within evolution” (p. 84). Godin suggests that organizations evolve by using the most basic of organizational elements - the meme. A meme is a unit of information that leads organizations to innovate. Godin notes, “Memes are spreading faster and faster (thanks to electronic media) and that just makes us hungrier for new memes. Human genes don’t have a reinforcing positive feedback.... However, our memes are in a state of runaway and they appear unstoppable” (p. 42). Once memes are in runaway, the organization is asserted to be zooming.

Organizations also engage in “natural” and “selective” reproduction in order to leverage memes and business productivity. Natural reproduction in organizations is like incremental change - adaptive. Selective reproduction relates to substantive changes that evolve the organization quickly. In most organizations the biggest fear surrounds a failed change attempt, in some cases the fear is so exceptional that it is just easier to deny the need for any change and stick to what Godin refers to as the winning strategy. Most understand a winning strategy today will be a roadmap to failure in the future. Natural reproduction simply reinforces old ideas by promoting those tired ideas up the corporate ladder into higher positions of management, leading to fewer and fewer memes and innovation. Sometimes organizations engage in selective reproduction where they may specifically acquire new small companies that easily zoom.

Additionally, organizations can hire new memes by attracting zoomers from other successful companies and bring their mDNA. These new memes bring innovation and chaos to a stagnant environment. Another aspect of organizational evolution relates to the changing environment. As unpredictable as the environment is for species, the organizational environment is infinitely more complex due to the speed, distance involved, and number of dependent actors. When most of our profit models are based on a non-changing environment, those environments are assumed to be stable - which is a delusion that few of us can reasonably sustain. Godin encourages us to both plan for success and to plan for failure, and this planning must take place assuming an environment that changes faster than people can apply new mDNA to situations.

One of the more contemporary and popular methods of assessing organizational change (and larger societal change) comes from the concept of the “tipping point” (Gladwell, 2000). Gladwell provides a detailed account of the intricate mechanism of change based on the historical innovation cycle first introduced by Rogers

(1983). Gladwell's idea of a threshold or critical mass has become a driving force of change theory. Essentially, once a change reaches the necessary threshold, there is little that can be done to stop its eventuality. Gladwell suggests that people transmit the infectious agent, or innovation, and once it has been dispersed it grows to epidemic proportions. Gladwell's model is a diffusion model that relies on both the change as well as the social network in which the change is presented. Finally, the primary means by which the change is presented plays a large role. Gladwell presents two ideas that serve as the mechanism for the change: contagiousness and stickiness. Contagiousness stems from the idea that the time is right for an innovation. Stickiness relates to the attractiveness of the message. Both are critical elements in allowing the idea to gain epidemic proportions. The models of change espoused by Godin and Gladwell are highly complimentary, though they differ in small ways.

Another model recently discussed comes from confronting and challenging the system based on the necessity of common good change. Risk leadership (Brungardt & Crawford, 1999) involves mobilizing a change agency around an issue, a problem individual, or by attempting to radically transform the entire system. Risk leadership emerges from a single risk agent that seeks to build a coalition of revolutionaries in order to prompt bottom-up change within the organization. This change model is predicated on the idea that the industrial model of top-down leadership, named classical leadership, is inadequate to solve many organizational problems. Likewise, human resource-based change models that are top-down, labeled progressive leadership, suffer from the same type of problems, though they are generally better suited to the modern organization because personnel are treated better. Risk leadership requires a risk agent to build an agenda for change, build a coalition, and motivate and inspire that coalition toward the first act of change - confronting those in power. Risk leadership next takes the coalition through the process of negotiation and conflict management to arrive at a stage of mutual trust enabled through verification. The risks to

risk leadership are significant, but the benefit to the company can be more significant and warrant its use when the issues are too serious to overlook.

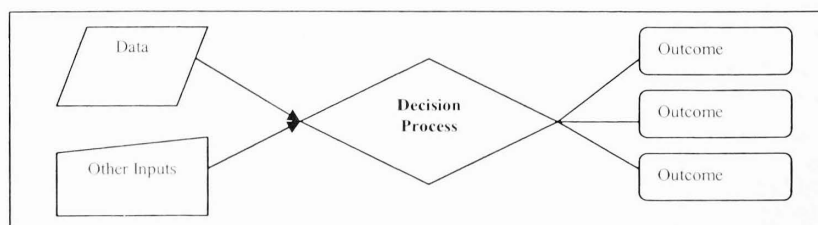
Each of the change theories addressed involves a couple of different elements. First, change is both an individual as well as a social process. As such, looking at change as either an individual process or an organizational imperative, neglects this basic element. Second, change is focused on the ability of organizational members to move past the status quo. There are two basic methods by which this is accomplished: incremental change and transformational (deep) change. Finally, for most change theorists, decision making is a central and unavoidable part of the process. It is both an individual as well as a systemic process, simultaneously. Thus, understanding decision making can help leaders know more about the success of the change process.

Basic Decision Making Theory

Basic decision making theory is predicated to a large extent on games and probability theory. In essence, the goal in organizations is to minimize the randomness associated with the decision (or the game) by providing as much information as possible about the probable outcomes. Much of this is based on mental scenario testing, though larger organizations have risk management on staff to assist with such analyses. The calculus of games theory relies on chance and limited outcomes, but the basic premise rests on the idea that positive outcomes are a product of the number of attempts. Even simple games have a probability equation associated with them. Take a simple coin toss game where the outcomes are constrained. Of every throw, there is a 50% chance that one side of the coin will be heads up.

Organizational decision making allows for much better gaming due to the massive inputs, the multiple decision points, and the level of probability associated with outcomes. The following model (figure 1) of decision making is rather simple, but displays the basic parts of any organizational decision making situation.

Figure 1: Model of Decision Making Outcomes



Information and human inputs are channeled through the decision making process, and that makes certain outcomes more or less likely. Effective decision making results in outcomes that are more productive for the organization, but there are always risks associated as improbable outcomes. Finally, the decision process is enhanced when certain undesirable outcomes can become less probable, and desirable outcomes can become more probable. The obvious consideration at this point squarely centers on the need to do the following:

- Clearly assess the desirability/value of each outcome, probable or improbable (valence);
- Understand the extent to which each outcome is likely given organizational action (expectancy);
- Know the probability of certain organizational decisions leading to certain outcomes (instrumentality); and,
- Assess the likelihood of change from the point the decision is made to the point that the outcome occurs.

While the first three factors have been well addressed (Expectancy Theory) in the organizational behavior literature (Vroom, 1964), the final aspect of the model is most troublesome in the current business environment. No one argues the reality that the business environment has undergone profound changes in the last 20-30 years, and the pace of organizational change is staggering. The chance that a decision made today would lead to different outcomes due to rapid, chaotic environmental change,

and not miscalculation, is a very real scenario. Thus, those elements more closely under the control of decision makers may be of less relevance to the modern organizational decision maker. As the environment changes even faster, the calculations that were once “solid gold” are now little more than busy work for a corporate accountant. The real work of the decision maker stems from taking risks based upon what the changing environment can evolve into before the outcome can be realized.

Organizational change becomes stymied because while the length of time between decision point and outcome has not lengthened, the reality is that the decision was not quick enough to have an effect on the outcome. In any case, a planned incremental change can actually become transformational change because of the effects of environmental responses that occur before the outcome can be felt. Likewise, transformational change may have little impact because of the mitigation of environmental effects before the outcome can be realized. One final factor must be addressed - the predictability of environmental change. To say that chaotic environmental change occurs before outcomes are realized is not news - this has always been the case. The problematic nature of this change stems from its chaotic unpredictable nature. For some decisions the level of change is imperceptible, for other decisions, the change is far more significant. The precise point at which change has an impact can also be problematic - it could be before the outcome is realized, or in some cases, immediately after the outcome might be realized. Figure 2 details this scenario.

Figure 2: Consequences of Change and Outcomes

		Type of Outcome	
		Favorable	Not Favorable
Type of Change	Planned	Q1 Profitable, strategic Synergistic	Q3 Unprofitable, strategic Erroneous
	Unplanned/ Chaotic	Q2 Profitable, non-strategic Accidental	Q4 Unprofitable, non-strategic Dissynergistic

The current business environment is not decision friendly, but the lack of decision making causes an unresponsive organization, which is suicidal.

Synergistic and Dissynergistic Outcomes

Given the rapid, chaotic state of decision making it is surprising that organizations are ever able to deliberately

move forward, and this environment is only going to speed up and become less predictable. The consequential effects of decision making essentially reduce to the four quadrants displayed in figure 2:

- Q1: Synergistic
- Q2: Accidental
- Q3: Erroneous

- Q4: Dissynergistic

As figure 2 notes, the goal of organizations should be to move toward synergistic consequences, and away from accidental, dissynergistic, and erroneous consequences.

Synergistic consequences emerge when an organization develops a plan, executes that plan, and achieves the intended outcome. If an organization can continuously do this, then it is fortunate and has great vision. As organizations enter new markets, hire less experienced people, and build connections with untested vendors, the probability of achieving this consequence declines markedly.

Accidental consequences occur when an organization experiences a favorable outcome through serendipitous occurrence. The organization played a risk and moved without considering the options, and the result was a profitable payoff. If organizations engage in this type of strategy, they run the risk of being profitable less and less. As in our coin toss experiment, if heads keep coming up over and over, it does not decrease the inevitability that tails are equally possible the next toss. As organizations lose touch with their client base, lack information on which to base sound decisions, or fail to think about strategy before moving forward with a course of action, the chance of a failure increases.

Erroneous consequences are the result of planned change that simply fails to materialize or is too late. Most organizations are becoming more cognizant of the TTM factor - time to market. The longer the time a product takes to get to the market, the less likely the organization will find success. There are notable exceptions if the time to market is too short to produce a quality product. This concept applies fully to erroneous consequences - if the time span between decision on strategy and outcome is too great, then the chance for erroneous consequences increases. Organizations that have poor or unresponsive strategic planning models that fail to implement strategic priorities will have more erroneous consequences.

Dissynergistic consequences are inevitable when an organization fails to plan and has the feared, but expected negative outcomes from that failure. Organizations are often paralyzed by analysis, fear movement due to a changing environment, or simply fail to move when apparent harm comes their way. Profit quickly evaporates when the environment changes the historic business climate too much for an organization that fails to see the rapid change. A variety of organizational maladies can produce dissynergy, but poor environmental scanning and neglected planning must be considered very likely symptoms of organizations that fail.

Additive Effect - Synergistic and Dissynergistic Spirals

A final concept must be added to the discussion - the effect of these consequences being repeated over time - the uncontrolled spiral. Perhaps the best illustration is one of graphic carnage. Once an animal falls prey to a predator there is a strong chance that the others will follow. Bad things happen to those too weak to respond appropriately. Sometimes the organization agonizes, but sometimes the awe falls swift. Animals that are able to act swiftly have outwitted their competition and may have more resources on which to feast. Thus, the additive effect plays both ways. Evolution is not fair, but those who are stronger survive. Organizations that have not planned adequately are likely to fall victim to failure and may be excised from the gene pool (Godin, 2002).

A positive additive effect - the synergistic spiral - moves organizations toward greater success. The synergistic spiral occurs when organizations plan for a positive change, achieve that change, and from that advanced position take advantage of even greater opportunities for more change. If an organization is able to penetrate a previously untapped market and maintain a share, they may be able to move into other related markets. Once the foothold is established, more ground can be gained. Over time, this synergistic spiral has an extremely beneficial effect for an organization. Greater things happen to those organizations that can maintain growth. Of course, an equally devastating problem can arise from organizations that become too large for their culture because they become bloated and immobile. As long as the entire organization is responsive to the advancing strategic movement, then the synergistic spiral can occur as long as the outcomes are positive. Godin labels this concept "zooming".

A negative additive effect - the dissynergistic spiral - occurs when organizations fail to plan and have significant losses. Organizations, like turtles, tend to take defensive positions when they fear change that is beyond their control. Failure leads to despair which leads to more failure. Sometimes a poor quality decision can lead an organization down a dissynergistic path. Production of a poor product can force an organization into a decision where they make other poor choices. Instead of continuous improvement cycles, that organization experiences the fatal additive effect of poor decision upon poor decision. Once an organization allows itself to be "backed into the corner", turning around becomes less an option until the additive effect becomes too large to ignore - fail or change. In these cases, change is more

painful and more difficult, but the alternative is near certain business failure. The process of turning around poor decisions will be marked with doubt because there will be people addicted to moving in the failing direction. There will be shame and ego-involvement on the part of those who promoted the wrong direction. The organization seeking to rebound will need to do an exceptional job of keeping its eye on the ball and moving it down court, even while its own players may not be playing with the team.

Role of Leadership in the Change Process

To assert that leadership and change are inseparable is likely true. Since the 1980s the common organizing logic has been to consider the leader as an agent of change. Every change theory addressed earlier puts the leader squarely in the driver's seat for organizational change. What may be lacking in a good many theories is the idea that the entire organization - leader and follower alike - is responsible for its continuous improvement. More recent writings on the nature of organizational systems (Senge, 1994) suggest that every member of an organization plays a role in the change/improvement process. To say that change is simply the domain of the leader is to avoid that which is becoming very obvious. Change is the duty of every member, and collaboration of all members in achieving a common good, by definition, necessitates leadership in the change process.

Leadership plays a crucial role in the development of vision and business strategy. While some divorce the issue of strategizing from the realm of leadership (Kotter, 1990), there is good reason why strategy is a central part of the act of leadership. The role of vision is unquestionable - vision allows the organization to dream

of future possibilities, but this dream will never be realized without appropriate planning and implementation. Leadership, as an act of moving organizational members toward success through collaboration, cannot be successful without consideration of a vision and the requisite strategies in achieving that vision. Organizational change that avoids strategy is simply a strong wish that lacks fuel for propulsion.

More leaders have come to rely on their strategic planning process as a method aligning their organizational culture toward a shared mission and vision, while understanding the larger context in which the organization functions. Strategizing, formerly a regaled managerial function, seems to have been bred new life as a central function of effective leaders. Change that lacks strategic focus is unplanned change and often leads to chaotic action. Effective leadership in organizations now nearly mandates that mission, vision, and the culture be aligned to fight the external forces and entropy.

Implications for Leader-Decision Makers

As leaders attempt to wrap their souls around the rapidly evolving business environment, change will be the one constant in a landscape strewn with obstacles. The only way for leaders to remain successful is to help them learn how to anticipate challenges before they occur. In the context of decision making, leaders must learn to do the essential things faster and with insight. Thinking that the environment is adaptive to the business needs is a cure whose disease has long since been eradicated. The days of the organization controlling and driving most markets is over, except in the rarest of single supplier cases.

Figure 3: Essential Macro and Micro Level Functions for Synergistic Organizations

Macro Level Function	Micro-Level Function
Understand the past and present mission, market, and culture of your organization.	Invest in a strong knowledge management system, so you know the current state of affairs.
	Engage in a real environmental scan.
	Get widespread commitment to the mission of the organization by all relevant stakeholders.
Anticipate the future environment of your organization and your product.	Look at what your competitors are doing right now to position themselves - know the industry trends.
	Ask your customers what they need.
	Be prepared to create something so valuable that your organization can control its destiny.
Unceasingly strategize for the unanticipated.	Make "what if" the corporate mindset without creating widespread paranoia.
	Spend time thinking about the future, not just planning to solve today's problems.
	Involve all members as much as possible because real change occurs at all levels.

To maintain synergistic effects, organizational leaders and decision makers must continue to make accurate and profitable decisions. Figure 3 above displays three essential macro-level functions. Once an organization has made the wrong choices and has languished in the hole of dissynergy, turning around will be a long and difficult process full of doubt and hesitancy. Rebuilding must take the form of continuous improvement and can take extraordinary time and effort to be productive, but can be done. It will be easy for organizations to give up the fight on the long journey back, but the hard fought outcome of a stronger competitive position and quality improvement mindset may be enough to swing old and new markets. Companies that have traveled down the dissynergistic path would be well served to quickly assess their position and to take immediate steps to make the right decision to pull themselves up from their past errors.

Implications for Leadership Educators

A long-held carpenter's credo, "measure twice, cut once" is now, more than ever, an intelligent strategy for organizations that are searching for the right business model in an environment that changes faster than the response. For several years, leadership education has focused on the vast complexities of building vision, empowering others, getting commitment from stakeholders, facilitating a supportive and accountable environment, and providing free reign to teams. However, the somewhat dated topic of decision making may not have been given adequate attention in most curricula. There may be good reason to reverse that trend and to refocus education on the basic, and largely assumed, topic of strategic decision making.

As leadership educators, we must be vigilant in our attempt to explore two things related to synergistic and dissynergistic outcomes:

- Analysis of the actual organizational environment
- Responses by leaders and followers in attempting to decrease the chaotic environment by rapidly planning change

To achieve such results, leadership educators must build curriculum that addresses cognitive issues like synergy and dissynergy at the same time they facilitate behavioral skills like strategic planning, rapid application design, and extreme team-based solutions. The days of looking at decisions in a vacuum are over and must be replaced by teaching philosophies that encourage promptness in the face of insufficient data. Furthermore, our leaders must be allowed the flexibility of making an

occasional mistake, because decision making in our chaotic environment is destined to produce errors in judgment. Finally, leaders must be prepared for the inevitable dissonance that occurs with decisions made under changing environmental conditions. Like anyone else attempting to locate a moving target, leaders face serious challenges in attempting to provide a synergistic outcome instead of shooting blindly into the dark. Leadership has always been like the art of walking the tightrope, but now the safety net is sometimes not even there.

Summary

Like Quinn's change agent that walks naked through the land of uncertainty, leaders must accept the certainty of chaos in today's digital environment. Knowing the consequences of lengthy response time based on outdated information is no longer optional - leaders must know and understand that unplanned strategic decisions can more likely propel their organizations into dissynergistic spiraling. Only leaders with a quick reflex based on available data will survive, and only those leaders with the most timely and "on-target" strategic decision making will synergize their organizations to success.

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