

DRIVE OUT FEAR: HAVING THE COURAGE TO DO THE RIGHT THING

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Abstract

We are in year 88 of a 112-year shift to a new paradigm for managing variability. A successful transition during the next 24 years is dependent on leaders supporting others to overcome the fear associated with taking action to do the right things by reducing variation.

Introduction

The aim of this paper is to frame the challenge in supporting the final phase of the transformation to the new paradigm for managing variability. The expected result includes unleashing more of the enormous potential of the American people in improving quality. Improved quality will help us overcome what I believe is still an accurate assessment of America by Dr. W. Edwards Deming. In his assessment, he notes that the United States is one of the most undeveloped nations in the world:

"What is the world's most underdeveloped nation? With the storehouse of skills and knowledge contained in its millions of unemployed, and with the even more appalling underuse, misuse, and abuse of skills and knowledge in the army of employed people in all ranks in all industries, the United States may be today the most underdeveloped nation in the world." (1)

Deming defined the steps in the needed transformation as a chain reaction. When organizations improve quality by doing the right things (reducing variation), they decrease costs, improve productivity, capture the market because they're offering better quality products or services at a lower price, stay in business and provide jobs and more jobs. (2)

Better quality, more jobs, and higher paying jobs lead to a stronger economy. A growing economy, in turn, contributes to reductions in the national debt, as a percent of the gross domestic product. The new technology for managing variation (with technology being defined as the practical application of knowledge) leads to improved cooperation and significantly improved leadership skills, problem-solving skills and decision-making skills. Increased leadership capabilities improve society, and an improved and more just society results in a smaller and more effective government.

Success in America will create a chain reaction throughout the world. Improved competition enabled through globalization will lead to higher standards of living and help prevent wars. When wars can't be prevented, conflicts will be resolved quickly and decisively, with less chance of recurrence. The world will never become "perfect" but will always be getting a little better or at least not any worse off.

Transformation to a better world starts with the individual and requires the application of a new paradigm for managing variability. One of the greatest barriers to individual transformation is fear and overcoming this fear can be accomplished by aligning purpose with vision and following a lead-by-example approach that includes four steps: (3)

- Learn the theory, methods and tools.
- Apply what you learn to improve a system or process.
- Teach others by sharing your success story.
- Support others in their effort to Learn, Apply, Teach and Support.

The New Technology for Managing Variability

We are in year 88 of a 112-year shift to the new paradigm in the area of quality improvement. In 1924, Dr. Walter Shewhart developed the control chart, which established the new paradigm for managing variability. Deming's Red Bead exercise illustrates the primary aspects of the concept.

Shewhart concluded that although everything varies and individual things are unpredictable, groups of things from a constant system of causes tend to be predictable. (4) In more common terms, the concept can be expressed as: *If you always do what you always did, on average, you will usually get what you always got.* The "you" in this case could be an individual or group represented by a team, a corporation or a nation.

In June 1986, Deming updated his forward to Shewhart's book *Statistical Method from the Viewpoint of Quality Control*. In that forward, he noted:

"Another half-century may pass before the full spectrum of Dr. Shewhart's contributions has been revealed in liberal education, science, and industry." (5)

Given that the clock started in 1924 when Shewhart developed the control chart, June 2036 marks when Shewhart's contributions on how the technology can be applied to improve quality (effectiveness and efficiency) in any aspect of life will be considered common knowledge by at least 51% of the world's adult population.

A Broader Description of Variation

Deming reinforced the most important aspect of Shewhart's contributions in his statement:

"If I had to reduce my message for management to just a few words, I'd say it all has to do with reducing variation." (6)

This statement on the importance of reducing variation raises three basic questions. The questions and their answers are as follows:

1. Reduce variation from what? From the ideal. An ideal is always doing the moral or right thing.
2. By what method? By reducing common causes of variation through actions guided by the Shewhart Cycle for Learning and Development.
3. Who decides whether variation was reduced? The stakeholders that will have a significant impact on or will be significantly impacted by the actions taken in the near, mid and long term. A stakeholder can be an individual, group or organization.

Typically, the term variation is defined within a statistical, manufacturing or scientific framework. A broader description that supports universal application includes the following:

"In simple yet profound terms, variation represents the difference between an ideal and an actual situation. An ideal represents a standard of perfection—the highest standard of excellence—that is uniquely defined by stakeholders, including direct customers, internal customers, suppliers, society and shareholders. Excellence is synonymous with quality, and excellent quality results from doing the right things, in the right way.

The fact that we can strive for an ideal but never achieve it means that stakeholders always experience some variation from the perfect situations they envision. This, however, also makes improvement and progress possible. Reducing the variation stakeholders experience is the key to quality and continuous improvement." (7)

Reducing variation requires leaders to do the right things, which are defined by the stakeholders. Efficiency is doing things right, and effectiveness is doing the right things. Determining what is “right” opens up a broader philosophical, moral and ethical discussion.

There are a variety of descriptions for philosophy but they generally include the search for meaning, understanding and knowledge, including questions regarding morality. Moral is defined as pertaining to the character of behavior from the point of view of right and wrong. Ethics is a philosophy or system of morals, and ethical behavior is actions that are in accordance with the “right” principles. Right is a positive action that benefits other (e.g., a good thing). Wrong is a negative or harmful action.

Moral Imperative – Better or Worse

Variation either gets better or it gets worse, which makes reducing variation a moral imperative. Accepting the status quo (e.g., doing nothing) means that a predictable number of people will continue to be harmed as a result of imperfect systems and processes that produce poor quality. Examples include medical errors, crime, wars, literacy, poverty, traffic accidents, unemployment and underemployment. In his book *When Jesus Came to Harvard, Making Moral Choices Today*, Harvey Cox made the following observation regarding moral choices:

“... there has been an emerging convergence of the two ways of thinking that includes the consequences of action and inaction.

We can now do great evil without intending to. What we need today is more awareness, a wider recognition of how vast systems we are caught up in can do terrible things and how we can contribute to evil without even being conscious of it.” (8)

Shewhart and Deming were both influenced by the work of philosopher Clarence Irving Lewis and frequently referenced his book *Mind and the World Order: Outline of a Theory of Knowledge*. Deming’s system of profound knowledge provides a framework for improvement and learning. Deming consistently reinforced that “there is no substitute for knowledge and there is no knowledge without prediction and theory.” Knowledge is gained through actions guided by the Plan-Do-Study-Act (PDSA) cycle, which Deming referred to as the Shewhart Cycle for Learning and Development. (9)

The PDSA cycle can be applied to any level or type of improvement action. Improvement actions fall into three general categories:

1. Sustain, maintain the status quo (most common)
2. Incremental or evolutionary improvement
3. Radical or revolutionary improvement (which includes a new or a redesigned system or process)

Actions taken after the attack on the World Trade Center on September 11, 2001, illustrate the application of all three categories:

1. The United States’ response included pursuing the arrest and prosecution of the perpetrators. This action was similar to the actions taken when the towers were first attacked in 1993.
2. In addition to pursuing the arrest and prosecution of the perpetrators, a broader strategy for Afghanistan was implemented that included defeating the Taliban, supporting elections and establishing a new government.
3. The United States implemented a revolutionary strategy to support transformation within the Middle East, which started with the war in Iraq. It will likely take another 15 years to assess the results of this strategy.
4. The overall strategy also included preparing the United States for new threats. The preparations included the establishment of the Department of Homeland Security and the Northern Command. Other actions have included preparing the National Guard and preparing state and local emergency management personnel to deter and respond to attacks on the homeland.

In his article “*Think Again: Intelligence*,” Paul Pillar, a 28-year veteran of the Central Intelligence Agency (CIA), reinforces the critical role of leadership in making decisions. He states that knowledge or intelligence is not the decisive factor. The decisive factor is a leader’s “own strategic sense, the lessons they have drawn from history or personal experience, the imperatives of domestic politics, and their own neuroses.” Regarding the quality of information, knowledge or intelligence available in support of the decision leading up to war in Iraq, Pillar commented that: “If the intelligence community’s assessment pointed to any course of action, it was avoiding a war, not launching one.” (10)

Discussion and debate as to the effectiveness and efficiency in development and execution of the strategies has reinforced the critical need for leaders to develop an improved understanding of variability in order to optimize all elements of national power, which include Diplomatic, Information, Military and Economic.

Paradigms and Paradigm Shifts

As mentioned previously, Shewhart and Deming were both influenced by the work of philosopher Clarence Irving Lewis. In his paper “*The Influence of C.I. Lewis on Shewhart and Deming*,” G.T. Peterson states that Lewis labeled his general point of view as conceptual pragmatism, which “claims that truth is a matter of the usefulness of beliefs in practical action.” (11) Lewis’ work likely influenced the work of Thomas Kuhn, who developed the concept of paradigms. Kuhn’s work was popularized by Joel Barker in his book *Future Edge* (12) and his video “The New Business of Paradigms.” According to Barker:

A paradigm is a set of rules and regulation that does two things: First, some of the rules set or establish boundaries—just like a pattern sets the edges.

Then the rest of the rules offer you guidance on how to be successful by solving problems that exist in inside those boundaries—in a sense, they offer you a model for problem solving.

So a paradigm is a problem-solving system. And a shift is when you change from one set of rules to another.

In challenging the constraints imposed by the prevailing paradigm, Barker proposed that leaders ask a paradigm shifting question:

“What today seems impossible but if it could be done (practical), would fundamentally change what you do?”

This is one of the primary questions every successful person, organization and nation should continue to ask and answer to sustain innovation and improvement. Answers to the question result in new and innovative products and services that help to expand existing markets and create new markets.

Depending on the period of time, answers to the “What today seems impossible” question have included kitchen appliances, automobiles, televisions, telephones, putting a man on the moon, the Internet, smartphones, wireless technology, tablet computers and 24x7 news coverage to name a few. In the future, answers to the “What today seems impossible” question might include technologies that help provide health care for all, overcome underemployment and unemployment, eliminate poverty and hunger, eliminate disease, end the war on drugs or even end war itself.

In area of quality improvement (i.e., reducing variation), the answer to the “What today seems impossible” question is that within the next 24 years, the technology for reducing variation will be commonly understood and successfully applied worldwide, supporting the chain reaction of which Deming spoke. This includes a common awareness and understanding of the following:

1. The knowledge needed to reduce the gap between the ideal situation and reality

2. Why a problem is never truly solved
3. What people can and can't agree on
4. Why transparency is important to effective and efficient decision-making
5. Why reducing variation is a moral imperative
6. Why driving out fear is crucial
7. The way ahead

The Knowledge Needed to Reduce Variation

As previously mentioned, variation represents the difference between the ideal situation and reality. To identify and reduce the gap (i.e. variation), you need to know about the following:

- The two causes of variation (common and special)
- The two types of systems (stable and unstable)
- The two types of mistakes (treating a special cause as common cause and treating a common cause as a special cause)

It also helps to understand the distinction between facts and problems. A fact is an objective observation that represents a truth. A truth is defined as a statement that corresponds to a fact or current reality. A problem represents a difference between a desired condition and the actual condition. Problems present choices in regard to the desired outcome, and the choices vary. Many people choose to accept that once a desired condition is obtained, there is no longer a problem. This situation is commonly referred to as the status quo.

Choice is the exercise of free will and correlates to power. Power determines the quantity and quality of choices. Power can and often does corrupt. An effective application and balance of power among stakeholders is the best predictor of peace (absence of conflict) and prosperity.

In a political context, a democracy or republic such as the United States creates a balance of power among stakeholders. On the other extreme, a totalitarian regime such as North Korea limits individual power. Freedom House is a 70-year-old organization that measures the progress of countries in providing individual freedom. (13)

Within an organizational context, the amount of power provided to employees (i.e., empowerment) is determined by the respective culture. (Culture is defined as how a group of people does things.) The effectiveness of the distribution of power is best assessed through independent reviews or audits. Examples include:

- ISO 9000 standards. These International Organization for Standardization (ISO) standards require organizations to develop and validate the effectiveness of Quality Management Systems (QMSs).
- Malcolm Baldrige National Quality Award Criteria. Using the Baldrige Performance Management Framework, organizations can assess system performance. The Baldrige framework supports for-profit organizations as well as not-for-profit organizations, including all levels of government. Specific criteria are also available for education and healthcare organizations.
- Within the federal government, the Federal Managers Financial Integrity Act of 1982 requires annual reviews of an organizations effectiveness and efficiency. Continual improvements in execution of the guidance to include integration of the new paradigm for managing variability, would support needed transformation.

Why a Problem Is Never Truly Solved

Given the variation principle, a problem is never solved because variation can never be eliminated. Therefore, a problem represents an unacceptable degree of variation, and a solved problem represents an acceptable degree of variation. The decision on what represents an acceptable level of variation and how you achieve that level has costs associated with it.

For example, everyone needs to eat to survive. However, you will never have the ideal amount of vitamins and minerals needed for good health. Hunger represents an unacceptable degree of variation. When you eat something to satisfy your hunger, you have an acceptable degree of variation.

The decision about what constitutes an acceptable level of variation and the way you reduce that variation (eating fast food as opposed to fresh fruits and vegetables) has costs associated with it. You or other people might suffer the consequences from the imperfect system or process – consequences that might have been preventable. For example, choosing an unhealthy diet (as opposed to a healthy diet) will affect the quality and longevity of your life, which in turn, affects your family and friends.

What People Can and Can't Agree On

People can agree on facts and ideals. In addition, people can agree to work together to resolve problems. However, people almost always disagree on the desired courses of action, which actually provides an additional opportunity for understanding and learning. On any given issue that is of interest to a respective stakeholder community, a few people will be adamantly for or against it, and everyone else will be somewhere in between. The U.S. Founding Fathers intuitively understood this variation paradigm. They accepted the *fact* that English rule was unacceptable, *disagreed* on many issues (with slavery being one), and agreed on the *ideals* expressed in the Declaration of Independence:

“... that all men are created equal, that they are endowed by their Creator with certain inalienable rights, that among these are life, liberty and the pursuit of happiness.”

Their *common cause* was to design a system of government – a republic that could be continually improved through new laws and amendments.

The American justice system provides another example. The *ideal* is justice. *Facts* are represented by evidence that is allowed to be presented in court. *Desired outcomes* range from innocence, which is a position represented by the defense, to guilt, which is a position represented by the prosecution. The judge ensures compliance to the rules of law and the jury makes a decision as to guilt and innocence. Appellate courts and ultimately the Supreme Court provide additional safeguards that the system produced a judgment that was fair and impartial. Establishing the standard of determining guilt “beyond a reasonable doubt” is a design attribute that acknowledges imperfection in that it is better for the guilty to go free than the innocent to be convicted.

Using the justice system as a model, you can apply the concept of a “Quality Court” to the political system to resolve issues that require an optimum level of bipartisanship.

Why Transparency Is Important

Transparency is an objective that has worldwide interest. Transparency is the sharing of information with stakeholders that can be used to explain and support *effective* and *efficient* decision-making.

As mentioned previously, the elements that determine a nation’s powerfulness include Diplomatic, Information, Military and Economic. These elements are interrelated. A weak economic system results in fewer resources for the military. A weak economy and a military that doesn’t have the capability to support national interests reduce diplomatic and economic leverage needed for effective leadership. The Information element provides the intelligence or knowledge that helps to leverage the other elements of power. Deming’s concept of the System of Profound Knowledge (SoPK), which consists of a basic understanding of knowledge, systems, variation and psychology, can be applied to optimize power.

In a memorandum to the heads of executive departments and agencies, President Obama stated his aim for transparency and open government in the United States:

“My Administration is committed to creating an unprecedented level of openness in Government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration.

Openness will strengthen our democracy and promote efficiency and effectiveness [emphasis mine] in Government.” (14)

Application of the variation paradigm provides the methods for supporting transparency. Effectiveness and efficiency can only be achieved by reducing variation. Optimal approaches in reducing variation require a basic level of competence in applying the SoPK.

Transparency International is an organization with “a mission to create change towards a world free of corruption.” (16) It developed a Corruption Perception Index that draws a correlation between a lack of transparency and corruption. The index provides an approach for assessing long-term progress in supporting leaders in managing variability. Like the assessments made by Freedom House, the index results show that democracies with checks and balances on power tend to be less corrupt than more authoritarian regimes.

The Index of Economic Freedom provides yet another source of information that uses a variety of economic measurements to assess the degree of economic freedom in the world’s nations. The organization’s fact-based analyses support the conclusion that: “economic freedom is the overwhelming catalyst in creating jobs, fighting poverty, building a safe environment, and improving overall human well-being.” (15)

In the area of financial management, there is a significant degree of oversight and regulation when it comes to reporting on the financial condition of a respective organization. Legislation such as the Sarbanes-Oxley Act of 2002 was enacted to protect investors by improving the accuracy and reliability of financial information. It was created in reaction to corporate corruption in companies such as Enron to restore public confidence in the security markets.

The explosive growth of communication technologies provided through the Internet, wireless technologies and cable, along with stakeholder expectations for transparency on a 24x7 basis, leads to an unprecedented demand for data and information. This demand leads to an implied need for valid data, which leads to potential knowledge and power.

Deming remarked that failure to understand the distinction between common and special causes of variation result in a situation where 95% of changes could result in increasing variation rather than reducing it.(16) In other words, without knowledge of common and special causes of variation, assessments of system performance – whether they come from the profit or non-profit sector – are most likely inaccurate and support the need to identify and establish standards.

Shewhart’s contributions include creating new standards for numerical literacy that stress the importance of operational definitions, organizing and classifying data, and determining valid interpretation standards for assessing trends. This information is critical for assessing predictability of a system or process. It also serves as the foundation for supporting the “Quality Court” concept.

Why Reducing Variation Is a Moral Imperative

As the world becomes smaller, more connected and more competitive, understanding and managing variability provides a decisive advantage that will separate the winners from the losers. Winning is defined as reducing variation, whereas losing is defined as increasing variation. The ultimate aim of competition is supporting a level of cooperation where everyone wins or at least is not any worse off.

The terms winning and losing are typically associated within an adversarial context. However, Abraham Lincoln promoted using a win-win strategy, which is reflected in his statement: “Am I not destroying my enemies when I make friends of them?”

Individuals and groups can generally take the following basic courses of action that can result in winning or losing:

- Ideal - Optimal: Actions that result in everyone benefitting (e.g., win/win), such as

- Competitors reducing variation, resulting in better products and/or services with improved quality at less cost.
- Actions taken by individuals, groups and organizations motivated by love.
- Application of the “Quality Court” concept to help resolve controversial issues.
- Suboptimal: Actions that result in someone winning and someone losing or everyone losing (e.g., win/lose, lose/lose), such as
 - Politics, warfare, and conflict between religious faiths. Losing can motivate people to take action that will result in a cycle that never ends.
 - Given the fact that variation either gets better or worse, doing nothing to break the win/lose cycle that sustains a status quo results in everybody losing at one point or another. For example, a child born with the potential to cure the common cold or create a new source of endless energy who, by chance, is born into a region of the world that has a high degree of poverty and lack of access to education may never realize his or her potential, which would be a loss for everyone.

Why Driving Out Fear Is Crucial

Deming developed the *14 Points for Management* (17) to help guide organizational efforts to reduce variation. *Drive out Fear* is point 8, which states: “Drive out Fear so that everyone may work effectively for the company.” Put another way, the challenge for leaders is to identify and drive out the fear that prevents individuals within an organization or nation from cooperating in doing more of the right things.

Fear takes many forms. Continual improvement implies continually making choices. Effective choices require information, and information can lead to knowledge. Knowledge is potential power and more power equates to making more decisions. Actions to re-align power can have both negative results (e.g., wars and assassinations) and positive results (e.g., market growth and new and better employment opportunities).

In addition to giving up power, there is also fear of getting more power and having to make more decisions that individuals may not believe they are qualified to make. The range of empowerment within an organization can range from a culture that requires people to “check their brains at the door” to organizations such as Toyota that empowers their employees to implement one million ideas a year. (18)

One organization that has a core capability in managing fear is the military. Every service member takes an oath to defend the constitution, which could result in personal death or injury. Overcoming fear is done through leadership that:

- Provides purpose, motivation and direction. Direction includes near-, mid- and long-term strategies and plans.
- Embraces current reality (e.g., learns the truth through assessments on performance and capabilities, and integrates the lessons learned into doctrine).
- Provides effective individual and collective skill-based training.

Training and a leadership-by-example approach provides confidence in individual and group capabilities. All personnel are expected to be leaders. The improvement opportunity for the military is transitioning from an implied knowledge of variability to one that is explicit.

In *The Fifth Discipline, The Art and Practice of a Learning Organization*, Peter Senge discusses Robert Fritz’s theories about systems that affect behavior. The behaviors that he witnessed led Fritz to conclude “that practically all of us have a belief that we are not able to fulfill our desires.” (19) These beliefs include:

- Powerlessness – the belief that we are unable to bring into being all the things we really care about.
- Unworthiness – the belief that we do not deserve what we really care about.

Fritz believes that we inadvertently learn this as children:

“As children, we learn what our limitations are. Children are rightfully taught limitations essential to their survival. But too often this learning is generalized. We are constantly told we can’t have or can’t do certain things, and we may come to assume that we have an inability to have what we want.”

To overcome the sense of powerlessness and unworthiness, Senge reinforces the importance of believing that we all have a positive purpose in life. Although this can’t be proven or disproven, it is a helpful premise that supports the aim for success and happiness. Purpose is the source for vision.

An indication of fear for individuals, organizations and nations is the absence of a quality vision that is specific, achievable, shared, linked to purpose and leads to achieving expected results. A technique that can be applied to help identify your respective purpose is to envision what you would want others to say about you when they learned of your death. What are the contributions that you would want to see mentioned in your obituary?

On a national level, the U.S. vision is often reflected in how an individual defines his or her American dream. The foundation for the American dream can perhaps be summarized from key statements contained in documents that include the Declaration of Independence, the Constitution and the Pledge of Allegiance:

A Republic representing One Nation, under God, indivisible, with liberty and justice for all where its citizens are committed to taking action to support the individual’s inalienable rights to life, liberty and the pursuit of happiness that continually results in a more perfect Union.

The Way Ahead

Transformation starts with the individual. Overcoming fear in the transformation to the new paradigm for managing variability can be supported through the following steps:

1. Develop a desire and commitment. This includes aligning vision with purpose and identifying an improvement strategy and plan. Within an organization, assessments using the ISO 9000 standards or the Baldrige Performance Management Framework would support this objective.
2. Develop an understanding of variation. Assess your current reality: *If you always do what you always did, on average, you will usually get what you always got.* What are you “always doing” that you want to do more or less of? What are the priorities for improvement?
3. Lead by example:
 - a. Learn the basic theory, methods and tools.
 - b. Apply what you learn to develop your success story.
 - c. Teach others by sharing what you’ve learned.
 - d. Support others in their efforts to Learn, Apply, Teach and Support

Conclusion

The situation that led Deming to conclude that America “may be the most underdeveloped nation in the world” has gotten worse, especially in areas such as security, personal income, global conflicts, affordability of healthcare, unemployment and underemployment, and the national debt.

Globalization creates opportunities by expanding markets and increasing competition. Increased competition, along with the explosion of media-related technologies supporting 24x7 communications, has led to higher expectations and a greater need for transparency. Transparency is providing the information and knowledge used to support *effective* and *efficient* decision-making.

Reducing variation is the only way to improve effectiveness and efficiency. Methods for reducing variation require an optimal balance of power among the stakeholders. The fear of losing power or getting more can be overcome through optimal courses of action that lead to results that benefit almost everyone.

Supporting a successful transition to the new paradigm for managing variability during the next 24 years will support the need for a chain reaction in quality worldwide. As Deming accurately described:

When you improve quality by doing the right things (reducing variation), cost decrease, productivity improves, capture the market with better quality and lower price, stay in business and provide jobs and more jobs.

Supporting the chain reaction requires individuals to lead by example and to help others overcome their fear of doing the right things.

Deming's advice to leaders who identified demanding goals that they expected their followers to achieve was presented as a question: "By what method?" The "method" for supporting the final phase of the transformation to the new paradigm for managing variability is by applying the SoPK through repeated applications of the PDSA cycle. The result will be a better quality of life for us all.

*"If I had to reduce my message
... to just a few words,
I'd say it all has to do with reducing variation."
- W. Edwards Deming*

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