

Connecting Vision to Reality: An Introduction to *SCOPEVision*™

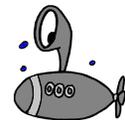
To use the advice of Stephen Covey, “start with the end in sight.”¹ Any quality program, continuous improvement program, whatever you call it, is about getting better as an organization. If the world were static, and the constraints and expectations did not change, then once we achieved perfection we could stop changing. But the world is not that way. What is the goal in this kind of initiative? The goal is to improve the processes in the organization. The specific objectives may be narrow, as in the improvement in the flow of a process limited to two or three individuals. The objectives and goals may be more transformational, as in a reengineering project in an organization that involves complex integration of processes and policy. An example might be a contract processing reengineering project that requires consideration of transactional efficiency, capabilities of stakeholders, the relative advantages of centralization and decentralization, and the affect of the process on internal controls.

The *SCOPEVision* approach focuses on observation and viewing. At its core is the dictionary definition of scope: an “instrument for viewing and observation.” “At every step we’ve noted the need for managers to learn to see: to see the value stream, to see the flow of value. The final form of seeing is to bring perfection into clear view so the objective of improvement is visible and real to the whole enterprise.”²

Quality management is defined by the International Organization for Standardization (ISO) as “what the organization does to ensure that its products or services satisfy the customer's quality requirements and comply with any regulations applicable to those products or services.” The approaches to quality management are commonly defined by various models, such as total quality management, zero defects programs, and more recently Lean Manufacturing and Six Sigma. We’ll cover those models, but do not get too tied up in the specific steps of any one. The important thing is just to begin. And you begin by connecting to the external and internal customers or stakeholders. In the *SCOPEVision* tool chest, that process is called periSCOPE. But customer centricity or focus exists in all the models.

The *SCOPEVision* Tool Chest

The approaches of other quality models are selectively used throughout. The basic premise of the *SCOPEVision tool chest* is that organizational improvement begins with observation and viewing. The imagery of different scopes is used to describe the essential tools that exist for seeing the organizational processes. SCOPE is a tool for analyzing processes and discovering disconnects between the process “as is” and the way it “should be” so employees and stakeholders can engage to improve it. The most important scope step is the periSCOPE, because that inquiry provides the impetus to get started. The radarSCOPE provides a visible way to keep the kaleidoSCOPE team’s efforts in the spotlight -- for leadership, customers, and stakeholders. The one scope that departs from the imagery of observation – gyroSCOPE – is the part of the process that involves actual decision about and implementation of an improvement approach. That is the last step in



any improvement process and follows the analysis phase. The microSCOPE, teleSCOPE and oscilloSCOPE detailed examination and analysis precede the implementation phase that SCOPE uses the gyroSCOPE to describe. The relative latecomer to the SCOPE tool chest, the horoSCOPE, reminds us of the importance of knowledge and training to sustaining any improvement effort.

The *SCOPEVision* tools are intended to get you started. They highlight specific considerations for each phase of the continuous improvement process. Starting with the *SCOPEVision Agenda*, the tools are intended to get the improvement effort started. They focus on questions and moving the process forward towards action. Each of the tools has topics and considerations/questions that might be used during meetings.

The tools were developed with this goal, “what does a team consider or talk about or do to move an improvement project towards a successful conclusion?” Whether talking about going up periSCOPE, doing analysis, making recommendations, or implementing, what does the team do? Or to make it even simpler, what does the meeting agenda look like? Meetings are central to these processes, and the kaleidoSCOPE tool will cover meetings thoroughly.

Each of the tools is intended to be modified, although they are good starting points for most improvement projects.

What the Evolution of Quality, Improvement, and Reengineering Concepts Means to Your Organization

“In the beginning, God created organizations.’ No, this is not the way Genesis begins. Organizations came along later -- probably as a little trick God played on us.”³ Organizations do not exist naturally. They are formed in order to make individual contribution more effective. Especially in a complex world, the demands for results (called “outputs” in a process) exceed the individual ability to satisfy them. In the middle ages, artisans could transform material into products with the help of apprentices. As the industrial age evolved, consumers became more demanding. As companies competed with one another in better satisfying consumer demands, more ways were found to organize in order to better leverage individual contribution. And value became part of the equation. Not only did individuals demand more complexity, they wanted value. They wanted lower cost.

Assembly lines began to raise the management of organizations to a science. Manufacturing became the world’s most complex process, where hundreds of people applied their labor to transform raw materials and assemble them in a process whose output was hoped to meet expectations for an extended period of time. Manufacturing organizations then became layered by process upon process as:

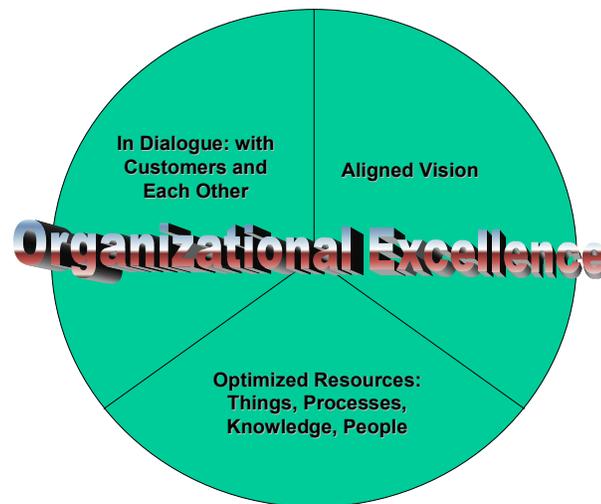
- Professional service personnel (engineers) designed systems for transforming the materials economically into end products that consumers would purchase.
- Other engineers designed the manufacturing processes to handle the materials and integrate the labor on the factory floor.
- Materials were stored in inventories by personnel trained in stores management and, later, by the suppliers themselves.

- Skilled workers operated the tools and equipment, and performed other assembly steps on the factory floor.
- Materials, machines, and component parts were purchased by the organization -- requiring that employees be trained in business relationships related to procurement.
- Quality professionals inspected and rejected defective parts.
- Later, information technology professionals began to use a new technology, computers, to further automate information storage and dissemination and repetitive tasks.
- Organizations had training departments to conduct or manage the training required to make all these employees successful.

As industry became more scientific, so did government. Bureaucracy was a benign creation in the nineteenth century that had a laudable purpose. Being a bureaucrat was a good thing then. It eliminated the spoils system, provided a level of consistency to government, and was designed to drive patronage out of the system. The processes in government organizations likewise involved lawyers, accountants, procurement professionals, architects and engineers, managers, analysts, law enforcement specialists, military men and women, and a host of other kinds of employees. But governments differ from non-service industries in the absence of capital (materials) as a significant input in government processes. Further, government in general does not have the profit measurement as a key measure of its process performance. Cost is measured, but using competitive process to evaluate merit, and relating costs to the value of benefits, is more difficult in government. In any event, government shares with industry the challenge of increasing complexity and the need for collaboration between many individuals in organizations.

What distinguishes a good organization from one that is not highly performing? Most management theories advocate looking three places to see if an organization is highly performing. Look for evidence of each of the following:

- Does the organization have a vision that permeates the organization at all levels?
- Does the organization commit itself to acquiring, developing, and improving its resources – including its people and processes?
- Is the organization in dialogue – leaders, mid-managers, employees, customers?



Watch the coffee room or water fountain. Are people actively discussing organizational issues? Look for the conference room schedule. How full is it? Better yet, sit in a couple of meetings. Is there meeting discipline? Is everyone contributing? Even better yet, go to one of the people at the water cooler or in the coffee room and ask, "I'm looking for your mission statement. Do you off the top of your head know what it is? Where can I find it?"

Continuous improvement is part of the vision. Having worked in public service for over 30 years, I am convinced that organizations want to get better. However, in the heat of the battle when more needs to get done with less, finding the time to engage in continuous improvement is a challenge. The only marginally successful improvement initiatives I encountered were those in which senior management spurred initiation of quality programs and created the initial motivation. But employees, supervisors, and managers were expected to implement the quality model, and the efforts rarely sustained the momentum with which they started. A basic premise of *SCOPEVision* is that the process of improvement and innovation must be disciplined. It must also be fun, and filled with visualizations that make the improvement processes come alive.

A Brief History of the Quality Movement

The SCOPE model uses what has been developed before. Most of the quality models were developed in a manufacturing environment, which makes reading about the models somewhat challenging. While all of the tools have at least indirect relevance to governments, nonprofits, service organizations, and internal service functions, the "how to" of many of the implementation tools – statistical ones in particular – is fuzzy. *SCOPEVision* draws on those other tools where they are particularly relevant to governments, nonprofit organizations, and internal service functions that do not have profit or revenue as a visible measure of performance. A basic understanding of the genesis of the various quality models – and even the known criticisms – is useful. Understanding a little about these quality models, their timing, and the differences

between them may be helpful as you attempt to assess the utility of other resources and books about this subject.

1980: *Quality is Free and Zero Defects*

Quality has not always been part of the discussion of organizational effectiveness. Curiously, while universities had quality control and industrial engineering programs, quality was a late bloomer in publications generally available to the public. One of the first that promoted an approach called Zero Defects, was Philip Crosby's 1980 book, *Quality is Free*. That book started some fundamental rethinking about achieving excellence in organizations. The two major contributions in that work were the focus on management participation and the overall organizational responsibility for quality. At that time, quality was something that inspectors did during the manufacturing process at the end. They inspected and rejected defective products. Crosby brought the concept of "do it right the first time" to the forefront. The book remains historically significant, even though the later Deming books probably started the popular quality revolution and brought more technical discipline to quality programs.

A key contribution of Crosby's book was its definition of quality. Quality does not have anything to do with "goodness." It simply means that the product or service meets the "requirement." While Crosby clarified that vital definition, he did not add much clarity to the process of deciding what the requirement is. For governments and service industries, that is a critical first step. A key premise of the *SCOPEVision* and other quality models is that the customer or stakeholder – the person internally or externally who the organization serves – should be the touchstone for defining the requirement.

1982: Deming's *Out of the Crisis*

When *Quality is Free* was published, W. Edwards Deming was about to become widely known in the United States. Dr. Deming was a statistician who had served in the Bureau of the Census. After World War II, he worked with Japanese industry in applying statistical control concepts. By the 1960s, the Japanese – who revered Dr. Deming – had developed a prestigious national award, called the Deming Prize, that was given to companies who had demonstrated adherence to his principles. However, Dr. Deming remained a relative unknown in the United States until a 1980 NBC special awakened interest in Dr. Deming. Dr. Deming's books became classics in quality literature. The famous Deming "Fourteen Points" came from his 1982 book, *Out of the Crisis*.

His concepts are credited with having spawned the Total Quality Management (TQM) movement in the United States. The principles were popularized by a book (still in publication) written by a journalist, Mary Walton, who spent time with Dr. Deming and pierced some of the esoteric nature of Dr. Deming's prose. She humanized the man and published a readable version of the Deming principles that made it into the mainstream press.⁴

The public enthusiasm that existed with respect to TQM waned somewhat, although the principles still are valid. The American Society for Quality on its Web site⁵ still has many references to TQM. The concept of "continuous quality improvement" – a bedrock of Japanese quality methods – was introduced in the United States with Dr.

Deming's concepts. His focus on management integration, criticism of United States view of quality as a post-production function, and emphasis on building quality into processes were the key contributions of his model. True, he also highlighted understanding of statistical variation of being woefully inadequate, although in service industries and government the importance of statistical methods was and remains a difficult sell.

Criticism of Dr. Deming's model centered on the absence of practical guidance about how to translate the quality principles into executable steps for achieving continuous improvement. That void was filled by other publications later. Most notably, ASQ promotes a practical toolkit, *The Quality Toolbox*, that has step-by-step instructions for using quality techniques like process mapping.⁶

The Malcolm Baldrige National Quality Award

The Malcolm Baldrige National Quality Award was created by Public Law 100-107, the *Malcolm Baldrige National Quality Improvement Act*, that was signed into law on August 20, 1987. The Award Program led to the creation of a new public-private partnership. Principal support for the program comes from the Foundation for the Malcolm Baldrige National Quality Award, established in 1988. The Award is named for Malcolm Baldrige, who served as Secretary of Commerce from 1981 until his tragic death in a rodeo accident in 1987. His managerial excellence contributed to long-term improvement in efficiency and effectiveness of government.⁷ Awards are made in manufacturing, services, health care, and education each year. In 2004, criteria for nonprofit organizations were added, although there still is no specific set of criteria for government.

The Award and its criteria represent a comprehensive assessment tool for evaluating organizational excellence. The Award is administered by ASQ under contract to the National Institute of Standards and Technology, Department of Commerce. The seven criteria – leadership, strategic planning, customer and market focus, deployment of measurement, analysis and knowledge management, human resources focus, process management, and organizational performance results – are widely recognized as fundamental indicators of organizational excellence. There are very few organizations who receive the MBNQA each year. State organizations have sprung up around the MBNQA program and service as an available source of quality resources for all organizations committed to performance excellence.⁸

Later 1980s: Six Sigma

In the meantime, in Motorola in the 1980s, another quality “revolution” was underway.⁹ A Motorola industrial engineer introduced a structure for quality improvement that became known as Six Sigma. *Sigma* is the Greek character used in statistics to refer to “standard deviation.” Everyone is familiar with a bell curve. Well, a standard bell curve has data that are equally distributed on both sides of the average, or mean. The *Sigma* or standard deviation refers to the distance above and below the mean that 68% of the data would fall within. That is “one Sigma.” Six Sigma refers to much greater “perfection,” in the quality world it means no more than 3.4 defects per million.

Six Sigma is deeply steeped in statistics and has been referred to as TQM “on steroids.” The final step in Six Sigma implementation, Control, refers to the use of statistical control to monitor the process. Historical performance and “run” data is collected and analysis performed to find the amount of variance that represents “statistical control.” For a process “in control,” when an observation goes beyond the statistical control limits, the process is analyzed to determine what “special cause” for variation may exist. *SCOPEVision* uses oscilloSCOPE to refer to the process of quantitative analysis – normally using less sophisticated analysis like averages and evaluating distribution.

Six Sigma has a well-defined infrastructure. Its founder had liked the martial arts and borrowed from their hierarchical structure in defining team roles. The “master black belts,” “black belts” and “green belts” are roles that signify certain level of training and experience, and they serve the leadership and expert roles on the self improvement teams.

The Six Sigma implementations are the most expensive. But there is a healthy consultant corps and suite of training programs to assist in developing this kind of program. From a public or nonprofit perspective, the cost of fulfilling implementing a program with the rigor of a General Electric, Motorola, may be prohibitive.

Lean Manufacturing

“Lean Production” refers to the Toyota Production System, first described for a public audience in a book, *The Machine that Changed the World*, that arose out of MIT’s five year study on the future of the automobile and the description of differences in Western and Japanese automobile production and sales.¹⁰ While the Six Sigma retained a focus on quality and statistical control, Lean emphasized process flow, waste (*muda*), and time. Despite the heavy manufacturing emphasis, in some ways Lean may be just as relevant to service industries, governments, nonprofits, and internal service functions. Although revenue is not a cornerstone for evaluating their organizational performance, time often is an important driver in terms of customer and stakeholder satisfaction. And the rigorous way in which value, waste and time are treated in Lean provides a good roadmap for service organizations. Those concepts are adopted in microSCOPE’s use of process mapping and value analysis.

Machine introduced the Japanese *kaizen* (continuous improvement) session, where stakeholders would isolate themselves up for days to solve particularly thorny problems. In many cases, a solution would be identified and implemented. Then the team would go back and *kaizen* again . . . and again . . . and again. Lean and its history serves to keep organizations grounded in the understanding that these models are not installed – as Deming warned – they are a way of organizational life that is more like a journey than a destination.

Early 1990s: The Reinventing Government Movement and NPR

In 1993, David Osborne and Ted Gaebler’s book, *Reinventing Government*, launched a fundamental reexamination of processes in government. Their book, and the series of books that followed, did not create a new continuous improvement model. Yet, the books remain powerful prescriptions for government change. They signaled more emphasis on performance measures, competition among government service

providers, and use of performance-based contracting and other measures to improve government service deliveries. With the election of President Clinton, Vice President Al Gore spearheaded at the national level the National Performance Review (NPR). NPR was aimed at reducing government regulations and reducing bureaucracy. With the change of administrations, NPR largely lapsed into the historical archives. The Bush Administration initiative focuses on performance-based measurement and contracting. While the *Reinventing Government* series of books are prescriptive in nature – that is, they build a case for change – they also highlight important public policy considerations that gyroSCOPE embraces during decision making and implementation.

Early 1990s: The Theory of Constraints

Eliyahu Goldratt’s book, *The Goal*, defied all convention. It also reinvigorated deductive reasoning and “thinking.” *The Goal* and the sequels to the Goal were written as business “novels.” In fact, the Denver Public Library initially shelved *It’s Not Easy* in the fiction section. The novels fictionalize life in a factory and the story of improvement: increasing throughput, reducing inventory, and decreasing operations costs. The books outline an approach to problem solving that has been developed and refined over the years. Identify the constraint. Exploit the constraint. Subordinate all else to exploiting the constraint. Then elevate the constraint. The “clouds” of deductive reasoning evaporate intuitively once conflicting objectives are apparently uncovered. The books elevate the thinking process once again to a level on a par with measurement. The emphasis on quantitative analysis sometimes obscures the fact that most of a team’s effort is devoted to applying their judgment (based on knowledge and experience) to the definition of solutions, identifying root causes, choosing from among a myriad of potential solutions, and evaluating constraints and undesirable effects.

Early 1990s: Business Process Reengineering

Michael Hammer and James Champy originally published *Reengineering the Corporation* in 1993. It was not a “how to” book of organizational improvement. Instead, it advocated dramatic, swift transformational change in business organizations: starting over, not tinkering with processes. Information technology was a key player in this change, and the authors directly contrasted their approach to the quality movements (like Total Quality Management) of the 1980s. They contrasted traditional quality programs as activity working within an organization’s basic framework, doing what companies already do, but better. The reengineering approach was breakthrough, not by enhancing existing processes, but by replacing them with entirely new ones.¹¹ As the authors later wrote in their 2003 paperback release of the book, 50-70% of reengineering efforts never achieved their expected objectives. Much has been written about the reasons, and some have suggested that too little attention was paid to the ability of an organization to sustain the scope of change that went with these transformational reengineering programs.

SCOPEVision sees reengineering as another manifestation of process improvement, but with a broader scope and more ambitious objective. The scope of the improvement program obviously drives the type of team selected, resources and training required, as well as the role of leadership in the process and in managing the attendant change.

Late 1990s: Lean Six Sigma

Late in the 1990s, consultants began asking, “what does Six Sigma have that Lean does not, and visa versa?” This has led to a combination of Six Sigma and Lean that is not without its controversy. As Michael George explains in his book, *Lean Six Sigma For Services*, Six Sigma can benefit from Lean’s focus on value, flow, waste, and time. Lean can benefit from Six Sigma’s discipline, structure, and emphasis on measurement of performance. There was a spirited debate among quality professionals about whether the two models should be integrated. Even traditional books on Six Sigma now have incorporated Lean concepts of value and waste into the process mapping steps of Six Sigma.

Fort Wayne, Indiana, implemented an improvement program based on Lean Six Sigma. *SCOPEVision’s* microSCOPE tool borrows heavily from the selective judgments in Lean Six Sigma books. Among the quality model literature now available, those tools have the most direct relevance to public and nonprofit organizations.

ISO 9000:2000 – It’s Genesis and Evolution

Quality Management made its way into international standards as well. A “standard” is a written specification that is commonly agreed upon in an industry as the preferred means of accomplishing some work, manufacturing a product, or testing acceptability or performance of products and services. Military specifications (or “mil specs”) in the United States are commonly used by the Department of Defense to define product specifications. After World War II, “quality control” specifications were developed and added in contracts for complex military hardware. MIL-Q-9858 was a Quality Assurance specification that not only governed United State production; it also was used as a basis for quality in Europe via its participation in the North Atlantic Treaty Organization (NATO).

MIL-Q-9858, Quality Program Requirements, the more comprehensive of two quality assurance programs specified for DOD products,¹² was used when the technical requirements of the contract required more control of work operations and addressed other factors, like organization, planning, work instructions, and advanced metrology. The system was specified for “complex” and “critical” items. Complex items were those having quality characteristics for which contract conformance must progressively be established through precise measurements, tests and controls performed during purchasing, manufacturing, assembly. Critical items were items in which failure of the item could injure personnel or jeopardize a military mission. This program was required to be documented. It expanded the notion of quality throughout all areas of contract performance: from design through installation of projects. It had a section titled “Quality Program Management” that addressed organizational issues and required documented authority and responsibility of those in charge of contractor quality control. The specification added requirements for management reviews, documented work instructions for employees, change management procedures, and more comprehensive subcontractor controls.

There were parallel developments internationally. The British Standards Institute and Defense Ministry published analogous quality program standards. Canada in 1975 became the first nation to publish quality system standards for commercial non-military

use. In 1982, a British white paper on standards, quality, and international competitiveness launched “certification” to quality standards as an objective among British industry. According to David Hoyle’s account in *ISO 9000 Quality Systems Handbook*, in the mid-1980s the Britain Standards Institute encouraged the International Organization of Standardization (ISO) – a worldwide federation of national standards bodies -- to develop an international standard for quality systems. Over 25 countries were involved in the first development, and it bore all the hallmarks of the military specifications. ISO 9000 has tangible similarities to MIL-Q-9858.

ISO 9000 was revised in 1994 and underwent significant revisions in 2000. ISO 9000’s family of standards includes ISO 9000 (general principles and definitions), ISO 9001 (specified requirement for a quality management system), and ISO 9004 (guidelines for assessing and improving the effectiveness and efficiency of the system). The ISO standard today is clearly “management” in scope. It departs from the previous versions in attempting to eliminate “quality” as a separate, bolted-on management structure in an organization. It also migrates away from the procedural focus in the previous versions. A whole consulting industry had grown up around the ISO 9000 certification process, driven by the belief that ISO 9000 was something a company “obtained.”

“Believing that ISO 9000 was only about ‘documenting what you do,’ organizations set to work on responding to the requirements of the standard as a list of activities to be carried out. . . . In some organizations, managers were assigned responsibility for meeting the requirements of a particular element of the standard even though there was not only no requirement to do so, but also no business benefit from doing so. Consultants were engaged to write the documents and apart from some new procedures governing internal audits, management review and document control, very little changed. There was a lot of money thrown at these projects in the quest to gain certification. However, nothing changed, not the processed, not the people, not the culture.”¹³

The new version of ISO 9000 is intended at least to move back towards the concept that quality management concepts are endemic to a successful organization’s management process. There is no separate “quality management program” independent of the overall management organization that exists. Unfortunately, the new standard still retains the term “quality management program,” a vestige of the past. The first section of ISO 9000 establishes the breadth of its scope: “managing an organization encompasses quality management amongst other management disciplines.” And ISO 9000’s eight quality management principles are aligned very closely with recent developments organization improvement and quality theory. Those principles line up nicely with the way *SCOPEVision* views improvement: customer focus, leadership, involvement of people, use of process, a systems approach to management, continual improvement, factual decision making, and mutually beneficial supplier relationships.

ISO 9000 was intended to be a commercial standard for governing the contractual relationships between suppliers and purchasing organizations. Some government agencies have pursued ISO 9000 certification, although it is unclear why the expense of certification was warranted. Certification is not a necessary part of the standard; compliance with the standard can stand independent of any third party certification that

the standard has been met. Yet, the tenfold increase in certifications between 1992 and 1997 (after the 1994 revision) attests to the value on certification placed by companies as a result of the expectations of their customers.

Indeed, in the 1990s, the United State Department of Defense abandoned maintenance of MIL-Q-9858, even though it is authorized for use by DOD components where the ISO 9000 family of standards is not adequate in specifying the stringent quality standards. Indeed, some of the criticism of ISO 9000 relates to the flexibility it provides. The automobile industry has developed tailored quality assurance standards for supplier manufacturing, and even the aviation industry now has developed a lower tier quality standard for aviation products, just as MIL-I-45205 was a less stringent standard for defense manufacturing.¹⁴ The software industry has developed its own quality model with CMMI (Capability Maturity Model Integration).¹⁵

ISO 9000 and its derivatives remain the most structured recitation of quality principles internationally. Government agencies in some cases are pursuing it. One of the problems encountered when talking about quality is creating the bridge between principles that everyone agrees with and operational steps that can achieve the objectives of quality management. *SCOPEVision* has not been “mapped” to ISO 9000 certification, but *SCOPEVision* incorporates the lexicon and concepts and may be a useful way to help satisfy the training, awareness, competence and continual improvements requirements necessary for a sound quality program.¹⁶

Improvement is Nonlinear and an Iterative Process

Describing the steps in this or any other quality model makes the process appear “linear.” That is, one step is completed before another is begun. You will find yourself looking at later steps in the process as you plan, and looking back at earlier steps as you proceed with a project. For example, the decision-making criteria in gyroSCOPE are important in deciding what the scope of the project should be. Further, the composition of the team is dependent on the project scope, the importance of statistical and financial analysis to the decision, and the policy dimensions that may exist in the solution. What you learn when you discuss the decision-criteria may affect what you look at for data in the oscilloSCOPE analysis or what benchmarking you look at (or even do) during teleSCOPE. And what you learn in those later stages may require that you revisit the scope and team composition you thought you had settled on. As a result, the team will be looking forward and backward at process steps at various times, both as a precursor to planning and at later stages of the project.

These improvement processes are also best described as “iterative,” defined to mean “relating to a replication of a cycle, done over and over again.” For example, you may have thought your periSCOPE was used effectively, only to revisit the customer input phases with a more comprehensive survey after assembling the kaleidoSCOPE team. The cost of data collection, or the policies inherent in making a decision, may later affect the radarSCOPE phase and cause a reevaluation of project priorities. And the definition of the problem or opportunity is subject to continual revision as the project proceeds. Consequently, be prepared to revisit phases of the improvement project over and over again.

The Multiple “Dimensions” of Improvement

Through this discussion, you will see varying “dimensions.” One dimension is the actual process of taking an opportunity or problem, disassembling it with analysis, deciding on a solution, and then implementing it. A second dimension – already touched on in this introduction with the description of the reengineering movement – involves more fundamental restructuring of an organization to move towards dramatic innovation, a concept that Joseph Juran called “breakthrough.” An initiative that is being done as a breakthrough project will require involvement of leaders and other cross-functional team members differently than more straight forward improvement initiatives. Then, there is yet a third dimension, one that the division’s SCOPE implementation has started to move towards. It involves the development of a management system of continual evaluation and improvement. A continuous improvement approach is sustained, has different resource and management challenges, and gets closer to the ISO 9000 vision of a quality management system.

The core objective of *SCOPEVision* is to provide an end-to-end guide for improvement teams, with a lot of borrowing from other models and materials that give information about specific steps in the process. However, the effect of these different dimensions will be discussed. The kaleidoSCOPE chapter on teams, for example, highlights the different team requirements – including a different magnitude of leader involvement -- when a reengineering project is undertaken. A radarSCOPE looks much more like a project management control tool when a single project is undertaken; the DFP radarSCOPE tackles management of multiple improvement initiatives. Similarly, the process of decision-making, and the role of policy, changes with the dimension. The last chapter on CinemaScope® is relevant more to sustained continual improvement efforts than individual improvement projects.

The Process of Improvement

Each of the models – Six Sigma, TQM, Lean -- defines their improvement process differently. However, they all represent an elaboration on the original PDCA (plan, do, check, act) described by Walter A. Shewhart (who worked for Western Electric in the 1920s) in his book, *Statistical Method From the Viewpoint of Quality Control*. The concept was further popularized when W. Edwards Deming introduced the PDCA in Japan after World War II.

The basic improvement process begins with planning: recognizing the need for improvement, assembling the team, adopting a project management approach. The “doing” and “checking” phases are the analytical phase where the improvement plan is carried out, assessed, and checked or analyzed. Based on those results, the planning phase may be revisited. Eventually, the improvement solutions are acted upon, or implemented.

The DMAIC steps of Six Sigma expand on the model. The opportunities are (d)efined. The improvement process follows with (m)easurement and (a)nalysis of proposed solutions. After analysis, the (i)mprovements are implemented. The (c)ontrol phase follows. Six Sigma “control” is statistical process control, giving Six Sigma the reputation of being more statistically oriented—a likely by-product of its manufacturing

roots. The reengineering or Six Sigma design model is analogous, although the steps are somewhat different owing to the different scope of the projects.

In any event, the improvement process “rudder” is the same: ask internal and external customers to identify how the organizational “should be” differs significantly from the “as is.” Ask customers to recommend priorities for your improvement projects.

Some improvement projects may not employ all of the tools with the same amount of rigor. Some projects start with problems that are limited in scope; solutions may be obvious once stakeholders and customers apply their intuition and experience in discussing the issues. But on some level – however informal – all improvement projects have the following steps in common.

Identifying the Opportunity

There has to be some imperative for looking at processes. Notice the word “problem” was not used as the title of this subsection. We use the more positive concept of “opportunity.” Problems give us opportunities to solve them, even though improvement projects commonly start because a customer or stakeholder had identified a problem with a current process or performance. The periSCOPE tool is used not only in reacting to these problems, but actively seeking out the air in the processes and tired policies by engaging the customers.

We use the submarine metaphor to describe the mission in the Division of Finance and Procurement. We establish policies for financial management. We, and the internal services operations that we work with in state agencies and institutions, operate below the surface. The division has an important mission, and how it performs its work can significantly affect the success or failure of the overall enterprise. Employees in the division realize that day-to-day they get so engaged with issues, they sometimes don’t take the time to step back and explore with customers the essential questions: how do they see the division’s mission, what do they think the division can do to improve, what one thing could the division do (or stop doing) to help them perform better? PeriSCOPE provides tools to connect with the stakeholders and customers.

The *Six Sigma* model uses “definition” as the shorthand for this part of the process, engaging customers systematically in determining what value exist in the processes, and how that value can be optimized and waste eliminated. Going up periSCOPE can range from an informal process to a facilitated process to inform customers of the issues, identity a provisional approach to the problem, and motivate them to participate. PeriSCOPE tools can include surveys, one-on-one informal visits, focus groups of customers and other stakeholders, and evaluation of on-going feedback that occurs in the organization. That way we get a picture of whether the “as is” state of processes needs reexamination. There is no substitute for face-to-face meetings with customers. Go to the customer’s place of business, and ask them the key questions -- things like, “what one thing should I do or stop doing to help you succeed?”

For public organizations, regulatory and statutory change is a possible outcome. The division, for example, influences statutory change in public finance, procurement, and construction. We have rule-making responsibility in all state real estate, procurement, financial reporting and internal controls activities. Public entities have

internal controls, and those processes may require reevaluation. For example, contracting is a process challenge for governments and any large organization in terms of time and potential inefficiency. The division has used periSCOPE in the state's contracting improvement project – starting with a survey and ending with development of better training.

In general, surface periodically and let customers know when you do. This involves a systematic, continual reevaluation of policies and involving customers in setting priorities and problem solving. PeriSCOPE gives you the tools to connect to the customers. It also highlights the importance of engaging other stakeholders in the process.

Assembling the Team

While the *SCOPEVision* principles may help with personal improvement projects, realistically every organizational improvement project will require a team. KaleidoSCOPE adopts the essential elements of team dynamics and gets teams into the literature if they want to know more. It maps the process of aligning team capabilities with project requirements.

Assemble a team that includes customers – if you can -- and stakeholders. Include people with technical knowledge about the process, creative and collaborative agility, and essential skills in project management and financial and statistical analysis.

A customer is used to signify that group of persons who directly benefit from or are affected by the process. Stakeholders technically are those other persons – often internal – who may not directly consume the service or other process output, but who are critical to implementation of any improvement process. Information technology professionals, for example, may not be “consumers” of the accounting functions performed in the division, but they are key players when it comes to changes to business rules that may require underlying changes to the IT systems supporting them. The customers define the value steps in the division's processes. Stakeholders must be engaged in change management and in evaluating potential solutions. Both may have to be represented on the kaleidoSCOPE team.

Obviously, functional experts need to be involved in the improvement projects. However, each team member also has to have the ability to work with others. Brainstorming and normative group techniques are useful tools in identifying solutions, and properly used they insure that ideas are not criticized too early. At the same time, you do not want a team to fall into the “groupthink” mode, where they become so aligned that they are not constructively critical about solutions that appear to be good ones at first glance.

Teams will largely be responsible for doing this self-analysis about whether they have the right membership. And while leadership may initiate team formation, the teams themselves have to develop the team norms to work within. They must also determine whether the team possesses the basic financial, project management, and technical literacy to be successful. If they do not, they have to enlist members who can. If they cannot find willing participants, they need to up-channel the problem to leadership and get help.

The team will have to have essential knowledge, skills, and abilities in the disciplines it needs to succeed. That may include financial analysis skills, for example. Ability individually to manage one's own time is important in any work environment, but the project may require someone with more extensive project management experience: the ability to manage a schedule with many "players" involved. Similarly, the technical skills are important to a team. Basic skills in word processing and spreadsheets are becoming a test of technical literacy for most office functions, and continuous improvement teams in particular. The ability to put together effective presentations – such as PowerPoint -- may be important to selling team recommendations.

There typically will be an initial meeting where the team will begin "forming, storming, and norming." Essentially, the team has to spend time with one another to build cohesiveness. Bookstores are replete with team-building exercises that can be used for the first meeting. At this meeting, get to know one another and informally talk about the reason for the team.

At the next meeting, establish group norms and identify the team roles. The essential questions a team must ask are: do we have the expertise and the resources? Who else should be on the team? When do we start worrying about getting to big? How will we relate as a team? What is important to us, things like punctuality, meeting deadlines, and the like?

Then at the third meeting, with the project sponsor: write the team's charter; define the roles of leadership, the process owners, and the team members; clarify the scope of the improvement effort; and develop the plan for communicating with stakeholders. Use existing liaison groups with stakeholder employees – the division has statewide liaison groups in procurement and accounting, for example – to communicate progress. Decide with the project sponsor how the team should relate to leadership. After all, leadership is a stakeholder also, and they should be part of the communications plan.

The most critical step – delay it until you actually get to know each other – is to agree on a set of norms for the group. Put it on the agenda, talk about them, agree on them, and write them down. Teams inherently have conflicts. You have to agree informally on the norms that will govern. For some, for example, tardiness is an issue. They get irritated when people don't show up when they are asked to. This needs to be discussed, and team needs to know the hot buttons for everyone on the team. The team needs to tackle this and other similar foibles that team members may have, and write down the expectations. Then discuss how to handle conflict in the team. Many teams use the model of "academic freedom." What happens in the team discussions stays in the room. Some teams agree to initially talk one-on-one about frustrations. If they can't work it out, they bring it to the team. Talk about these things as the team forms, storms, and norms.

Pick a small project to pilot as a team. Maybe keep it simple, such as, "identify what should be the first low risk, low cost, high return periSCOPE assessment." Perhaps there is a simple form that has caused some frustration in the organization. A limited scope project is an opportunity for the team to apply its group normative skills to brainstorm ideas about the initial assessment, whether the right stakeholders were

involved, who else to talk to, etc. At this time, a more comprehensive “opportunity summary” may be used to pulse the customers, get them energized, and move to the next level in the project. This modest first normative group exercise will lay the foundation for what follows.

The last stop on the initial kaleidoSCOPE phase of the *SCOPEVision* model will be at the manager’s or organizational leader’s office to brief her on the progress, membership of the team, capabilities of the team, and key resource issues.

Normally, the group will revisit the initial periSCOPE work in assessing opportunities for improvement. This is the point at which the final touches will be put on the formal opportunity summary if one is done. The team of experts can best decide how to market the opportunity in a way that engages the stakeholders. They will know what supporting and blocking forces may be involved in finding possible solutions.

KaleidoSCOPE supports the team formation. Then beginning the project will require essential elements of project management using the radarSCOPE.

Managing the Process

The radarSCOPE is the visual metaphor for monitoring project success. This is the primary way that the division team communicates project progress with stakeholders, customers, and leadership. It is the high level “control” mechanism as well.

The radarSCOPE serves three essential functions. First, it assists in managing the project. Second, it continually connects the project to the stakeholders and customers. Third, it is a way to celebrate victories, the “missions accomplished. In the division’s implementation, each of the primary, secondary, and possible targets is described on the Web page. Each target includes a description, contract information for the lead team member, the current status, and the time for the completion of the next action.

Most improvement projects do not involve only one process or a discrete problem. Consequently, one of the biggest challenges faced by the team and leadership is in setting priorities among competing projects. Project selection is a key theme in all quality models. Even a single team assembled to look at a single project likely will uncover different dimensions of a problem that need solutions. The radarSCOPE tool is a way to work through priorities. The radarSCOPE tool uses primary, secondary, and possible targets as its three priorities. Customers – and judgments about project costs weighted against the potential value to the operation -- are critical to setting the right priorities. The radarSCOPE serves as the project management tool.

Project management essentially requires merging the right resources and people at the right time to achieve a specific objective that is time-based. *SCOPEVision* or any other continuous improvement project is a process that requires management. To connect the vision of continuous improvement to the reality of adopted and sustained improvements requires discipline. Your process to be successful must include task definition, accountability in terms of who is responsible, a time for completion, and a plan for follow-up and monitoring. Someone needs to be watching the “dependencies” in terms of schedule, and assessing how delays may affect the completion. Generally, these improvement initiatives do not involve “technical risk” in the traditional sense, but “financial risk” may be an issue if the project is large and requires significant

commitment of resources. RadarSCOPE gives you essential tools for managing projects of this size. Teams and team meetings tend to be central to these initiatives, so the *SCOPEVision* Agenda is a good starting point for implementing sound project management techniques.

RadarSCOPE's second role is overall project communication. DFP found that the division did not have the luxury of being "linear." That is, the division was not able to work on just one project at a time. The management team had a series of improvement projects proceeding at any time. There are more sophisticated models for managing this kind of effort, but the division found that SCOPE provided an adequate way to juggle several balls in the air at once.

Missions Accomplished. Finding a visual way to celebrate progress is a challenge. In a continuous improvement program, momentum can easily be lost. RadarSCOPE helps you showcase your wins, but it has another benefit as well. If your customers do not agree that you have accomplished a mission, they will let you know. Incorporate the concept of "post attack" reconnaissance in your project planning, to revisit apparent project successes to see if they are being sustained and whether the problems were indeed solved. Six Sigma calls this step the "Control" phase.

RadarSCOPE is a visualization tool that everyone can identify with. How often have you heard someone say, "it's not on my radar screen yet"? When the DFP division director visited other departments or institutions for customer one-on-ones, the radarSCOPE was used during the meetings. RadarSCOPE is an effective, easy way to show customers what you are working on and solicit their comments about improvements they recommend.

These three tools – periSCOPE, kaleidoSCOPE, and radarSCOPE -- make up the preliminary planning part of the project. After connecting with the customer, assembling the team, and developing the basic project management structure with radarSCOPE, the team will be ready to dive into the heart of the analysis stage of any continuous improvement project.

Defining and Analyzing the Problem

SCOPEVision is no different than the other models in putting problem definition, analysis, and measurement at its epicenter. No matter how modest the improvement effort, or complex when cross-functional teams are involved, the process is essentially an application of the scientific method. Opportunities (or problems) are identified and defined, potential solutions tested and adjusted. Reaching a consensus on a clear definition is a crucial first step. Typically, as the process of analysis unfolds, the problem may take on a different character and require revision. Problem definition and analysis then crosses a number of tools: microSCOPE, teleSCOPE, and oscilloSCOPE.

When appropriate, map the key process steps, identifying the bottlenecks, handoffs, and wasted wait-time in each step. Find out what value-added and value-enabling benefits exist at each step from a customer's standpoint. Describe the value and undesirable effects at each step. Evaluate potential benefits and costs of policies. Challenge the assumptions, analyze the underlying contradictions, find the root causes, and create solutions. Collect appropriate, relevant data where it exists. Consider the use

of pilots to assess the merits of alternatives. As you learn more through analysis, you may have to redefine the problem and scope, revise apparent solutions, and reassess. Develop a approach to process control/oversight. Create meaningful ways to measure output performance, where the advantages outweigh the costs of data collection.

Not every improvement effort requires the rigor of statistical analysis, use of control charts, and the like. Most do not in government. The Division of Finance and Procurement achieved the bulk of its successful improvement efforts without any quantifiable analysis to speak of. Policy often is the touchstone for action in government. Then analysis involves qualitative evaluation and assessment.

In most cases, though, the process has to be understood in detail. When the States of Utah and Colorado embarked on a pilot e-procurement system implementation, the vendor and states undertook essentially a disassembly of the procurement processes. Succeeding layers of the processes were “peeled away.” Causal relationships and handoffs were defined. In the state of Colorado, the contracting and procurement process is a key driver of transaction costs. Some say they drive inefficiencies. More than any other “process” in DFP, this gets the attention. Understanding the procurement process is critical.

The microSCOPE takes the improvement process apart. Whether done graphically or descriptively with words, the process is mapped. The purpose and value of each part of the process has to be understood. Typically, this involves interviews with the “owners” of those processes.

Again, many improvement processes do not require high “magnification.” In some cases, though, there may be quantifiable data to analyze. In other cases, none exists. In general, governments are challenged by not having data readily available that may assist with the analysis. In Colorado, for example, the state’s enterprise resource planning software system is late 1980s vintage. While it is adequate for financial reporting and essential budget controls, it does not have a cost allocation module that might help with activity-based costing. Further, while the procurement requisition module was adequate when it was implemented, the learning curve for users under that legacy technology is steep. Consequently, the procurement module has not been widely adopted throughout state government, and institutions of higher education are on different systems entirely.

Design of customer satisfaction surveys is enabled through the periSCOPE. David Osborne in his latest sequel to *Reengineering Government* counsels to focus less on the survey results than on the ideas that are exchanged. That has been the experience of the division. Apart from the numerical ratings, survey comments typically highlight the “waste” or other problems with processes that are controlled by the division through its policies.

The oscilloSCOPE embraces the essentials of quantitative analysis: statistics. Limited as governments and nonprofit entities have been in data collection, there are fewer opportunities to use numbers to help assess performance. SCOPE teams must have an appreciation of the key methods of measurement and quantitative analysis that are relevant to the kinds of improvement initiatives they are likely to encounter. They must be able to use the most commonly used: measurements of central tendency (like the

mean), dispersion or variation (like standard deviation), and correlation. DFP's experience with contract process improvement has spawned the use of "cycle time" analysis and statistical measures of central tendency and dispersion. Yet, data has its limitations. Critically examine the relevance of data.

Surveys are used by everyone. Surveys have to be designed and often include quantified rating scales. W. Edwards Deming in *Out of the Crisis* in fact was death on use of measurements for employee performance rating. The division has used surveying over the past two years, struggling with reliability, validity, and statistical significance of surveys. Spreadsheet functions that are commonly available – such as Microsoft Excel – can support survey analysis.

The buzz in governments is "performance measures." Industry has effectively used quantified measures for years. Is there a difference? Is there a risk of adopting meaningless measures of merit at the expense of effectiveness?

Part of the analysis step involves looking for examples external to your organization. The TeleSCOPE uses benchmarking and can identify quantitative goals that are commonly used by first-class organizations to measure performance. As important, though, they may describe a "best practice" approach to a process that can be implemented. "Steal shamelessly" in finding ideas to help the organization get better. Start with the internet. The www.google.com search engine can uncover a wealth of information. The division used benchmarks in making its internal controls policies and thresholds more progressive.

But know how other organizations may be different. Not every organization's solution can be transplanted where there are different customers, different core ideologies. There is room for zealous skepticism here. Ask why those implementations worked? What didn't work? How do those in that organization see the keys for success? How are the measurements used in that organization for decision-making?

The "twist" in teleSCOPE is looking through the "wrong" end of the telescope. When you do, the perspective changes, and you see a view that expands the peripheral vision. Periodically through the project, the team should step back and ask itself, "Are we headed in a direction with this project? Have we lost the forest for the trees?" The analytical tools get one so focused on the problem it is easy to lose the perspective of the basic objective. Look through the "wrong" end occasionally. Perspective is needed by improvement teams and their leadership. Occasionally step back, look the project from 30,000 feet, and ask, "Are we missing the big picture?"

OscilloSCOPE and TeleSCOPE provide a good foundation for critically analyzing and using numerical performance measures.

Recommending and Deciding on a Solution

The gyroSCOPE chapter has two essential elements: deciding on a solution and then implementing it.

Recommendations and Decision. GyroSCOPE emphasizes the process of decision and models for decision-making. Teams must get the criteria for decision defined early. Budget documents often show how an organization approaches decision-

Technology



The question of whether you will be on the following edge, mainstream, leading edge, or bleeding edge of technology may have more to do with the organizational gyroSCOPE than with analysis. Among the considerations of an organization's IT strategy are importance of the cost of ownership, capacity for absorbing financial and technical risk, employee capabilities to support the technology, and importance of technology as a differentiator in standing out from competitors.

making and what it sees as its strategic focus. These documents should be part of any continuous improvement program arsenal.

Who Will Decide? A related question is, “who will decide?” Often senior leadership will be making the decision. In that case, the SCOPE team will be providing recommendations. The SCOPE team must make practical recommendations to aid in decision-making.

GyroSCOPE decision-making differs fundamentally from other quality and process improvement models. First, governments and nonprofit organizations are not steeped in profit-loss analysis. Costs and expenses are relevant, course, but policy – or what Jim Collins might call core ideology -- plays a much greater role.

Governments operate in a fishbowl. Because many nonprofit organizations get their money from governments, they tend also to operate in a fishbowl, required to comply with ethical or legal requirements that may not apply to businesses. With the passage of Sarbanes-Oxley, publicly held

corporations will face more visibility into their internal operations, where things like ethics become more closely aligned with operations. Ethical codes and policy drive behavior which in turn drives process costs. SCOPE team members need an awareness of these types of considerations, ones that can constrain potential solutions. For example, you may not be able to just unplug a fraud, waste, and abuse reporting hotline if management wants to.

In governments and nonprofits, financial performance of process improvement is measured on the expense side of the equation almost entirely. Sure, there are some revenue aspects to the equation. More fee-based government services are being performed. In DFP, the Bid Information and Distribution System (BIDS), an internet based solicitation distribution system for potential bidders for state business, is supported by vendor fees. But for the rest of the division, the mission is defined by what the general assembly has statutorily required, and the goal is to reduce the costs. And much of the implementation strategy is based on policy. Members of continuous improvement teams must understand the policy underpinnings, and the kinds of questions to ask to challenge those assumptions. David Osborne and Peter Plastrik's current book, *“The Reinventor's Fieldbook*, builds on the seminal work *Reengineering Government* to provide a map of potential policy checklists. GyroSCOPE highlights public policy considerations like centralization and decentralization, internal controls, public stewardship, and individual accountability – all issues that DFP has encountered in assessing the wisdom of proposed changes.

Where does a team start in trying to assess the wisdom of options? The organization's mission and vision statement is a good beginning. The division's parent organization, the Colorado Department of Personnel & Administration, has a core ideology called the "three C's": customers, communication, and credibility. It is the glue that holds together the other divisions' guiding principles. The organization's strategic plan is a good launching point for an improvement team.

Then, consider cost. Government uses cost-benefit models or the "business case." The State of Colorado "decision item" process in budgeting is an example of a methodology commonly defined by the organization's budgeting process. Colorado's budget instructions contain a host of evaluative tools that might be of interest to improvement team members. Because budget submissions are often a deliverable, teams should consider approaching the improvement project with the "advocacy" objective of being able to write a persuasive, credible decision document that is consistent with budget submission requirements.

Ultimately the objective is to select the best alternative from among available options. Once the choice has been made, often the team will be asked to implement the improvement.

Implementing the Solution and Following Up

A successful team by this time will have already learned how to define tasks, assign responsibility, and track actions. The implementation phase requires change and risk management during project execution and implementation. Developing a communications plan, understanding program, schedule and financial risk, and applying many of the same skills the team has already used are key.

A term commonly often used in the quality literature is standardization. This is the part of the process where the solution is imprinted on the organization so it doesn't fall into its old patterns. This is the part of the process where procedures or policy are changed, often in a rewrite of rules or procedures. The objective is to achieve some consistency and sustained change that implements the improvement. There is a value to consistency: it eliminates variation in service levels and makes it easier to deal with succession or continuity challenges caused in organizations when people turn over. Done correctly, consistent policy and practice is efficient: consistency allows people to plan and forecast the future requirements. This process of continual learning is signified by the newest scope in *SCOPEVision*, the horoSCOPE. The oldest known "science," astrology, dates back to the third millennium in Mesopotamia when planets and zodiacs were observed and cataloged.

Periodically, where teams are involved in multiple efforts – as is often the case -- the team needs to circle back and reassess what it thought was a "win." One program in DFP does this periodically by setting up a meeting focused specifically on the prior "missions accomplished." The questions: Have the solutions not just been written and adopted? Have they become part of the fabric of the organization culture? Are they being followed? There is a huge gap between writing a new policy and validating its adoption. More communication and training is often needed.

Essentially the implementation phase requires a return to the planning, doing, checking, and acting phases. Implementation requires a new plan, perhaps new team members, other stakeholder involvement, more analysis, more adjustments to account for unknown developments, and a new project management plan. Ideally, the team members that proposed the solutions will be a part. They have most of the background information that can streamline the process of implementing the solutions.

Assessing Organizational Readiness

How do you know if your organization needs a quality program like SCOPE or any other? Ask. Ask the employees and ask the customers. For example, ask in a company or organization newsletter, “How many of you think your organization – however, you define the term “organization” -- has a significant problem with either “air in its processes” or bloated policies that should be fixed?” CinemaScope® is a reminder that leaders can be “distractions” and need to assess personal and organizational readiness for quality or continuous improvement programs. Does the organization as a whole need such a program?

In government, when constituent or other customer complains, you know you have a problem. But it is better to have a program that pulses the stakeholders, employees, and customers to find out what is broken and anticipate changing requirements. At least in the public sector, the call to action was sounded in 1992 with the publication of *Reinventing Government*.¹⁷ That book more than any other launched public dialogue and created new public vocabulary. Who hasn’t heard by now, “what gets measured gets done.”¹⁸ That book identified a need to connect with customers, use results-based performance assessment and budgeting, and make government more industry-like in the focus on mission. Osborne’s new book, *The Price of Government*, highlights the need for more progress. Line item budgeting, for example, is still with us.

Private companies are not immune from the bad bureaucracy that Osborne highlights. For example, while some think governments have oppressive rules and controls governing procurement and contracting, often governments are challenged by the time it takes some large companies to weave their way through their own approvals for contracts. Salespeople have been known to openly plot how to structure transactions so their legal department would not have to be in the approval loop. A little SCOPE’ing in that company might have done some good!

The focus of *SCOPEVision* is on the “diggers and fillers” among us, and this approach is not intended to be yet another prescriptive presentation about the need to act. Leaders need to be a constructive part of the process, and CinemaScope® is the *SCOPEVision* metaphor for the role of leadership.

CinemaScope® was a new camera technology owned by Twentieth Century Fox, credited with more clarity of image, more vivid colors, and bringing audiences back into the theater by making on-screen pictures wider and higher. CinemaScope® focuses on leadership – who hopefully are not – cell phones in a theater or talking on the set -- distractions to the project. Just like in the theater, distractions in a quality or continuous improvement effort can be debilitating to an organization.

CinemaScope® counsels leaders against grasping for the next “shiny thing” or flavor-of-the-month of management. TQM suffered from that. Instead, recognize and learn from the successes that already occur in the organization. Then melt the model into the organization. One of the toughest challenges is overcoming cynicism; find ways to harness healthy skepticism while avoiding corrosive cynicism. In many cases where the response to improvement initiatives is not constructive, the issue is fear of change. Leadership needs to manage the legitimate, real apprehension that exists about change. Provide employees with information that they can use to forecast and adapt to change. Make them part of the kaleidoSCOPE teams.

Leaders have the primary responsibility to provide the necessary resources for the improvement project. They must set the proper tone with an understanding of the limitations of quantitative analysis, and avoid “metric madness.” They should not significantly compromise effectiveness of performance for marginal improvements in efficiency or small reductions in cost. A change by leadership in project scope can also be a distraction, starting with the makeup of the team, who may not be as equipped for transformational changes that attend continuous improvement projects that are turned into reengineering projects having much greater scope and impact.

“Model the way” in terms of demonstrating the importance of promoting a learning environment. Be inquisitive. Use questions. Avoid declarative sentences. Use “why” and “what if” before you use the word “how”.

If improvement projects are done right, the people who are doing the heavy lifting are line employees who know what is broken and what is not. There is risk to them from these kinds of initiatives, because they may never have participated in one before. “Raining on people’s parades” is a personal problem leaders sometimes have, not because they don’t mean well. When they hear a good idea, they immediately jump in and seize the initiative. Let them improve: it was their idea! Have you ever had someone ask you a question right away that pointed out limitations or weaknesses in what you thought was a great idea?

The Leadership Challenge and other books highlight the importance of tolerating well intentioned failure. Osborne and Gaebler even quoted one leader who said that if you aren’t experiencing some failures, you aren’t effective as an organization.

Overall, CinemaScope® is a metaphor for organizational readiness and the importance of executive support. A recurring theme is that leaders should melt these concepts into the fabric of their organizations, not “launch” them. For example, how about showing an employee at lunch the one-page SCOPE summary on the *SCOPEVision* Web site and discussing, “how could we get better as an organization?”

Sustaining Innovation and Improvement Efforts

However you decide to tackle the challenge of getting better – whatever you call your method or however you implement – the key to sustaining the effort is getting started. The subtitle -- “Connecting the Vision to Reality” -- highlights the fundamental objective of *SCOPEVision*. It provides a series of practical tools to get teams moving towards continuous improvement. The *SCOPEVision* tools are intended to provide an

organization with agenda topics and questions that the team will use to embark on its improvement journey.

Jim Collins and Jerry Porras coined a phrase – mechanisms of discontent¹⁹ – that nicely describes the concept of seeding improvement efforts. Self improvement is difficult to sustain. Some means of creating healthy discomfort with the status quo on a sustained, continuing basis is required. *SCOPEVision* does this in two ways. Committing the organization to go Up PeriSCOPE! periodically generates the kind of introspection that fosters commitment to these efforts. Customers will help you find ways to get better in their survey responses. Next, with leadership conducting one-on-one visits with customers, the entire organization’s credibility is somewhat on the line. This promotes healthy internal dialogue, both within your own and the customers organization. And at a senior level, you’ll find that customers aren’t shy about telling you the way it is.

The quality concepts in *SCOPEVision* are not new. The imagery is. No matter how small your organization -- whether you use SCOPE, Six Sigma, TQM, Theory of Constraints, Lean Six Sigma or something else -- use something. Find a way to connect with your internal and external stakeholders and customers, identify the disconnect between the “as is” and the “should be,” analyze the reasons, create options, pick some solutions, and implement them. Get started!

¹ “*Start with the End in Sight*”: Steven Covey, *Seven Habits of Highly Successful People* (New York: Simon & Schuster, 1990)

² “*At every step . . . the need to learn to see*”: Womach and Jones.

³ “*In the Beginning . . . organizations*”: Bellman, *The Consultant’s Calling*

⁴ *Mary Walton*: Mary Walton, *The Deming’s Management Method*

⁵ *American Society for Quality(ASQ) Web Site*: <http://www.asq.org>.

⁶ *ASQ Quality Toolkit*: Nancy Tague, *The Quality Toolbox* (Milwaukee: ASQ Quality Press, 1995).

⁷ *Malcolm Baldrige National Quality Award*:

http://www.quality.nist.gov/Improvement_Act.htm

⁸ *Other States’ Quality Sites and Programs*: See, for example, Colorado Performance Excellence (CPEX), <http://www.coloradoexcellence.org>.

⁹ *Six Sigma History*: George Eckes, *The Six Sigma Revolution: How General Electric and Others Turned Process into Process* (New York: John Wiley & Sons, 2001).

¹⁰ *Lean Manufacturing Generally*: James P. Womack, Daniel T. Jones, Daniel Roos, *The Machine that Changed the World* (HarperCollins 1991). See also James Womach and Daniel Jones, *Lean Thinking* (Simon Schuster 2003).

¹¹ *TQM and Reengineering Differences*: Hammer Michael Hammer and James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution* (New York: HarperBusiness, 2003), p. 52.

¹² *DOD Military Specifications*: Pennington, *Inspection and Quality Assurance in Government Contracts: a Thesis Submitted for the Degree of Master of Laws* (George Washington University, 1983). By the early 1980s, the United States quality specifications for defense equipment included two fundamental specifications. MIL-I-45208 was used when the technical requirements required control of quality by in-

process and final end product inspection, including control of such elements of the manufacturing process as measuring and testing equipment, drawings and changes, inspection, documentation, and records of inspection. That specification required the contractor to maintain an inspection system to assure that all supplies and services submitted to the government for acceptance would conform to contract requirements. The specification required maintenance of a documented inspection system, development of clear, concise and complete instructions for inspection and testing, calibration of testing equipment, and identification and control of nonconforming material and products.

¹³ “*Believing that . . . ISO 9000*”: David Hoyle, *ISO 9000 Quality Systems Handbook*, 4th Ed. (Burlington, Manchester UK: Butterworth Heinemann, 2001), p. 8.

¹⁴ *Tailored Automotive and Aviation Standards*: These standard and the reasons for them are explained in a series of articles in the March issue of ASQ’s *Quality Progress*.

¹⁵ *Software’s CMMI Model*: <http://www.sei.cmu.edu/cmmi/>

¹⁶ *Training, Awareness and Competence and Continual Improvement*: ISO 9001, ¶ 6.2.2 and ¶ 8.5.1.

¹⁷ David Osborne and Ted Gaebler, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector* (Reading MA: Addison-Wesley Publishing).

¹⁸ *What gets measured gets done*: Osborne and Gaebler, p. 146.

¹⁹ *Mechanisms of discontent*: James Collins and Jerry Porras, *Built to Last* (New York: HarperBusiness, 1997), Chapter 7.