

## Corrected Vision



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### Introduction

Something odd is happening today in the world of business quality; many business leaders seem to feel that quality is merely a form of risk management and that quality tools and personnel are not to be applied in business improvement initiatives.

There are two surprising aspects to this observation: First, even if many business leaders understand the impact of process quality and business improvement, many do not. It is strange after so many years of work by quality leaders that such myths persist to hamper rapid improvement. Secondly, the breadth of this is also surprising. According to anecdotal evidence from many quality consultants and quality control specialists in a wide variety of industries, the majority of business leaders believe in some of these myths.

In my article in the July 2008 issue of The American Society for Quality's magazine *Quality Progress*, "Blurred Vision," I discussed this problem and eight myths that get in the way of understanding quality's role in business improvement. Here, we discuss what we can do about these eight myths. To help make sense of the myths, I have rearranged them in a different order than in the July 2008 article. The eight myths in their new order are:

1. Quality is strictly about product or service issues.
2. Quality is about controlling risk.
3. Cost of quality programs are old school.
4. Quality is a discipline learned on the job, not in a classroom.
5. Six sigma and lean are great new tools.
6. Choosing a quality approach is a task for senior leaders.
7. No preparation is required to run an improvement program except willpower.
8. Cost, quality and schedule form an iron triangle.

Myths and beliefs drive our understanding and reactions to the world around us. The particular myths listed here help develop the wrong behaviors in business today. To make faster progress, belief by leaders in these myths needs to stop.

Why should we care? Some may subscribe to the idea that "if we are making money right now, that's all that matters." I suggest that we should care because rapid improvement is essential. Today's work moves transparently across borders. This international movement of work sets up three issues:

1. While the cash flow for single businesses may improve with the transfer of labor to another country, the economic dislocations and cost in the larger society are not borne by the individual firm. These costs are mounting, and the bills will come due.
2. The risk of political instability and disruption of supply chains set up by outsourcing are often ignored or denied, with business leaders hoping that political leaders will protect them from political disruption. This is not assured.
3. We have seen a number of major mistakes made by business leaders in the last decade. These problems have often required government action to prevent economic disruption. While the prevention of major economic disruption is laudable, the public funding of business mistakes cannot continue at the historical pace we have seen. There is simply not enough tax revenue to keep it up.

A better way to ensure a stable and sustainable business environment is to ensure businesses are competitive. Working smarter is the best way to achieve breakthroughs in efficiency and competitiveness. Quality tools are all about working smarter. Properly applying quality tools is the best method to reach breakthroughs in competitiveness without raising the deeper risks of outsourcing.

This is good advice that has been touted for decades. Why isn't the good advice being applied? What can we do about it? Let's look more closely at each of the myths.

Myth 1: Quality is strictly about product or service issues

There is nothing wrong with believing that quality products are important, but to say that quality is limited to only products or services is just wrong. Your organization may have great products and deliver them with an average organization or even a sub-standard process and be successful. If you want to offer your product consistently and at the best cost and avoid being overrun by competition, you really do need organizational excellence. But what does that mean?

Organizational excellence in the United States is promoted by the various state and national quality awards. However, what is really at stake here is not a mere award for excellence but survival. The statement by W. Edwards Deming, "It is not necessary to change. Survival is not mandatory" is as true as ever. With all the various developing countries doing what the United States used to be uniquely good at, taking leadership in many areas of applied technology and business, survival is less assured than ever.

Many of the state quality awards follow the Malcolm Baldrige National Quality Award criteria. For the time being, let's forget about the award part and concentrate on the criteria. The criteria are not about an 'award.' They represent more than a 'quality management system.' You don't need to even want an award to understand that these concepts outline what it takes to succeed. The criteria offer the following set of core concepts to delineate success:

- Visionary leadership
- Customer-Driven Excellence
- Organizational and Personal Learning
- Valuing Workforce Members and Partners
- Agility
- Focus on the Future
- Managing for Innovation
- Management by Fact
- Social Responsibility
- Focus on Results and Creating Value
- Systems Perspective

If you want to know more about these core values of the criteria, look them up: the booklet that describes these core values is a free download from <http://www.quality.nist.gov/Criteria.htm>.

System-wide, comprehensive improvement is not easy. Remember that these concepts do not guarantee success. The 'free' market has destroyed and will continue to destroy long established organizations. There is no perfect shield against business failure, nor is there a magic bullet for business transformation. Applying these core values will increase the odds of success, and that is all we can expect in a chaotic world.

Your products and services come and go, but your business process continues. Reorganizing is not always helpful, either. Improving the business process is how you add quality that lasts.

Myth 3: Cost of quality programs are old school

According to this myth, measuring quality costs is no longer important. Cost of Quality is an old concept. It is recognizable even if it is sometimes called by various names: cost of poor quality, cost of poor execution, cost of conformance and nonconformance, etc. Many leaders feel there is little to be learned by applying this 50 year old concept. Others have measured it in the past, and no longer consider it a valid metric.

The value of this may be illustrated by changing what it's called. The older name 'cost of quality' does not mean the same thing today that it did 40 years ago. What this measure actually does is track the organizational financial benefit of business improvement. 'Finance for improvement' is a better term for this metric today. What other quality metric provides

data for return on investment? Six sigma does apply return on investment calculations, but only for projects that have been defined. It does not help decide where in the organization effort needs to be applied, since it concentrates on defined projects.

If quality is only about managing risk, you really don't want to track return on investment. Who considers the return on their insurance policy premiums? Quality control used to manage risk is like an insurance policy. Your objective is to merely keep the premiums as low as possible and insure only what you need to insure.

If you really want to apply quality tools and methods to make your organization run like the proverbial Swiss watch, you will need to measure finance for improvement and make the connection between the prevention expenses and the costs of your failures and mistakes. Used this way, finance for quality is the key measure of all your improvement activities.

#### Myth 4: Quality is a discipline learned on the job, not in a classroom

Future business leaders need to learn quality tools and approaches while they are being taught in master's level courses. The issue here is that resources to enhance the quality content academic programs are limited at institutions of higher learning because there are few degrees in quality. This restricts the amount of accredited quality control material available inside the academic world. Without current process performance issues presented in the classroom along with the quality body of knowledge, most of our future leaders will remain unschooled in what the quality tools can do for them, and unaware of the value trained quality professionals can contribute to business improvement.

A solution here is to bring the quality experts into the classrooms and teach quality in today's terms, not according to what the gurus of the past said or did. This is not to say the teachings of the past are to be forgotten- quite the contrary. The instruction needs to be put in terms relevant to the global marketplace, and use today's quality body of knowledge to solve widespread issues. Application projects need to illustrate how our future leaders' problems can be solved by using quality tools.

#### Myth 5: Six Sigma and lean are great new tools

This myth speaks to use of tools. Six Sigma and lean are great tool sets. They do not use new tools, but are compilations of older tools, applied in better ways. Lean was created from Toyota's rethinking of Henry Ford's mass production process. Most of the tenets of lean are standard industrial engineering techniques, applied in a particular way and with an emphasis on application by the normal staff in a manufacturing environment. In a way, lean is industrial engineering for the masses. Visual management and control, five whys, five s, takt time, failure modes and effect analysis, point of use work layout, mistake proofing, total productive maintenance, Kanban inventory control, work cell design, one piece flow, setup time reduction, and standardized work plans have grown out of the industrial engineering body of knowledge. By rewriting these for use by workers, a much faster rate of implementation is possible, compared to relying on a few floor engineers alone to apply the tools.

Six sigma is quality engineering applied in a matrix of command and control that emphasizes project planning and management. While six sigma is a powerful tool, it can be misapplied. By working on processes that lack data, by not using the six sigma command and control structure, and by emphasizing statistical controls on processes that have significant special cause problems, six sigma efforts are often wasted.

Certified quality professionals possess the knowledge to apply these tools effectively. You can't train one person in a set of tools and expect to effectively implant business process improvements across an organization. Widely deployed Improvements need to be applied by trained teams, with leaders that understand the tools well.

#### Myth 6: Choosing a quality approach is a task for senior leaders

Must senior leaders identify a quality approach? Clearly, they will make the final decisions. What senior leaders may lack is an intimate knowledge of detailed business processes. The solution here is to make sure there is a robust upward communication flow within the organization.

Upward communication is difficult to sustain. Older leaders may view it as a distraction; new leaders as a threat. Tight command and control can stifle upward communication, and open door policies can be made useless by unconscious disincentives.

Regular, thorough reviews of the processes of upward communication are needed to keep information flowing, to see that the best opportunities for applying process quality tools are recognized.

Myth 7: No preparation is required to run an improvement program except willpower

When improvement approaches go wrong, it is often due to the idea that willpower will overcome poor preparation. Many firms avoid good preparation, perhaps due to the desire for quick results. I have yet to find a firm that does not desire fast results, and moving fast is important in today's business environment. It's not the fast action that's in question; rather, it's the missing element of preparation.

Understanding current root problems, looking at data, planning, training, communication are all part of preparation. Actually fixing the problem is usually quick and straight-forward. Lack of good preparation often results in fixing mere symptoms or addressing the wrong issues.

Costs are a second excuse to avoid good preparation. Training is expensive, and the better the training, the more it costs. You can buy a business help book, skim it, and try to apply what it tells you. You may even succeed some of the time. Getting a team to all understand the same ideas and commit to working together as a team does not come in a book. Good preparation can take weeks to months, and there will be little return for the investment in preparation in the short term. The point here is to not confuse action with progress.

Myth 8: Cost, quality and schedule form an iron triangle

This myth says improvements in these three areas are mutually exclusive. To improve any one, you will hurt one or both of the others. For example, to make a shipment on schedule, either product quality is sacrificed to speed up the process, or significant labor additions (higher cost) are needed to meet a deadline. In another example, to improve quality you slow down a production line to allow more careful work. This costs more, and risks a delay.

If quality is seen as risk management, the above examples seem intuitive. They are not true if quality is taken as process and product. If the quality of a process is evaluated and improved, it will run faster, produce fewer defects and cost less. In other words, process quality underlies both service and cost.

Closing

Recommendations for fighting the eight myths can be summarized:

1. Seek organizational excellence, and use the Malcolm Baldrige National Quality Award criteria even if you do not seek an award. Think of the whole organization in order to reach breakthrough improvements.
2. Quality is not just risk management. Process control across the organization needs to use the tools of quality.
3. Use 'finance for improvement' (formerly called cost of quality) to track your business improvement progress. Fifty years of productive use show that this is not a 'fad;' this is how top leadership will understand the scope and impact of any improvement approach.
4. Improve quality education in master's programs. Use today's experts outside academia to bring process quality to life for our future leaders.
5. Apply lean, six sigma, and other improvement approaches appropriately. Be sure to use these tools where they provide benefit, not to merely keep up appearances.
6. Top down management will drive change, but the knowledge of what is needed comes from the bottom up. Employees that know the process are at the bottom. Upward flowing communication is difficult to start and easy to stop. Listening efforts by leadership have to be consistent and sincere.
7. Good leaders know that instant success is no success at all. In organization after organization, it has been shown that widespread process improvement takes good preparation. Starting with strategic planning, specific and thorough education in quality tools, allowance for experimentation and recognition that short cuts are useless, businesses can succeed and grow without following the risky path of outsourcing.
8. Process quality measures always trump schedule and cost measures. Avoid putting the cart before the horse in letting cost and schedule restrict process quality improvement.