



Behavioral Quality  
Improvement™



## ***A New Tool for All Quality Initiatives: Systematically Addressing the Human Behavior That Leads to Quality Improvement***

Quality experts have always maintained that “It’s not the people; it’s the process.” What they really mean is, “Don’t blame the people for defects; fix the process.” This advice is good but incomplete. The behavioral approach says, “Fix the process and systematically address the behaviors necessary for people to effectively execute solutions and perform the critical-to-quality behaviors needed for quality excellence.” A well-designed process must still be implemented by people. Those people need to know exactly which of their behaviors influence the process the most and how well they are performing those behaviors.

The old adage that “what gets measured gets done,” applies to human behavior. The word behavior refers to anything you can see someone “do” or hear someone “say.” A behavior is physical or verbal and is so specific that it can be counted. The objective of every quality improvement initiative should be to specifically identify activities (behaviors) that a frontline employee can do that will improve quality and then to verify through measurement that this behavior has led to quality improvement. Systematically addressing human behavior in job performance is referred to as the *behavioral approach*.

Here are the essential tools of the behavioral approach:

1. First, identify the specific, observable, frontline employee behaviors that are affiliated with the causes for poor-quality performance. Most causes of a poor-quality product will have a people factor. You must identify the critical behaviors that frontline employees need to perform to resolve the quality problem being targeted.
2. Next, communicate the complete list of those quality improvement behaviors identified in step 1 to individuals and workgroups throughout the plant or site. Individuals will then know the critical job functions they need to do to improve quality.
3. Now create a checklist of critical-to-quality behaviors and use it to remind workers that these are priority behaviors. Supervisors and frontline employees will review the checklist regularly.
4. Monitor frontline employee behavior with the checklist. Peers and managers can do the observations of checklist behaviors, and frontline employees can also be trained in self-monitoring.
5. Finally, collect and present data as feedback to the frontline employees and management. Frontline employees set improvement goals and management provides positive recognition for improvement and goal achievement.

In a recently published book, *Quality, Behavior, and the Bottom Line: The Human Side of Quality Improvement*, the authors provide a detailed description for systematically addressing human behavior and quality improvement. This system becomes a universal formula for producing frontline employee job success: identify key behaviors linked to quality improvement, provide clear expectations, including checklists, for the frontline employees to ensure they will perform those behaviors as stated and when required, observe the behavior to ensure proper execution, and provide coaching with positive feedback for improvement and goal achievement. The behavioral approach serves as a positive accountability system that ensures the job behavior needed for quality excellence is achieved.



## A Focus on Behavior Is Needed

Internationally, business and industry have implemented quality improvement initiatives that have not met expectations and have been cast aside. Lean, Six Sigma, World Class Manufacturing, Operational Excellence, and Total Quality Management are still in fashion in spite of their mixed record. Some companies are implementing three or four initiatives at once—thinking more is better. Näslund (2013) highlights some of the problems with such efforts:

*A Wall Street Journal* article, based on a five-year study, stated that Six Sigma fails to produce the desired results 60 percent of the time (Chakravorty, 2010). Similarly, Soti et al. (2010) claims that many companies have failed to reap the fruits of the Six Sigma methodology, often taking up valuable organizational resources. A parallel scenario happened for Just-In-Time (JIT) in the 1990s and reports are also starting to occur for Lean (Rosemary and Wempe, 2009; Chakravorty, 2010). A survey by *Industry Week* found that only 2 percent of companies with Lean programs reached their anticipated targets while 74 percent were not

making good progress with Lean (Pay, 2008). Farris et al. (2008) claim that most Kaizen descriptions of success are based on anecdotal evidence.

If you review each initiative, you see dozens of techniques, tools, and processes for solving problems and improving quality. Each initiative mentions frontline employees, but doesn't produce a systematic approach for addressing the role people play in hindering or improving quality.

The irony is, *frontline employees' behavior* is the fundamental element in producing a product or service. How frontline employees behave—doing things right, doing things wrong, not doing what they should—determines quality results. But most quality initiatives have no systematic method for identifying or changing frontline employee behavior. There is a demonstrable need for each quality improvement initiative to include a systematic process for analyzing frontline employee behavior and identifying the specific behaviors each frontline employee needs to perform to accelerate quality improvement.



The behavioral approach is the solution for any company that has implemented a quality improvement initiative but has not achieved or sustained the desired results. We know why the results are lacking or unsustainable. All quality doctrines call for supportive senior executives to ingrain quality practices into the organizational culture, but the initiative does not specify how to do this.

Try this test. Open any book about Total Quality Management, continuous improvement, Lean, Six Sigma, World Class Manufacturing, or the Toyota Production System. Look for a chapter about “how to manage human behavior”—a chapter that describes exactly what supervisors and managers should say and do to influence frontline employees behaviors required to deliver high-quality results. You won’t find one! Human behavior is not on the quality agenda. Quality gurus are often statisticians and engineers and designers who are not trained in how to encourage people to perform at their best.

When audiences asked Dr. W. Edwards Deming, the pioneering father of quality, what exactly managers should do to achieve his 14 Points, he would famously reply, “You’re the manager; you figure it out.” That mindset has continued in the world of quality. Quality initiatives primarily focus on analyzing data and designing processes and then count on managers to make quality plans come alive in the everyday work habits of frontline employees in the real-world workplace. Quality initiatives leave it up to managers to “figure it out.”

Many quality initiatives have a gap—a missing ingredient, a blind spot. The gap is the assumption that human beings will automatically behave in accord with a newly designed, quality procedure. Human behavior doesn’t work that way!



## The Factors That Change Behavior

Changing the way we do things is often accompanied by uncertainty, frustration, and the desire to revert back to doing things the old way. At work and in our private lives, changing our behavior is not usually comfortable or easy. Doing things differently requires us to go through a *learning curve*—a term that embodies all the negative feelings we experience when struggling to improve.

Making changes in our private lives provides us with some insights into what to expect when we are asked to change our work behavior—the way we are used to doing things. When trying to lose weight or begin exercising, we find that measurement is essential to keeping ourselves committed and motivated. We count calories, count the number of minutes or miles we walk or run, record the amount of weight we lift to get stronger, or the amount of seconds we hold a stretch when trying to improve flexibility.

Measurement allows us to track change and provides us with encouraging feedback—information that motivates us and keeps us on track. Seeing our improvement gives us a good feeling; we are proud that we are successful. If others make supportive statements about our progress, this provides us with another dimension of pride and motivation toward our goal.

The same factors—measurement, feedback, and recognition—which we refer to as the *behavioral approach*, ensure that quality initiatives will be successfully implemented and the solutions and quality improvement changes they produce will be executed effectively. These factors need to be applied to the efforts of managers, supervisors and frontline employees as they attempt to do new things, both individually and in team activities.

The main thing to be aware of is that training alone does not ensure that the new ways will stick. Training is the beginning; the behavioral approach adds coaching

performers with measurement of their change progress, positive feedback for the change, and recognition for their improvement is essential.

Quality practitioners inevitably discover that while quality approaches offer useful analytical tools, *the success of a quality effort is not about the tools, it's about the people*. Should you add the behavioral approach to your quality effort? Think of some challenging projects in your quality effort. Have you experienced any of these situations?

- The operating team does not embrace a well-designed quality solution developed by your quality project team.
- Initial gains from a new process end up fading over time.
- Managers have limited success on quality even though they repeatedly urge frontline employees to focus on well-designed plans.
- Frontline employees seem to need repeated re-training.
- Quality proponents complain that the organization lacks a quality-oriented culture.
- Quality audits find the same problems again and again.
- Frontline employees do the minimum to pass the quality audits.
- More time and effort are spent on finding and fixing quality problems than on preventing them.
- A great deal of quality documentation exists—procedures, standard work, control plans—but the performance in the workplace does not match it.
- Projections about quality savings and return-on-investment do not seem to appear on the bottom line.

All of these situations indicate that the behavioral approach is not in place.



## Include Behavior in Quality Tools

To add the behavioral approach to your quality effort, it helps to include behavior in the standard quality tools. In particular, add behavior to

- process maps,
- fishbone diagrams,
- quality action plans.

### Show critical-to-quality behaviors on process maps.

Often the first step in improving quality is to draw a current-state or “as-is” flowchart of the process. A team studying a quality problem draws a flowchart showing the current work process with an honest representation of problems with the process. The team then identifies ways to improve the process and draws a future-state or “to-be” map that shows the new, improved set of process steps.

A process map is supposed to be a picture of the process, but if the picture does not highlight critical-to-quality behaviors, then those behaviors may be ignored and weakened.

To apply the behavioral approach to your quality effort, begin by making behavior visible on process maps. Identify the points on the process map where the critical-to-quality behaviors need to be performed. If necessary, add a table underneath the process map to list the critical-to-quality behaviors, the performers, and how behavioral data are collected.

Once critical-to-quality behaviors are visible on a process map, the team can have productive discussion about those behaviors. How often are these behaviors occurring? How well are they being performed? What data are collected about these behaviors? What happens to frontline employees when they perform the behaviors? How can data-based feedback be provided to the performers? How can positive consequences be provided for improved behavior?

**Look for the absence of feedback and positive consequences as causes of quality problems.** To identify the causes of a quality problem, quality teams often use a fishbone diagram (also called an Ishikawa diagram) to

illustrate the possible causes of the problem. The major categories of causes are drawn as large lines (large fishbones), and then specific causes are drawn as smaller lines (small fishbones). Most fishbone diagrams have a major category for People or Manpower. The team lists possible people-related causes of the problem on the People fishbone.

The difficulty with many fishbone diagrams is that they are incomplete regarding the identification of critical-to-quality behavior and the causes of off-quality behavior. Often the main cause listed on the People fishbone is “lack of training.” It is true that lack of capability (due to lack of training or practice) is one cause of off-quality behavior. But if “lack of training” is the only People-related cause identified, then the proposed fix will always be training, re-training, and still more training (this can be observed in many quality projects). As stated earlier, training is not a total solution. Granted, training identifies what the frontline employee needs to do to ensure quality, but if the frontline employee does not perform the essential behaviors identified in the training, then the quality problem is not solved.

When constructing the People component of a fishbone diagram, always consider four more fishbones, in addition to training, that affect behavior:

- Critical-to-quality behaviors have not been defined and communicated.
- Frontline employees do not receive feedback about critical-to-quality behavior.

- The consequences that frontline employees experience after performing the critical-to-quality behavior are negative or neutral. There is no positive recognition for performing the critical-to-quality behaviors.
- The consequences for performing poor-quality behaviors are positive. It is faster or easier to do something else instead of the critical-to-quality behaviors.

If any or all of these four possible causes are observed, then the needed behavioral countermeasures are clear:

- Precisely pinpoint the critical-to-quality behaviors and communicate them.
- Provide data-based feedback frequently to the frontline employees about their performance.
- Provide positive verbal recognition to frontline employees when they perform the behavior.

#### **Add feedback and recognition to quality action plans.**

All quality action plans should include plans for observations of critical-to-quality behaviors and feedback conversations with the performers. A change in process always means a change in behavior, and a change in behavior always requires feedback and positive recognition. An action plan to sustain or control a new process that does not include plans for feedback and recognition is a weak plan, because quality, after all, is about people!

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## References

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# Quality Safety Edge

## Who is Quality Safety Edge?

### Global Leader in Customized Solutions

Quality Safety Edge (QSE) offers a value proposition that other performance improvement companies cannot. Their team of experienced consultants work collaboratively with you to design customized performance improvement system that integrate into your organization's unique operational environment and culture.

The QSE team of experienced consultants are experts in applying behavioral technology from a systems perspective – ensuring key behaviors at all organizational levels are occurring consistently. Their systems are designed using proven behavioral technology to engage employees, develop leaders, and create cultures which align with your goals. QSE consultants work with you to clearly define your goals and the critical activities at each level of your organization needed to achieve those goals. The QSE/client team then creates systems to ensure these critical performances are occurring consistently. QSE's customized solutions are built for sustainability.

The Quality Safety Edge team of consultants has been recognized globally for their integrity and commitment to collaborative partnerships with their clients, particularly for their proprietary behavior-based safety process, Values-Based Safety. With thousands of implementations worldwide, in almost every type and size of business and industry, QSE consultants are known for the depth and breadth of their problem-solving skills and their ability to create customized, sustainable safety and performance improvement solutions adapted to significant differences in management style and social structures throughout the world.

### Customized Solutions to Meet Your Goals

- **Assessments**
  - Safety Culture System Assessment
  - BBS Readiness Assessment
  - BBS Health Check
- **Behavior-Based Safety**
  - Values-Based Safety®
  - BBS Essentials®
  - Safety Observation and Conversation Train-the-Trainer
  - Managing Your BBS Process Training
  - BBS Reboot
- **Leadership Development**
- **Serious Incident Prevention<sup>SM</sup>**
  - Serious Incident Prevention<sup>SM</sup> for Senior Leadership
  - Serious Incident Prevention<sup>SM</sup> for Frontline Leadership
- **Hazard Recognition**
- **Observation Data Management**
  - Data Management Services
  - Safety Action Planning Workshop
- **Behavioral Quality Improvement<sup>TM</sup>**
- **Speakers**





## International Reach

A global economy is no longer a future vision, but a reality and a necessity. However, doing business internationally requires much more than mutual commerce; it requires in-depth customer knowledge. With 30 years' experience, Quality Safety Edge has developed customized solutions for clients in 27 countries.

Not only is QSE's ability to work with different cultures and languages a key factor in our clients' decisions in choosing us to help them meet their goals, but our clients are delighted that we customize our solutions to their local culture, business, and industry. In short, we come in as partners. We work collaboratively with our clients to customize solutions around your management style, your company culture, and your unique goals.

## Industries We Have Worked In

- Construction
- Chemical Process plants
- Defense Contractors
- Electric Utilities (including generation and T&D)
- Heavy Equipment
- Maintenance
- Manufacturing
- Oil & Gas Production and Exploration
- Oil & Gas Pipelines
- Refining
- Warehousing & Distribution
- Health Care
- And many others!



## The Mining Group

Quality Safety Edge's Mining Group has many years of experience implementing behavioral solutions in diverse mining operations. From the Arctic to the tip of Peru, our consultants have created award-winning safety cultures across the globe.

Many of our consultants are natives of South and Central America and are fluent in Spanish, Portuguese, and English. Their diverse experience provides them with insights into many types of mining operations, the culture of the countries in which they are located, and a deep understanding of the people who do the work.



# QualitySafetyEdge

*Excellence through Behavioral Technology*

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