

Why Traditional Safety Programs Cannot Achieve Continual Improvement

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One does not “manage” people.

The task is to lead people.

And the goal is to make productive the specific strengths and knowledge of each individual.

Peter Drucker

Even with the extensive knowledge professional safety management has accumulated about accident prevention in the last one-hundred years the evidence shows safety programs can still be woefully ineffective. Unfortunately there are numerous examples of this reality; The Challenger and Columbia accidents; The Sago and Massey Mine accidents; BP’s Texas City Refinery explosion and its Deepwater Horizon disaster; and the fact an average of almost 5,000 people are killed and millions more are injured on-the-job each year in the U.S. are just a few that come to mind.

Investigations of these tragic events reveal a common problem; even though management proclaims its commitment to operate safely the real or imagined pressures of production can defeat any safety program. The reason - safety is a requirement for a company not an objective. In that respect safety is to a company like health is to an individual. A company needs safety, the more it has the better off it is but it’s not why it exists. In the same way people do things detrimental to their health, companies do things that are detrimental to their safety programs. This can lead to companies failing to deliver on safety when it is needed most and employees paying the severest consequences.

The primary reason for this failure is management’s misplaced emphasis on two areas of safety management. They are; 1.) The effort of the safety program to ensure the company complies with safety specifications, rules or regulations and 2.) Management taking steps to motivate people to behave safely. These two things are driven by the philosophy of traditional safety embraced by management that when it comes to safety just meeting specifications is good enough. Unfortunately they have little to do with the overall effectiveness of any safety program. In fact they actually prevent continual improvement of safety performance.

Since the 1970’s American management has been undergoing a transformation. Mass production with its mind-numbing, boring and repetitive job duties is being replaced. Until the 1980’s if your operations could “meet specifications” that was considered to be “good enough.” But in the 1980’s and 90’s things changed. American management which had mastered mass production was being challenged primarily by Japanese companies that were making products of higher quality and lower costs. Quality became the key to survival. It gave companies a competitive advantage.

To meet the challenge American management first tried to *reform* its command and control system. This was problematic because when you reform a system you leave it alone but change its behavior by trying to modify the means it employs. (Do what you do now only try to do it better.) American managers did this when they tried to just copy what Japanese companies were doing such as quality circles and thought that would fix their problems. This approach failed miserably. They didn’t realize they had to *transform* their whole management system. When you transform a system you change its objectives or its ends. They had to change their quality objective from just being able to meet specifications to

continual improvement so they could constantly reduce variation in the system. The two ways of managing have nothing in common with each other and cannot be reconciled. American companies have struggled to make the transformation and some have made great strides in staying competitive in the new economy. Many have not.

The surviving companies now work to deliver high quality products and services at lower costs. They know management and operations must be “lean” to be competitive and good management seeks to eliminate or reduce anything in production that does not add value. This requires every employee be involved in improving how the parts of the system work together not separately.¹ Companies now tap the mental labor of their workforce at all levels to help dissolve quality and productivity problems. Gone are the days when meeting specifications was the ultimate objective for good quality. But being able to produce high quality products still isn’t enough. These companies realize the management system must also be innovative and creative when it comes to taking care of their customers with a quality product. (Think Steve Jobs and I-Tunes, I-Phone and I-Pod)

But while management’s fundamental theory and thinking about quality has been transformed the same cannot be said about safety. The reason being there has been no external force to challenge the safety management system similar to what happened to quality in the 1970’s and 80’s. Consequently safety management is content with reforming instead of transforming itself. It does this by tweaking its means of delivery; i.e. personnel, safety training, safety inspections and audits, accident investigations and safety motivational schemes such as coaching employees and incentive programs to change unsafe behaviors. These efforts may make management feel good but they cannot deliver continual improvement.² Their primary objective is to maintain the status quo not to improve things. They have nothing to do with dissolving common causes (faults) in the work system that are responsible for most accidents. Continual improvement requires you work on making the system do what you want it to, not what it fails to do. Managers don’t seem to understand that like quality you cannot inspect safety into your processes. It’s already there. If you want to improve safety you must improve the system as a whole not the parts of the system individually.

Traditional safety management talks about empowering workers as though management can hand out some of its power as it deems necessary. Basically employees are asked for input on some safety matters but the final decision on how things are to be done is always left in the hands of management.

By focusing on successful compliance and shaping employee behavior which are merely reforming its methods, traditional safety cannot deliver continual improvement. At its best it can only maintain the status quo. These techniques are absent in quality management systems which have achieved much better results in the last twenty years than safety. (Computer chip manufacturers went from 2,700 defects per million in the 1980’s to less than 3.4 DPM today.)

¹ The fact is some of the “new” management theories being marketed today existed as early as the 1960’s but they were isolated practices in only a few American companies.

² The most glaring example of how management is content with reforming safety is BP. Five years after the Texas City blast in which 15 people were killed, a similar story of cutting costs to maximize profits and ignoring safety emerged from the Deepwater Horizon explosion in which 11 more people were killed. As a result of the Deepwater tragedy BP has promised a new division level safety unit with sweeping powers to meet safety specifications. Some people would say BP’s approach to solving their problem is like rearranging the deck chairs on the Titanic.

In today's economy businesses are challenged to continually improve quality and they do it. In these companies the most important thing an employee can do is contribute their knowledge about how the daily problems of quality, productivity and safety in the system can be dissolved. Knowledge is always given up voluntarily so the de-motivating methods practiced in command and control will not work in this new environment period. This is as true for safety as it is for quality.

Traditional safety management is effective but nowhere near what it could be if it adopted the management theory of continual improvement. With approximately 140 million people employed in the U.S. a six sigma level of safety performance would result in approximately 476 fatalities instead the 4-5,000 we now consistently experience. To do this it would have to change its objectives from working to just meeting safety specifications, and motivating employees to work safely; to continual improvement of safety in the work system so people won't be subject to getting injured while working in it. Companies that do this will have a constancy of purpose to meet the needs of its safety customers - the employees that work in the system.

In this world safety management must be fast, focused, flexible and friendly to address the variation of common causes in the always changing processes created in lean work systems. Safety management must create a system in which employees experience *autonomy*, *mastery* and *purpose* when it comes to safety on-the-job. These three concepts are absent in traditional safety management and this prevents ownership of the safety program by employees, which is necessary for any safety program to be effective. Incorporating them with safety would give management the ability to enlist the mental labor of every employee required to produce synthesis to dissolve the systemic safety problems they face every day. Without this type of safety system there is no hope of preventing the persecution of production from interfering with safety when it is needed most.

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