

The Six Myths of Standardized Work

How to avoid the traps when developing Standardized Work

A white paper
on TPS/Lean
Manufacturing by
Kaizen Solutions Inc.

There are many myths regarding standardized work in the world outside of Toyota. It is frustrating to see the amount of time and effort wasted by companies that fall into one or more of these myth traps and attempt to create a system based upon them. We will attempt to debunk these six myths about standardized work so that your company's efforts can be directed as effectively as possible towards the goal of continuous process improvement.

Myth 1: If we have standardized work, anyone can learn everything about the job by looking at the documents.

This myth may have originated because of Toyota's description of standardized work. During Toyota plant tours, standardized work is touted as the process used by operators to define their work method, and of course it is documented and posted. Perhaps this is misinterpreted as a fully detailed description of the work and associated standards. Anyone who has read the sheets would see that the work description explains the work elements in basic terms – not nearly enough information to read and fully understand the job.

Within Toyota, the job instruction method (JI method) is used to transfer complete knowledge of a job to a team member. This is a lengthy process, since there is much to learn to become an exceptionally qualified associate. Anyone who believes that a job is simple enough to distill down to a few sheets of paper underestimates the competency level necessary of their employees. We have never seen in any work environment where the work is so simple that everything you need to know is contained on a few sheets of paper.



Myth 2: If we have standardized work, we can bring anyone off the street and train them to do the job in a few minutes.

Refer to Myth 1 above. This may be possible for a small portion of a job or for a specific task, but to become a complete employee with a full understanding of the work takes considerable effort. This myth is often heard in conjunction with a reference to bringing “monkeys” off the street that could be trained quickly. Not only does this reference display a complete lack of respect for employees and their abilities, it mistakenly assumes the simplicity of the work done by employees. This mind-set needs to be adjusted in order to create the right culture for developing a lean operation.

Myth 3: We can incorporate all details of the work and standards into the standardized work sheet.

This is a classic case of trying to make a Swiss army knife out of a specific tool. Standardized work is not an all-inclusive tool. It is specifically used as a tool to identify and eliminate waste. After the most effective work method is established, the documented process is used as a visual reference to ensure adherence to the standard.

Myth 4: We will post the standard work document so operators can look at the sheet each day to remember how to do the job.

This is a complete misunderstanding of the purpose of a visual standard. In this case, after the operator has been trained – at Toyota, a carefully controlled process that ensures the employee’s capability before he or she is fully released to the job – and after the first few hundred repetitions, a reminder of the proper method is not necessary. The visual reference is utilized by management for monitoring adherence to

the standard which is done through periodic and regular audits of the standardized work.

Myth 5: Employees develop their own standardized work.

This myth is only partially true. Toyota does not want individual employees to “own” their standardized work, and uses job rotation so no one employee owns any one job (if employees “own” their job to the extent that they, and only they, can execute it, what happens when they are away or leave?). The initial work standard at Toyota is developed by engineers working with representative operators who are part of a “pilot team,” and this team assists in the launch of the next new model (Toyota updates its models every few years, and completely redesigns models on a four-year cycle). Group leaders and team leaders then have responsibility for training employees on the standard work and soliciting their input. Once the process is operating at some level of stability, employees are challenged to develop better methods, but the methods are always reviewed by others, including management. So it is the work team with their team leader and group leader that collectively “own” the tasks to be accomplished.

This myth is often combined with a misguided attempt to institute “employee empowerment,” whereby employees are free to develop their own work methods. It’s this notion which creates fear in the hearts of managers who envision employees creating work that is inefficient and who worry that employees will take advantage of the situation.

Nothing could be further from the truth. If everyone is in agreement that the objective is to create a work method that meets the needs of the customer with the

least amount of waste possible, it does not mean that employees have free will to create their own work in any way they would like. They still have to follow specific rules and guidelines. It's like a sports team. Players at specific positions know their jobs in detail, but the coach does not simply say to the players, "Do your own thing – you are empowered." The coach has specific ideas about the team's strategy and how specific individuals need to fulfill their roles. On the other hand, a coach who simply dictates how each player should play generally ends up with a player revolt and also does not capitalize on the unique talents and knowledge of each player.

Similarly, at Toyota, the work methods are not created in a vacuum. Everyone is looking at the work with the same intent. There are many possible alternatives. The idea is to find a method that is better than the current one. (Note that "better" is not subjective. It must be quantifiable and measurable.)

Management has the responsibility to set the objectives for employees and to provide the tools and resources necessary to achieve them. These objectives are most realistic if management has a deep understanding of the process, and of the lean philosophy, and is acting as an effective coach.

Myth 6: If we have standardized work, operators will do the job properly and will not deviate from the standard.

This may be the most preposterous myth. Defining work and documenting it on paper is still a great distance from good performance. There is nothing in standardized work that will prevent deviation by the operator except the visual awareness of others. To ensure compliance to the standard, it's necessary to

remove options from the work area and to remove the "clouds." If any deviation from standard is immediately recognizable, and there is a negative consequence, the standard will be followed.

At Toyota, work is so carefully defined and the requirements for performance so stringent that a deviation from the standard will generally produce immediate recognition. Suppose, for example, that an operator elects to perform a task out of sequence, and as a result the time required to perform the job increases. This operator would likely exceed the takt time and need to stop the line using the andon cord (this is the negative consequence of deviating from the standardized work). If this happened, it would attract immediate attention, and when investigating the condition, the team leader or supervisor would verify adherence to the standard.

Finally, Toyota says that the purpose of standardized work is as a "foundation for kaizen." If the work is not standardized and it is different each time, there is "no basis for evaluation," meaning no reference point from which to compare. Many companies are dismayed to discover that sometime after "improvements" are made, the work has returned to the "old way" and there has been no sustained improvement. Doing kaizen before standardizing would be analogous to building a house on quicksand. You may get it built, but it will be sinking fast!

You may ask, "If standardized work is the foundation for continuous improvement, why don't we do it first?" This is a good question. Toyota points out that there are some prerequisites to developing standardized work. The most basic of these is to have process stability, where processes have been stabilized to the

extent that they can operate with some consistency
(*stability*, in the context of processes, means having
the capability to produce consistent results over time).
Putting standardized work ahead of stability will surely
create a condition similar to a dog chasing its tail –
you will go round and round but never get the result
you want.

*For more information on TPS-based continual
improvement, contact Kaizen Solutions Inc. at:*

Kaizen Solutions Inc.

32 Saddlebrook Court

Courtice, ON L1E 2C5

Canada

Tel: (905) 436-1643

E-mail: info@kaizenimprovement.ca

Web: www.kaizenimprovement.ca