

THE SECRETS OF ISAO KATO – TOYOTA'S MASTER TRAINER

How Mr. Kato's concepts about TWI (Training Within Industry), Work Standards and Standardized Work will reshape our beliefs about operational excellence.

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Recently, a group of trainers from the TWI Institute brought open and inquisitive minds to Toyota City in Japan. Their goal: Gain intimate knowledge and insight on how production or process systems can yield dramatic results through a people program heretofore taught only in Japan, shaped by Mr. Kato and found within deep recesses of the Toyota Production System (TPS).



The TWI Institute team visits Mr. Isao Kato at Toyota City in Japan. Back row, left to right: Agata Pawlukojc, Sam Wagner, Skip Steward, Mike Braml, Audrius Lesciaukas, Shawn Volland, and Oscar Roche. Front row from left to right: Shigeru Homma, Pat Graupp, Mr. Isao Kato, Scott Curtis, and Richard Abercrombie.

Experience has proven that it is not uncommon for organizations, whether in manufacturing, healthcare or service businesses, to struggle in the midst of well-intended improvement or lean programs. If not careworn with ongoing programs that misfire, leaders can be frozen with doubt or confused about the best way to start up operational excellence initiatives.

The recurrence of situations like those described above motivated the TWI Institute to look beyond the "J" programs (Job Instructions, Job Methods, Job Relations and Job Safety), which are core to its training and consulting work, and make a "mission to the master" — Isao Kato. Time with Mr. Kato would teach a team from the Institute more about how TWI, problem solving, and Standardized Work could help client organizations experience far less stress in creating and managing a culture of integrated work and performance that stands the test of time.

Isao Kato spent 35 years with Toyota Motor Corporation working in manufacturing, human resources, training and development, and supplier development. During this period, Mr. Kato worked under the direction of another Toyota legend, Taiichi Ohno developing training material for the burgeoning Toyota Production System (TPS). While Mr. Kato's nickname was "Ike", he was better known at Toyota as "the father of standardized work and kaizen courses" and the master instructor of TWI who introduced the "J" programs to Toyota.

"You cannot separate people development from production system development if you want to succeed in the long run."

— Isao Kato

While Mr. Kato co-authored the book, *Toyota Kaizen Methods:* Six Steps to Improvement*, he is also remembered, perhaps even more so, for his ideas on Standardized Work and its impact on the people and production at Toyota.

The TWI team presented Mr. Kato with some of the issues that client organizations face as they are implementing improvement programs, or the difficulties they have starting up. Three key themes coursed their way continually through Mr. Kato's analysis: Problem solving, People-mindedness, and Standardized Work.

THE TRUTH ABOUT THE 5 WHYS

Many people know of Toyota's "5 Whys" method and its effectiveness in getting to a problem's core. It is an iterative questioning technique that delves into the cause-and-effect relationships underlying a particular problem. The primary goal is to determine the root cause of a defect or problem by repeating the question "Why?" five times. Each answer forms the basis of the next question.

Common belief credits Toyota's founder, Sakichi Toyoda, with creating the 5 Whys. Often, those who challenge Toyoda's authorship of the 5 Whys, say Taiichi Ohno created the technique. But when the TWI Institute team met with Mr. Kato, the truth came out. In fact, two truths came out. Neither Toyoda nor Ohno developed the 5 Whys.

Mr. Kato began teaching the TWI Job Methods (JM) program at Toyota around 1953, six months after introducing Job Instruction (JI). Simply, JM is a practical plan to help produce greater quantities of quality products in less time by making best use of the manpower, machines and materials available at the time and place. There are four steps to JM: Break down the job, Question every detail, Develop the new method and Apply the new method.

"It was I who went to Ohno's office...to answer his complaint. I told him, 'All right, then. We will ask Why five times.'"

— Isao Kato

Mr. Kato uttered the truth of the situation, "It was I who went to Ohno's office...to answer his complaint. I told him, 'All right, then. We will ask Why five times.'"

WHY PEOPLE ARE THE HEART OF STANDARDIZED WORK.

The importance of people is basic to Mr. Kato's philosophy, and Toyota's accomplishments. Many common workplace problems can be traced back to weaknesses in the treatment and development of people. Injuries can occur as can defects and rework. Equipment or tools can be damaged along with self-respect. Lack of trust can breed an overabundance of discontent.

Being mindful of how people feel, what encourages them, and their reactions to difficulty is core to the well-known work of the TWI Institute. Job Instruction (JI) addresses what workers do not know or cannot do and helps them understand the basis of the work and performance-to-standards. Job Methods (JM) concentrates on what is difficult for workers to do, takes too long or is too tiring, then trains them on using kaizen principles to make work easier and more efficient.

Job Relations (JR) helps prevent people problems from cropping up and instructs

"In Toyota we had a saying, 'mono zukuri wa hito zukuri' which means, 'making things is

supervisors on how to deal with

about making people."

The concept of Standardized Work evolved from Taiichi Ohno's machine shops beginning in the 1950s. Standardized Work did not replace TWI programming, nor was it a question of which was more important. Mr. Kato said that it was really a question of sequence.

- Isao Kato

He believed that TWI's Job Instructions (JI) represented a skill set that needed to be in place before Standardized Work or other aspects of TPS would be effective.

The Toyota Production System had four primary aims:

- Provide world-class quality and service to the customer.
- Develop employee potential through mutual trust and cooperation,
- Reduce cost through elimination of waste,
- Develop a flexible production system that can respond to changes in market demand.

Standardization supports these goals by stabilizing work conditions and operating time, increasing the level of safety, enabling easier judgments regarding "normal" versus "abnormal" situations, reducing costs and, overall, maintaining and improving quality.

WITHOUT STANDARDS, THERE CAN BE NO IMPROVEMENT.

So often, instability is at the core of process and performance difficulties. The impacts of variation and inconsistency can register throughout an organization like earthquakes and tremors across a fault plane. Standards can settle things down because they are the foundation of stability.

There are standards for actual work, and these may take the form of instructions, job breakdowns, user guides and the like. Also, there are standards for more indirect work such as equipment maintenance and inspection. Standards, and each new or improved standard, become the baseline for improvement. In some respects, it is analogous to the virtuous cycle.

Standardization is the determination of a standard or standards and then having a group or entire workforce utilize them to do the work required. Beside influencing stability, standardization also effects capabilities and attendant risks, information flow, quality of the work, safety of the workers, and visualization.

In short, standardization and stabilization unify the organization, processes, production and people.



SPREADING WORK STANDARDS AND STANDARDIZED WORK OUTSIDE OF JAPAN.

In addition to gaining a much deeper perspective into TPS and the ideas and practices that make it a paragon of performance, the TWI Institute team is



working to help Mr. Kato achieve his dream of making Work Standards and Standardized Work accessible to people outside of Japan.

He said that over time, the purpose – and the benefits – became clear, and with this clarity it became obvious that the knowledge and experience should be shared. Specifically:

- Clarification of criteria for building good quality in each process,
- Clarification of the best way to proceed under current working conditions,
- Standards and rules when workers perform work,
- Tools for supervisors to comprehensively manage work,
- Tools for judging normality/abnormality in the way of work,
- Improvement tools for management and supervisors.

As the Institute team absorbed Mr. Kato's points, questions began to bubble up and pop with points on the use and efficacy of Work Standards at organizations outside of Japan. Among a significant list of questions, these rose to the top:

- Is there a definition of how top quality is built into each process?
- Is "the best way" to work under current conditions spelled out clearly?
- Is there active observation and auditing of workers performing to standards?
- Are there defined procedures for training workers?
- Do supervisors use comprehensive guidelines when they manage worker output?
- When work is out of standard or abnormal can the variance be determined immediately?
- Are improvements being made from a fixed baseline?

When questions like these arise, it is time to consider implementing Work Standards and Standardized Work in a facility or even in a pilot situation within a facility. Understanding and creating solid standards and standardization enables managing work in an organized and controlled style, which ultimately leads to the level of results and value that has made Toyota, and firms like it, pinnacles in their respective businesses. The appropriate skills needed for success like that can be learned and practiced. Consistent with Mr. Kato's desire and in accordance with Mr. Kato's rights and permission, the TWI Institute is developing his Work Standards and Standardized Work into a comprehensive training and consulting program. When finished in 2020, it will be available exclusively through the TWI Institute and its global affiliates.

More information and updates on course completion and scheduling are available from the TWI Institute, www.twi-institute.com or by calling Scott Curtis, President & CEO, at 315.412.0303.



TWI Institute team leaders, Pat Graupp, VP & Senior Master Trainer (Left) and Scott Curtis, President CEO (Right) bookend Mr. Isao Kato.