



Productivity methodologies, tools, and techniques

Cultivation of positive work attitudes through 5S—Kelvin Chan


5S is an abbreviation for the five Japanese workplace improvement practices of *seiri*, *seiton*, *seiso*, *seiketsu*, and *shitsuke* (Table 1), also known as “good housekeeping.” The origin of this productivity technique can be traced back to heavy steel industries in Japan more than 30 years ago. At that time, *seiri* and *seiton* were widely practiced to improve safety in steel mills and to save lives. Over the years, the automobile and other industries have also adopted 5S.

of raw materials completely before new materials were delivered to the sites. With this new policy, the company achieved savings because it did not have to handle four or more truckloads full of unnecessary leftover materials that would have had to be returned to the storage area or to suppliers at the end of the project. In addition, it has been confirmed that 5S can contribute to improved equipment performance, safety records, and quality in any enterprise.

Table 1. The meaning of 5S.

Japanese term	Meaning	Explanation
<i>Seiri</i>	Sort	Sort out & discard unnecessary items
<i>Seiton</i>	Arrange	Arrange necessary items in good order
<i>Seiso</i>	Clean	Clean the workplace & equipment thoroughly
<i>Seiketsu</i>	Improve, standardize, maintain	Maintain clean, tidy conditions; improve 3S
<i>Shitsuke</i>	Self-discipline	Make 5S practices a habit

Source: Teian Consulting International, Singapore.

Successful 5S implementation systems in companies must be structured and are commonly organized into the four phases of preparation, training, launch, and sustaining. Although good housekeeping may appear simple, the experiences of many organizations have shown that these simple activities are often hard to sustain as people can be distracted by seemingly more “modern” sophisticated improvement techniques available on the productivity market. Therefore, effective leadership and commitment by the top management is important for the success of 5S programs in organizations. 

5S is now a structured technique with the initial 3S meaning “sort, arrange, and clean,” respectively. They form the basis for daily practice of the technique. The fourth S represents “improving, standardizing, and maintaining the standard of current housekeeping practices.” Eventually, people at the workplace will develop sufficient “self-discipline” to carry out and maintain the “right” activities in the workplace. Through these practices, positive work attitudes will eventually be cultivated among employees, helping to create a high-performance workplace.

Table 2. Benefits of implementing 5S.

Area	Benefit
Productivity	Waste reduction through systematic work systems
Quality	Fewer human errors through visual control & other systems
Equipment performance	Routine cleaning & inspection prevent unscheduled breakdowns
Safety	Reduction of hazards through proper storage & organization of items in the workplace

Source: Teian Consulting International, Singapore.

In many instances, 5S provided the foundation for the implementation and sustainability of many other popular productivity programs like total quality management (TQM), total productive maintenance (TPM), and just-in-time (JIT) production systems. In addition, a thoughtfully implemented 5S program involves every employee in tackling common issues related to good housekeeping practices. This can help bring about continuous improvement (kaizen) in the workplace. Table 2 summarizes the benefits of 5S.

It is known that good 5S practices can help to reduce the “7 wastes” in operations, thereby improving overall workplace productivity. For example, after putting a 5S system into place, an electrical contractor changed the company purchasing policy to one of buying raw materials for their project sites in smaller lots. This forced the workers to consume each bundle



Contributed by Director and Principal Consultant Kelvin Chan, Teian Consulting International Pte Ltd, Singapore, resource speaker for the APO training course on the Development of Productivity Practitioners: Basic Program.

p-Glossary



To provide easy reference to productivity-related terms including methodologies, tools, and techniques, the APO developed the p-Glossary, available on its Web site (www.apo-tokyo.org). Definitions and explanations of 5S and other relevant tools mentioned in this article such as TQM, JIT, kaizen, etc. are given in the p-Glossary.