

Tips for life and work “logistics” spoke to the Japanese management consultant and kaizen expert Masaaki Imai near Tokyo Tower, one of the city’s landmarks



“Mr. Imai, tell us what kaizen means

Kaizen is a Japanese word that means improvement. With regard to the workplace, it means continual improvement, for managers and workers alike. Kaizen is a state of mind which is never satisfied with the status quo. At its core is the common sense that makes us strive for quality, avoid waste, and meet customer expectations. The Toyota Corporation was the first company to employ the term kaizen to mean the profound improvement of corporate operations management. That was in the mid-20th century under the leadership of Taiichi Ohno, who implemented the principles of kaizen to create the mindset of lean systems in management and manufacturing. In Japan this is known as the Toyota production system (TPS), but actually, the lean-systems principle has been around since the early 20th century, when Henry Ford used it in the final stage of the assembly-line production of the legendary Model T. Today “lean” and “kaizen” are standard terms for a total corporate strategy to improve a firm’s overall operational performance.

How does a traditionally-run company operate?

The traditional system is based on the assumption that the best way to realize minimum cost is to churn out as many pieces as

possible in the shortest time possible. That’s why traditionally-run companies put their resources into expensive, high-speed machines. They also base their production scheduling on the sales forecast. The problem is that even the cleverest person can’t predict customer orders. For fear of producing too few units, optimistic forecasts are sent to the production floors, which in the end leads to the production of too many units, and that in turn leads to an accumulation of excess inventory. This kind of system results in an excessive use of resources such as manpower, machines, and material, as well as time, space, and money. Operations become more expensive, quality control is more difficult, production lead-time is extended, and inventories are high. At the same time, the flexibility that is necessary to meet diversified market requirements is low.

Where does kaizen and lean management start?

The key word for the lean approach is “flow” – flow of material, of information, of production orders, of the process layout, just to name a few. Toyota follows this concept in every detail. Taiichi Ohno extended the flow concept not only at Toyota but also to the management of the entire supply chain, including suppliers,

“In the flow”

Masaaki Imai is a kaizen pioneer. He explains to “logistics” what’s behind the Japanese method of business management – and says that the auto industry should put more faith in Kaizen

distributors, dealers, and customers. He added two further sub-systems to ensure an even better flow: synchronization and leveling. Synchronization means setting up all key processes with the same takt time. Leveling means breaking down all production schedules to daily levels, among other things. Ohno used to say, "Make the mound (high volume) lower and make the trough (low volume) higher."

You wrote: In order to achieve optimal flow, three principles must be followed on the shop floor: the "Five S's," standardization, and the elimination of muda ...

The "Five S's" are five Japanese words that all begin with S, and they are all basically principles of good housekeeping. Seiri means decide what is necessary and what is unnecessary and get rid of the latter. Seiton is arranging what you've kept after seiri in an orderly manner. Seiso is keeping machines and working environments clean, seiketsu extends seiso to the worker's personal appearance. Shitsuke means building up self-discipline and the constant improvement of the work environment by setting new standards. When they learn the meaning of the "Five S's," people often wonder how kaizen can bring about big changes in management when it deals with little things like housekeeping. It's

actually very simple, and shouldn't be underestimated: these details are the backbone of a truly lean management system.

What do you mean by standardization?

First and foremost, standardization means carrying out every business activity according to established formulas. These formulas are printed out and hung in the workplace for all to see. They develop into standards for the best, most efficient, and safest way to complete a job. In this way, quality is assured and customer expectations are fulfilled. It is management's task to make sure these standards are kept, to step in when deviations occur and to further develop the standards to avoid future deviations.

And what is muda?

Muda is anything that does not add value – senseless activities. There are only two types of operations: those that add value, for which customers pay, and those that don't, for which nobody pays. That's why management has to eliminate all types of muda on all levels. Ohno defined seven types of muda, from overproduction to downtime to defects.

How can automobile logistics providers benefit from kaizen?

Order and cleanliness in every detail Running a truly efficient company starts with the small things. That's true for all businesses, not just the auto industry, according to Masaaki Imai



ABOUT

Masaaki Imai

Kaizen: The Key to Japan's Competitive Success is the title of the 1986 book with which Masaaki Imai introduced the world to the management system developed in Japan. In the mid-80s he founded the Kaizen Institute in Switzerland, a consulting group that helps companies implement the concepts of kaizen and its lean methods. Today the Kaizen Institute Consulting Group has more than 400 employees in over 30 countries. Masaaki Imai has a degree in international relations. He lives in Tokyo, where he was born in 1930.



Green light Kaizen and lean management are the principles behind Toyota's continued success. With nine million cars sold, Toyota is the world's largest auto manufacturer. Masaaki Imai introduced kaizen to the rest of the world

Kaizen at DB Schenker

Continuous improvement, kaizen, is an established feature in DB Schenker's company philosophy. Processes, methods, standards, and the entire workflow-management are constantly reviewed with regard to efficiency management. Employees participate in the efficiency analysis. In addition to a suggestion box, the company offers workshops to look into potential improvements – both for employees and for customers. Since 1998, DB Schenker, together with employees, has used POP (permanent optimization program) and the kaizen method 5S to solve problems and eliminate non-value adding processes.

I recently had a chance to talk with a senior executive at Toyota. He was involved in the introduction of lean systems to the Toyota plants, and had employed several lean tools in doing so: kanban, for controlling the material flow; the supermarket principle, which places components close to the assembly line; jidoka and andon, which are both used to localize problems in machines and notify management or maintenance. He later implemented the TPS in the supply-chain structure at a new Toyota plant on Kyusu, Japan's third-largest island. I was interested to find out whether he used any other tools for this project. He said there was absolutely no difference between a shop floor and a supply chain. In both cases, you want to establish an optimal flow, and if you identify problems, seek out the root cause to solve them. The auto industry is a highly competitive global business. Its supply chains are long and complex. They not only involve a large number of people, but also many suppliers – all of whom have the goal of delivering the highest quality possible to the customer. Kaizen and the lean approach are thus excellent instruments for all players in the auto industry – including logistics providers.

You've made kaizen world famous. Where is it used today?

Kaizen and the lean approach can help make firms more competitive and more profitable than traditionally-run firms. They are also good for the environment, since they aim at using a minimum of natural resources and reducing waste. Still, the majority of companies worldwide, including the automotive industry, have not embraced kaizen and the lean approach. One reason, for example, is the simplicity of the systems. Many managers prefer new theories and state-of-the-art technology. Neither of these played a role in Ford's original moving assembly line or in Toyota's production system. Some managers get excited about one or another of the lean principles, but they forget that each principle is just a tool for improving the flow. If they want to achieve a far-reaching improvement, they have to create a comprehensive and consistent operational system. Kaizen and the lean approach are long-term strategies. Companies must commit to them for years or even decades in order to achieve the full success of constant improvement.

Thank you very much!