



“In the flow”

Japan plays a key role for Lufthansa Cargo and for the global airfreight industry in general. As a result, there is also a clear focus on the Japanese way of doing business. One of the decisive concepts that has emerged from this is Kaizen. What it really means and why airfreight can also benefit from it is explained by the pioneer of Kaizen, Masaaki Imai

Mr. Imai, please 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, 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.

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



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.

levels. Ohno defined seven types of muda, from overproduction to downtime to defects.

How can airfreight and other logistics providers benefit from kaizen?

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 in finding 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. Kaizen and the lean approach can make all players more competitive and more profitable – including logistics providers. Both concepts are also good for the environment, since they aim at using a minimum of natural resources and reducing waste. But whoever wants to achieve a far-reaching improvement, has 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 full success.

Thank you very much!