Kaizen

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This article is about a continual improvement philosophy. For Kaizen (\$K), a fantasy currency invented by Kaizen Games, see Priston Tale. "Red tag" redirects here. For designation of damaged structures, see Red-tagged structure.

Kaizen (改善, Japanese for "improvement") is a Japanese philosophy that focuses on continuous improvement throughout all aspects of life. When applied to the workplace, Kaizen activities continually improve all functions of a business, from manufacturing to management and from the CEO to the assembly line workers.^[1] By improving standardized activities and processes, Kaizen aims to eliminate waste (see Lean manufacturing). Kaizen was first implemented in several Japanese businesses during the country's recovery after World War II and has since spread to businesses throughout the world.^[2]

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Introduction

Kaizen is a daily activity, the purpose of which goes beyond simple productivity improvement. It is also a process that, when done correctly, humanizes the workplace, eliminates overly hard work ("muri"), and teaches people how to perform experiments on their work using the scientific method and how to learn to spot and eliminate waste in business processes. The philosophy can be defined as bringing back the thought process into the automated production environment dominated by repetitive tasks that traditionally required little mental participation from the employees.

People at all levels of an organization can participate in kaizen, from the CEO down, as well as external stakeholders when applicable. The format for kaizen can be individual,

suggestion system, small group, or large group. At Toyota, it is usually a local improvement within a workstation or local area and involves a small group in improving their own work environment and productivity. This group is often guided through the kaizen process by a line supervisor; sometimes this is the line supervisor's key role.

While kaizen (at Toyota) usually delivers small improvements, the culture of continual aligned small improvements and standardization yields large results in the form of compound productivity improvement. Hence the English usage of "kaizen" can be: "continuous improvement" or "continual improvement." Literally, it translates to: "good change."

This philosophy differs from the "command-and-control" improvement programs of the mid-twentieth century. Kaizen methodology includes making changes and monitoring results, then adjusting. Large-scale pre-planning and extensive project scheduling are replaced by smaller experiments, which can be rapidly adapted as new improvements are suggested.

In modern usage, a focused kaizen that is designed to address a particular issue over the course of a week is referred to as a "kaizen blitz" or "kaizen event". These are limited in scope, and issues that arise from them are typically used in later blitzes.

Translation

The original kanji characters for this word are: 改善

In Japanese this is pronounced "kaizen".^[3]

- 改 ("kai") means "change" or "the action to correct".
- 善善 ("zen") means "good".

In Korean this is pronounced "ge sun"

• 改善 ("ge sun") means "improvement" or "change for the better"

In Chinese this is pronounced "gai shan":

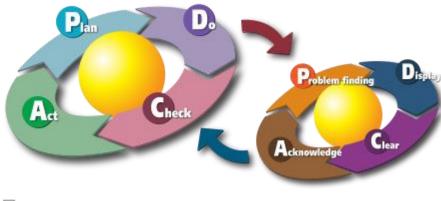
- 改善 ("gǎi shàn") means "change for the better" or "improve".
- 改 ("gǎi") means "change" or "the action to correct".
- 善 ("shàn") means "good" or "benefit". "Benefit" is more related to the Taoist or Buddhist philosophy, which gives the definition as the action that 'benefits' the society but not one particular individual (i.e., multilateral improvement). In other words, one cannot benefit at another's expense. The quality of benefit that is involved here should be sustained forever, in other words the "shan" is an act that truly benefits others.

History

In Japan, after World War II, American occupation forces brought in American experts in statistical control methods and who were familiar with the War Department's Training Within Industry (TWI) training programs to restore the nation. TWI programs included Job Instruction (standard work) and Job Methods (process improvement). In conjunction with the Shewhart cycle taught by W. Edwards Deming, and other statistics-based methods taught by Joseph M. Juran, these became the basis of the kaizen revolution in Japan that took place in the 1950s.^[4]

Implementation

The Toyota Production System is known for kaizen, where all line personnel are expected to stop their moving production line in case of any abnormality and, along with their supervisor, suggest an improvement to resolve the abnormality which may initiate a kaizen.





The cycle of kaizen activity can be defined as:

- standardize an operation \rightarrow
- measure the standardized operation (find cycle time and amount of in-process inventory) →
- gauge measurements against requirements \rightarrow
- innovate to meet requirements and increase productivity \rightarrow
- standardize the new, improved operations \rightarrow
- continue cycle *ad infinitum*.

This is also known as the Shewhart cycle, Deming cycle, or PDCA.

Masaaki Imai made the term famous in his book, *Kaizen: The Key to Japan's Competitive Success*.

Apart from business applications of the method, both Anthony Robbins and Robert Maurer have popularized the kaizen principles into personal development principles. The basis of Robbins' CANI (Constant and Never-Ending Improvement) method in kaizen is discussed in his Lessons in Mastery series.

In their book *The Toyota Way Fieldbook*, Brijesh Rawat, Jeffrey Liker, and David Meier discuss the Kaizen Blitz and Kaizen Burst (also called a Kaizen Event) approaches to continuous improvement. A Kaizen Blitz, or rapid improvement, is a focused activity on a particular process or activity. The basic concept is to identify and quickly remove waste. Another approach is that of Kaizen Burst, a specific Kaizen activity on a particular process in the value stream.^[5]

Key elements of Kaizen are: Quality, effort, involvment of all employees, willingness to change and communication.

THE FIVE FOUNDATION ELEMENTS OF KAIZEN:

1) Team work 2) Personal Discipline 3) Improved morale 4) Quality circles 5) Suggestions for improvement

OUT OF THIS FOUNDATION, THREE KEY FACTORS ARISE:

1) Elimination of waste (muda) and incorporation of efficiency 2) The Kaizen five - S framework for good housekeeping

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Seiri- tidiness
Seiton- orderliness
Seiso- cleanliness
Seiketsu- standardized clean-up
Shitsuke - discipline
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3) Standardization

See also

- 5S
- Balanced scorecard
- Business process reengineering
- Extreme Programming
- Muda
- Overall equipment effectiveness
- Root cause analysis
- Scrum
- Six Sigma
- Statistical process control
- Theory of Constraints
- TOC Lean Six Sigma

- Total Productive Maintenance
- TRIZ