

Petr Besta*, Radim Lenort**

Kaizen – Right Management

Summary

The article deals with the analysis of the Kaizen principles so called the continual improving principles. It compares the Japanese and European view at the control of the changes. Then the article describes the implementation of Kaizen principles in the companies.

Introduction

Today's world is a world of changes. Everything is moving, everything changes. Both the internal and external environment of companies changes as well. If a company wants to succeed on the market, reach its business targets, it must inevitably adjust its strategies reflecting these changes. The innovations represent the main tool for building and maintaining a long-term company success in the contemporary turbulent environment. The understanding of innovation and change is, however, entirely different in the „Western” and „Japanese” approaches to management, which logically determines completely different meaning of innovations and quite different principles of management of innovations.

On the general level, it is possible to show the fundamental contrast in the value systems of the Japanese and Western societies if we compare it to the different understanding and approach to the management of changes. The Western-European society has always been oriented towards the outcome. Outcome and target has always been preferred to the pathway. It is not a coincidence that we can find many variations and similes of the saying: „The end justifies the means” in many European languages.

* Inž., Department of Economics and Management in Metallurgy, Technical University of Ostrava, Czechy.

** Doc. dr inž., Department of Economics and Management in Metallurgy, Technical University of Ostrava, Czechy.

The „Eastern” civilisations were more preoccupied by the pathway which they saw as more important than its fulfilment. We can still trace these antagonistic views, perhaps even more than before, in the recent years despite all the globalization trends.

1. Innovation – „Western” approach

In this concept, the innovations are perceived as fundamental changes with the major emphasis on technological development or implementation of the latest manager’s concepts and technologies. The innovation is radical, dramatic and it attracts great attention. The logical consequences of such vast changes are, naturally, huge investments. The Western approach towards innovations is therefore especially focused on technologies and money.

The time flow of the innovation process is another important aspect. In the Western approach, innovation is understood as a single-shot, short process. The innovation can be very well compared to the function direction on figure no. 1.

The improvement is planned in short periods of time and in leaps (implementation of new technology, new management system, etc.). The real course of innovation is rather similar to figure no. 2. It is necessary to identify two aspects which can’t be omitted. Each status quo is, in each moment, devaluated by the dynamic environment. If we do not maintain the present state in an adequate way it will continuously grow worse. A number

Fig. 1. Theoretical course of innovation

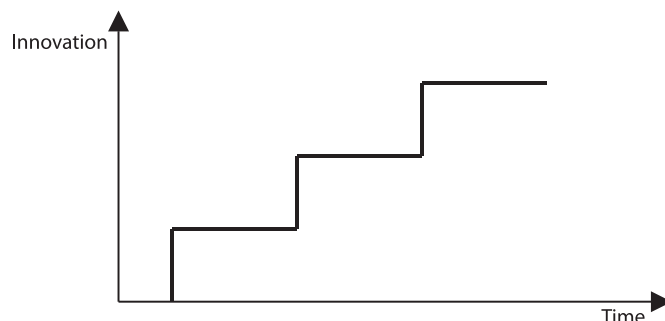
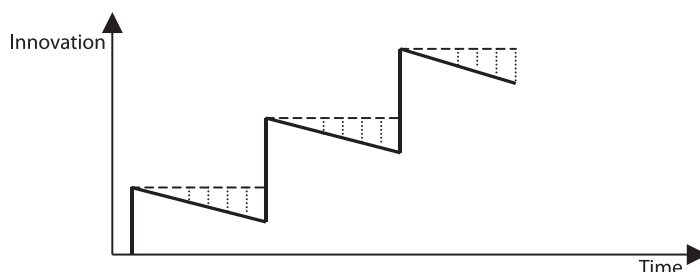


Fig. 2. Real course of innovation



of further steps must follow in order to secure and improve the current state after a leap improvement to a higher level.

Michael Hammer's and James Champy's re-engineering principle is a classic example of understanding innovation as a major change. The Re-engineering process was one of the most promoted management concepts at the beginning of the 1990's. Activation of the out-of-date processes which thwarted the plans of large companies was the basic idea. We can say that the BRP concept means the company starts with a blank piece of paper before it determines its processes, as it tries to put aside the old and routine practices.

2. Continuous management of changes – Kaizen

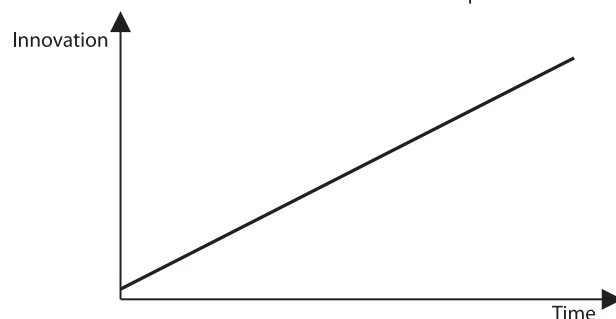
„Japanese” Kaizen represents the counterpart against the „Western” perception of innovations. The word Kaizen consists of two parts: kai, which means „change” and zen, which means „good” as well as „wisdom”. This conception can be generally explained as change for improvement.

Kaizen can be understood both as a process and as a strategy the target of which is continuous and long-term perfection which, however, does not require large investments and fundamental changes. The principles are not based on fundamental changes concerning the technologies, production equipment, but they particularly try to change the thinking of the people.

The intention is to stimulate creative thinking, to look at the routine tasks and to define areas which cry for improvement. Constant repetition of tasks can lead to the state in which we become dull and unable to define things which should be changed. Continual improvement also means to fight dreariness and let some inspiration in our work. Nowadays, Kaizen is considered to be a general term for the whole range of modern trends. Many of them originate in Japan and they were carried forward to the rest of the world: TPM, TQM, quality clubs, innovation suggestion system, automatization, robotization, Kanban, JIT, zero defects, work discipline, product development, etc.

The time course of innovations by means of continuous improvement principles can be seen on figure no. 3. Kaizen moves ahead slowly on the basis of many small improvements.

Fig. 3. The course of innovation in the conditions of continuous improvement Kaizen



3. Participation on the management of changes

The participation of employees on the realization of changes is another crucial aspect which divides these two bi-polar approaches to innovation. In case of Kaizen principles, they must address everybody, from the top management to the ordinary workers. The participation of all employees and the realization of continuous small changes in the production process are the major differences from the Western approach towards improvement. According to the founder Masaaki Imai, the Kaizen principles are not set only to be used at work but in the private life as well. The principles are not based on fundamental changes concerning the technologies, production equipment, but they mainly try to change the thinking of people. The objective is to stimulate creative thinking, look at the routine tasks and to determine the areas which cry for improvement. Constant repetition of tasks can lead to the state in which we become dull and unable to define things which should be changed. Continual improvement also means to fight dreariness and let some inspiration in our work.

The space for innovation in the Western approach is mostly limited to the sphere of middle and top management. There is minimal support for creative thinking from lower

Fig. 4. Japanese view of the work positions

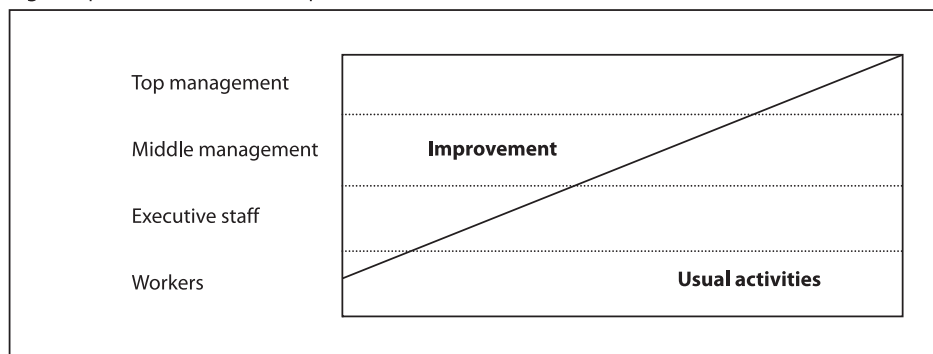
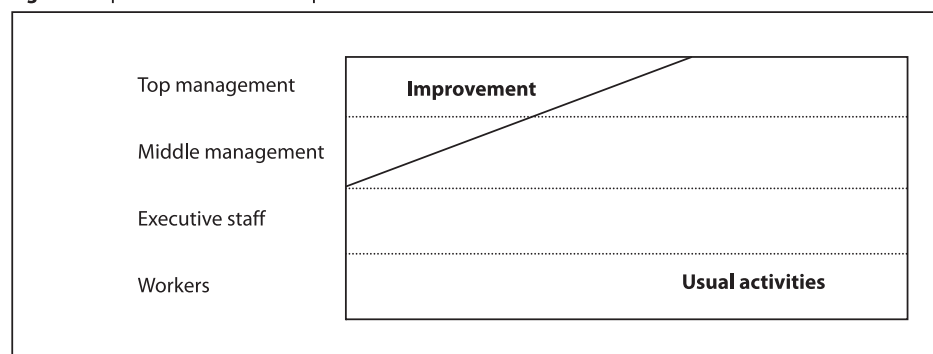


Fig. 5. European view of the work positions



and middle management employees or it is even unwelcome. With respect to these employees, precise and, in many cases, routine performance of their working duties, without any possibility to contribute to higher efficiency of the performed duties is assessed in a positive way. Figure no. 4 and 5 shows the share on the realization of innovations according to individual work positions in the European and Japanese approaches.

4. Implementing the Kaizen principles in Ostroj a.s.

The company is active in the field of heavy industry and it belongs to the leading world producers of mining supports. The implementation campaign of Kaizen policy was launched in 2005. Prior to the beginning of the project the management has set long-term objectives which should be fulfilled in the course of Kaizen project development. These objectives can be summarized in the following points:

- Reduce the production costs – increase the competitive ability,
- Reduce the volume of unfinished production,
- Shorten the production times,
- Eliminate poor quality production,
- Support the certification processes of VDA, AQAP and other,
- Influence the employees in a positive way.

The implementation of the five steps of good management – „5S” was one of the first steps in the implementation of Kaizen principles. This principle developed from multi-year experiences of people working in production departments. All the experiences are compiled in five rules represented by five Japanese names. Kaizen in any company should start with understanding and implementation of 5S and standardisation.

Five steps of good management:

1. Seiri: separate the essential and useless things in your work station and remove the useless ones.
2. Seiton: organize all things which were left in your work station after seiri in a well arranged manner.
3. Seiso: keep the machines and the work station clean.
4. Seiketsu: expand the concept of cleanliness on you and continuously carry out the previous three steps.
5. Shitsuke: built your self-discipline and practice the five steps by introducing standards.

5. Procedure and experiences with the implementation of „5S” in Ostroj, a.s.

All unused things were removed from the production facilities in the first step. It was agreed that all the things which are not used during a period of 40 days will be removed in successive steps. Because the mechanical production is very demanding as far as

equipment is concerned, many machines, clamping devices, wastrels, supplies and components, containers, preparation components, tools, pallets, boxes and other things were gradually removed from production. The effort of the executive staff met opposition from the employees who were insufficiently informed especially in the first stage of the operation. The main problem arose when tools, preparation components, clamping devices, etc. were removed from their ready-to-use boxes which they have by their machines. These areas were literally overflowing with tools which the employees marked as „indispensable“. It emerged not sooner than in this stage what a big mistake the low awareness of the employees was which was completely underestimated by the process managers. They started working on the improvement immediately; all the employees were gradually informed about Kaizen principles. Information panels with updated information were built in many visible places within the company. The ongoing campaign also got wider coverage in the company magazine. All these measures contributed to the successful accomplishment of the first step of good management. Most useless things were gradually removed from all departments.

It was necessary to organize and arrange everything during the second step. Thanks to good awareness, the employees themselves took part in the increase of process effectiveness during this stage. All items were divided into individual categories and their maximum amounts were assigned. The pallet areas were marked in colour as well as the pallets themselves. The pallets were divided into „intermediate product“ and final in which the final products were placed.

The number of pallets in the individual plants was limited according to the planned material flow. There were a maximum number of transport pallets given to each plant. After that, there were no cases during which the work in the hall was paralysed by a number of differently arranged pallets. All the other items were treated the same way. There was a place of destination and maximum number set for all items.

The year 2006 was announced as the year of the „third S“ – Seiso (clean). The cleaning and maintenance were, of course, carried out all the time, but the current main objective was to focus on the cleanliness of the machines, tools, and accessory equipment. Unfortunately, some employees were not used to keeping their gear properly clean. Some of the new machines and devices were in very bad state due to unsuitable maintenance. Both the employees themselves and the executive staff were warned of all these deficiencies.

Thanks to the great effort, the situation improved dramatically in 2006. All machines are kept clean, many machines received new coat of paint. The accessories belonging to each machine were painted with the same colour.

The company chairmen announced a competition which helped to complete the third S campaign successfully. All divisions and plants were regularly checked each month by a group of selected employees. They were evaluating cleaning and order everywhere. Each plant received a number of points from 1–10. The results were published regularly on the information boards and in the company magazine. The competition was closely observed by the employees also because the chairmen set a price of 100.000 CZK for the winner. The employees split this amount. The competition evoked great attention and it still continues.

They started working on the fourth S (Seiketsu – create a system) by the end of 2006. A selection procedure was announced as part of the project for the selection of supplier of working clothes. A special working cloth will be purchased for employees according to their workload. The cloth will be specially made to fit the specific needs of their professions. Further, all the clothes will be divided by colour according to which department the employees belong. The main tasks of the fourth step of good management to be fulfilled are announced for this year. The emphasis is not focused only on suitability and cleanliness of the work clothes but it also takes into account the work environment. From the larger projects, it is also necessary to mention the replacement and installation of additional ventilation devices in the plants.

The year 2007 was announced as the year of the fourth and fifth „S“. The process of implementation of good management principles is to be concluded this year. The standards for each of the five steps will be introduced in the last stage within the frame of fulfilment of all the principles of good management. It goes without saying that all these rules must be observed by the employees during their work. A method for assessing the achieved progress should be part of these standards as well. The assessment carried out by the supervisor and expert adviser + competition among the departments are used at the present time.

6. The system of improvement proposals and quality clubs in Ostroj, a.s.

Straight from the beginning of implementation of the Kaizen principles the management put the accent on the development and support of the employees' activities. The main objective was to motivate the employees, to support their creative thinking and by means of their positive participation on the changes built their positive approach towards the company and their work. There has been a campaign with the objective to support the employees in submitting small ideas for development in terms of this strategy. There was no limit imposed on the area of possible suggestions. The only criterion was that the idea should be possible to realize in a short time, without high financial, material or operational and organizational requirements. The reward for a good idea is paid immediately on the next pay day. The amount of this award is determined according to its contribution to the company, eventually, as percentage of saved costs which resulted from the implementation of the new idea in operation. However, the minimum amount for an accepted inspiring idea is 500 CZK.

The employees were not very interesting in submitting these ideas at the beginning. Gradually the employees understood that it pays off to be active and to open their eyes. Over 300 improvement proposals were accepted in 2006. Moreover, the employees and teams which submit the highest number improvement proposals in the given period are evaluated on regular basis. Naturally, the winners of this competition are rewarded too.

Despite the fact that the main goal of this campaign is to „educate“ the employees and to lead them into thinking in terms of Kaizen, the financial benefits of the improvement proposals should not be forgotten. It can be said, in connection with this fact, that the financial benefit of these ideas in the year 2006 was stated at approximately 2,5 mil. CZK.

Ostroj, a.s. management expects even greater participation in the improvement proposals campaign in the year 2007. Over 90 proposals were submitted in the first two month of this year.

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Keizen – właściwe zarządzanie

Streszczenie

Artykuł przedstawia analizę kluczowych zasad koncepcji zarządzania Kaizen, nazywanych zasadami ciągłego doskonalenia. Prezentuje on japońskie i europejskie spojrzenie na kontrolę zmian zachodzących w organizacji. Opisuje również metody wprowadzania zasad koncepcji Kaizen do przedsiębiorstw.