

KAIZEN CONCEPT AND ITS APPLICATION IN MANAGEMENT OF PRODUCTION AND BUSINESS ENTERPRISE

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Summary: *Kaizen is a method of constant improvement. It comes from the Japanese word "kai" which means change and the word "zen" which means to improve. An essential translation would be a change for the better. Conducted by everyone, every day, at all levels of one company. Kaizen derives from the best practices of Japanese management, and is committed to improving productivity, efficiency, quality and, in general, business excellence. Small improvements applied to key processes generate increased profits while gaining customer loyalty. The purpose of this method is to exceed the set goals of one company. The success of this method is based on a phenomenon called KNOWLEDGE. Kaizen focuses on spending the minimum necessary resources, while delivering the best possible quality of products or services.*

Keywords: *Kaizen, improvement, quality, communication.*

1. INTRODUCTION

The author of the book "Revolution in Learning", Gordon Dryden, says "If you learn only one Japanese word, then let it be the word *Kaizen*". *Kaizen* strategy is the most important concept of Japan's competitive success. *Kaizen* means continuous improvement that includes everyone: top managers and workers. It is known that in today's world, Japan is considered one of the most productive economies, that the Japanese are ranked high on the list of the best workers, and that their economic recovery after World War II is a lesson taught at all world faculties of economics and management. Japan is a nation that, if we are talking about the great nations of the world, perhaps has the most authentic civilization and culture. As in everything else, in the field of management and economics, the Japanese are known for specific concepts, and one of them, the business *Kaizen* philosophy, has become a concept known and applied beyond the borders of Japan.

If we follow the chronology, this term first appeared in 1986 in the book "Kaizen-the key to Japanese business success" by Masaki Imai (founder of the *Kaizen* Institute). In that book, he was first mentioned it and defined as *Kaizen*, but as a practice and way of thinking it appeared much earlier. Etymologically, this word consists of two terms, "kai", which in Japanese would mean "change" and "zen", which would refer to the term "good". A literal translation would be "change for the better", and in practice that means constant improvement, which is the shortest definition of *Kaizen*. It is a strategy that means constant progress in every place and at every moment, even in small steps. Unlike the western way of thinking, where great breakthroughs and innovations are celebrated, the Japanese are satisfied if every employee makes even the smallest contribution to the daily progress of the company in which he works and the process in which he participates. This is one of the differences between the Japanese and Western way of thinking, expressed through the form of progress in business. Where Westerners see an opportunity to take the leap, the Japanese will prefer constant gradual progress.

2. ASPECTS OF APPLICATION AND PRINCIPLES OF KAIZEN CONCEPT

Some of the practical aspects of applying *Kaizen* are the following: according to *Kaizen*, maintaining the current situation is not good for the company, because the world around us is changing and thus there is a need to change the company itself.

The possibilities for change are limitless, so they need to be implemented on a daily basis. Everything that does not work properly should be changed, because ignoring the problem leads to an even worse situation. Everyone should contribute to this improvement, and so all employees should be allowed to make their suggestions and be part of the big picture. Solutions should also strive for cost-effectiveness, which means better business without a large increase in costs.

One of the key terms that is closely related to Kaizen is Gemba - which, loosely translated into Serbian, would mean "on the spot", and which means going to the real place of the problem, production, etc. This means that there is no use in theorizing in offices until you get to the place where something is realized or produced. Only "on the line" can directors see where energy and resources are wasted, where there is no economy in work, where there is room for progress. And alone Masaki Imai named his next book from this field "Gemba Kaizen" - a continuous improvement on the spot.

This concept is the most significant and most represented concept in most Japanese companies. One of the most famous examples of successful implementation of Kaizen is the company Toyota. One of the basic pillars of their Toyota production system is Kaizen. Once, after the outbreak of the global economic crisis, Toyota received about 7,000 suggestions for business improvement from its employees, and adopted about 99% of the proposals!

What is attractive in Kaizen and what could make it acceptable for our area is that Kaizen does not require significant financial resources, but rather a change of awareness to constantly work on improving business. Kaizen did come from the field of management, but as the title says, it can and must be interpreted and applied to a much wider field, and that is life itself. The fact that nothing in life is perfect and that one should always strive for progress, even in small steps, allows the basic postulates of Kaizen to be applied as a kind of philosophy of life. *Do something good for yourself and your surroundings every day, change something for the better and you are already a follower of the Kaizen philosophy.*

Kaizen is based on several business principles (Pestic, 2010, pp.95-102):

- the existing situation must not be accepted
- a positive approach should be supported orientation
- we must not look for excuses and justifications, but insist on solving the problem
- actions should be supported and ideas implemented
- should use our knowledge in teamwork
- the main advantage of the organization are its employees
- the improvement of the process will happen if it is improved little by little rather than all at once
- improvements should be implemented as soon as the opportunity arises
- recommendations for improvement must be based on quantitative and statistical methods of process evolution
- good processes bring good results
- look for yourself, analyze and understand the current situation
- use data in speech and facts in management
- take steps to eliminate the real causes of the problem
- work in a team
- Kaizen means work for everyone...
- grab all the options at a given time
- the Kaizen application methodology is performed using a PDCA matrix.

The foundations on which the Kaizen method is based are:

- autonomy in terms of independent quality control of products or services. This prevents a product of inadequate quality from arriving from the previous process and stopping or slowing down the next operation;
- standardization that is necessary to implement because only in this way can all workers be introduced to the best way to do something. At the same time, it is necessary to understand that standards, rules, are constantly changing. This is an important difference between Kaizen and ISO 9000 methodologies. ISO 9000 standards do not deal with the effectiveness and efficiency of work and processes. The standard is designed as a specification that states only what needs to be done, while finding a solution and giving instructions on how to do it is left to the organization and individuals. Kaizen gives an answer to the question: how? At Kaizen, the current standard is at the same time the starting point for the new goals we are striving for, and when we reach them we set a new standard that becomes just a springboard for new goals;
- a flexible and universally trained workforce that is the main driver of all change;
- a system that supports creative thinking and innovative ideas coming from employees in terms of exploiting the abilities and creative potentials of employees.

3. IMPLEMENTATION OF THE KAIZEN PROGRAM

When introducing Kaizen, it is necessary to keep in mind the environment in which the program is intended to be implemented. Kaizen does not require large financial investments, but appropriate preparations need to be made. It is very important that every member of a company is disciplined and that there is a team spirit among them. For the introduction of Kaizen, it is necessary to first provide the support of top managers, and then other employees. In all this, it is necessary to win over business partners and convince them that processes without stocks will not have negative consequences for their business.

The implementation of Kaizen itself should take place from the top down, while suggestions should come from the bottom up, because the best suggestions for improvement usually come from the people closest to the problem.

The implementation of Kaizen implies that the following steps are followed:

- thinking about how to do something, not why it can't be done,
- not to make exceptions and not to look for excuses and justifications,
- not to seek, that is, not to demand perfection,
- if a mistake is made, it should not be covered up, but it is necessary to correct it immediately or seek help from colleagues,
- not to invest money in Kaizen, but to think more,
- wisdom appears on the surface in difficult situations,
- look for the cause of all problems by asking the question "why" more than once,
- ask for the opinion of ten different people and not one...

Kaizen is focused on eliminating harmful activities during the value of your business. As you analyze the flow of values in small increments, you will notice harmful and useless activities that you would not normally notice. Kaizen's application methodology can be described in the words PDCA - plan, do, check, act.

- *Plan* - Create a change plan and identify the specific things you want to change. Define the steps that must be taken and assume the results of these changes.
- *Do* - Execute the plan in a trial environment. Test the change on a small sample, or on a scale, so that you can examine the result of the proposed change.
- *Check* - Examine the test results. Make sure you improve the process. Only if you are convinced of the profitability of the change, apply it to the business, if not, try again with another change.
- *Act* - Apply changes to a wider sample (overall business). Introduce a change in your standard operating procedures. Over the course of a few days, the project team goes through a complete PDCA cycle targeting a specific business area or specific activity it focuses on. The team looks for harmful activities in the course of business value and eliminates them. The subject of improvement can be anything: product quality, internal or external communication, business organization, sales, service, etc. The project team usually works during working hours because it is extremely important to experience kaizen like any other normal work process, to become an early activity that is carried out regularly according to a predefined schedule. It is needed and necessary for kaizen to become a part of your company's life.

Improvement activities are focused on where problems have arisen and where value is being transformed with the help of all operational and management sectors. And in the value chain:

- problem-oriented measures are concentrated
- the value is increased
- problems are solved
- starting points for improvement have been identified

A clear distinction between value creation and losses makes it possible to achieve targeted improvement of individual stages in the process.

4. REASONS FOR APPLYING THE KAIZEN METHOD IN PRACTICE

One of the good answers is because the implementation cost is minimal. At the moment, a good relationship between an employer and an employee makes a difference between a boss and a leader. The Kaizen method has a great contribution to improving this relationship, because with its help the results of one company have been achieved as a result of the joint effort of each employee. Companies that want to have a leading position in the market are constantly working to improve their product or service, reduce costs and, perhaps most importantly, motivate all staff to give their best. Also, companies that do not invest in research and development are disappearing from the market. In that sense, the Kaizen method helps us understand that perhaps the way we use in doing our job is not the most efficient way that exists. *“Do a great job the first time and every time; quality costs nothing, what costs is a lack of quality”* says Philip B. Crosby.

The Kaizen method is not just a continuous improvement. It also refers to *a philosophy and a way of life that strives for improvement.*

What does a day at the Japanese company *Toyota Motors* look like, for example?

Workers come every day with suggestions for improving everything: themselves, their work, the canteen, the look of the office, the way they answer the phone, their products... Their company president, Eiji Toyota, says that they use their brains in addition to their hands. *“Our workers offer 1.5 million proposals a year, 95 percent of which are practically in use.”* Imagine that number of ideas! And imagine employee satisfaction when his / her idea helps the whole company to be better!

And for the end, a quote.

Masaaki Imai, “management guru” and founder of the Kaizen Institute, says, *“The message of the Kaizen strategy is that no day should pass without some kind of improvement anywhere in the company.”* This message can be applied to any segment of our lives. Because, if we do not progress, then we are certainly regressing.

The following old proverbs from the land of the rising sun also show how much the Japanese value work and how dedicated they are to their work.

- Happiness helps sometimes, and work - always.
- He who works diligently cannot, even by heaven, be made a beggar.
- A thousand days to learn, 10,000 days to perfect.
- Easy beginnings prepare a difficult tomorrow.

It is well known that the Kaizen business philosophy was among the first to be applied by Toyota after World War II, when the Japanese economy was in turmoil, worn out and set back due to the losses caused by this event.

To see its shortcomings and find a way to get the car industry back on its feet, during a visit to Ford in the United States in 1949, Toyota discovered exceptional systems, technologies, but also major shortcomings and illogicalities. Toyota then decided to take advantage of what it saw and introduce something completely new into its business - **Kaizen**.

Kaizen's philosophy is to work on the continuous improvement of not only production or just one sector in the company, but the entire system, people, relationships, processes. Kaizen should be understood as using every day to improve something. A small change can have a big impact on the overall strategy. If you have reached a goal that you set for yourself half a year ago and you are satisfied, and you spend the next half of the year in the same position and tap in one place, that is not Kaizen. Simply put, *you can never be satisfied enough, but you must always set new goals for yourself and strive for something higher.* Masaki Imai is the father of the Kaizen philosophy and the founder of the Kaizen Institute.

"Kaizen's message" is that no day in the company should pass without any improvement. That this is not just a theory is also shown by the data from the factory Japan Tobacco International a. d. Santa, the only one in Serbia that fully implements Kaizen management. Since the beginning of Kaizen's implementation, productivity in the factory has increased by as much as 40 percent, and the amount of scrap has decreased by 46 percent. Therefore, it is necessary to attract small and medium businesses and practically show them how, with the implementation of Kaizen, they can quickly progress and develop, thus increasing profits and contributing to the economic development of Serbia.

5. CONCLUSION

As we live today in a turbulent market environment, and when the old way of running a company no longer works, new concepts in management are being developed. One such concept is Kaizen, and that is the Japanese business philosophy, which is based on the pursuit of continuous improvement. This concept is based on the fact that nothing is perfect and needs to be constantly better and improved. This philosophy of Kaizen is unchangeable, while the tools and techniques of implementing this philosophy can change, supplement and improve over time. Knowing the economic development of Serbia and market conditions, it can be said that the implementation of Kaizen in as many Serbian companies as possible would bring faster progress of the Serbian economy and benefit the whole society. It is very important to apply concepts that give results and for which there is a defined methodology of application in business processes. The Kaizen concept could be a very appropriate approach that can make a significant step towards higher levels of their operational capability. Applying Kaizen is not easy. It requires time and patience, as well as continuous education and training of all participants in the process. Process improvements can only be within the limits of system flexibility and readiness for change. The Kaizen concept provides a solid basis for escaping inferiority, to which, despite the lack of money, we do not have to be doomed. Therefore, it is necessary that the principles and methods of the Kaizen concept be extended to the entire environment of this system. It allows quantity to be offset by quality, in which a new context of use would allow for new potential. Kaizen requires full adherence to prescribed standards and procedures.

Applying Kaizen tool we have to:

- we start with *facts* (not assumptions and feelings),
- we implement *temporary solutions* to protect users (internal or external),
- find the *cause* of the problem,
- *check* whether the solution we found can be applied only today or will be able to apply that solution always,
- *standardize* and *extend* improvements to the entire production and business enterprise.

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