



AN EVALUATION OF APPLICATION OF TECHNIQUES AND INSTRUMENTS OF KAIZEN IN HIGHER EDUCATION INSTITUTES IN INDIA

Dr. Suhas Bhaskar Joshi

Associate Professor & Head, Marketing Department, MES Garware College of Commerce, Pune.

Abstract

Despite the defeat in the Second World War and devastation due to constant earthquakes, Japan has made tremendous progress in the second half of the twentieth century and acquired the status of super power. Industrialists and academicians all over the world are anxious about the possible application of Kaizen and other techniques of Japanese style of management in different types of business and non-business organisations. Kaizen means continuous and gradual improvement in the performance. The Kaizen process has two basic aspects- maintaining present position and improving the present position. Kaizen includes various techniques and instruments such as 5 S Technique, TQM and TPM, 5 Why Technique and SEITON etc. The present paper tries to evaluate whether these techniques and instruments of Kaizen can be applied in higher education institutes like colleges and management institutes.

Key Words: *Administrative Office, Higher Education Institutes, Instruments of Kaizen, Techniques of Kaizen.*

1. Introduction

Five years long Second World War came to an end when two densely populated cities from Japan were destroyed with the dropping of two atom bombs by U.S. army. The economy of a small nation like Japan was shattered. Yet, like the famous 'Phoenix' bird (who, as supposed, takes birth from ashes), Japanese economy displayed a miracle. The new Japan was born amongst the defeat and devastation, to achieve the status of 'super power'.

The secret behind the success of Japanese economy is mainly associated with Kaizen and other concepts from Japanese style of management. It has been observed that the instruments of Kaizen are successfully implemented by business organizations not only in Japan, but in several nations all over the world. However, it is possible to go ahead and state that the Kaizen technique and instruments can be applied in various types of non-business organisations including higher education institutes like colleges and management institutes.

2. Japanese Style of Management

Management style is a philosophy or set of principles by which you exploit the capacities of your employees. It is a distinctive way in which organisation makes decisions and discharges various functions including goal setting, formulation and implementation of strategies, basic management activities and dealing with stake holders.

Businessmen, industrialists, academicians and general public all over the world have accepted and appreciated the significance and role of Japanese style of management in the amazing success of Japanese economy. Socio-cultural values and traits of quality conscious, workaholic and patriotic Japanese workers are ideally blended with managerial systems in corporate Japan. Honda, Sony, Toyota, Suzuki, Mikado, Hitachi, Matsushita and so many Japanese companies have achieved tremendous success on the basis of their effective style of management.

Japanese style of management considers various terms and aspects such as paternalism and groupism, life time employment, seniority based wage system, continuous learning, in-company training, Quality Control Circles and Total Quality Management, 'Kanban' or 'Just-In-Time' etc. Japanese management style also includes consideration of three more terms like Theory Z, Ringi Seido, and Kaizen. Among these, Kaizen is so crucial and basic that it is concerned not only with the working life, but also with personal life and social life of an individual.

3. Kaizen: Conceptual Framework

(i) Meaning and Nature: Masaaki Imai, in his book 'Kaizen: The Key to Japan's Competitive Success', (1986), for the first time introduced the concept of Kaizen to the western world. 'Kai' means 'change'. 'Zen' means 'better'. Kaizen means improvement. Moreover, Kaizen refers to continuous and gradual improvement performance. According to Imai, Kaizen is based on certain guiding principles, such as –

- Good processes bring good results.
- Go see yourself to grasp and improve the current situation.
- Work as a team.
- Kaizen is everybody's business.
- Big results come from many small changes accumulated over time.



The term Kaizen, however, is different from the term 'innovation'. Kaizen signifies small improvements made in the status quo as a result of ongoing efforts. Innovation, on the other hand, involves a drastic improvement in the status quo as a result of large investment in new technology and / equipments. In Japan, whenever innovation is achieved, it is followed by a series of Kaizen efforts to maintain and improve it.

In business organisations, Kaizen concept is applicable not only in the production activities, but also in profit planning, total quality control programme, purchase activity, supply chain management, systems improvement, corporate culture, customer satisfaction etc. In the recent past, Kaizen has been applied in several other areas like health care, psychotherapy, life coaching, government activities and banking.

(ii) Kaizen Process: Kaizen is a continuous and ongoing process which includes two stages such as – Maintaining the present position and improving the present position. These two are referred as – SDCA and PDCA.

SDCA includes following aspects-

S- Standardize: Determine a standard process of doing a task.

D-Do: Implement as per the standard.

C-Check: Check/Watch/Observe everything at 'Gemba' (i.e. work place)

A-Act: Take corrective action, if necessary.

PDCA includes the following aspects-

P-Plan: As per the 'Act' in SCDA

D-Do: Implement

C-Check

A-Act: Take further action, if necessary.

In other words, Kaizen process includes seven steps such as – Define the area of improvement, Analyze the problem, Identify the causes, Plan of action, Implementation, Confirmation of results, and standardization.

4. Techniques and Instruments of Kaizen

Kaizen includes various aspects, techniques and instruments. Some of them are described below.

(1) 5 S Technique: This is an important technique of Kaizen which includes following five aspects.

- SEIRI: Sort- It includes sorting of materials and products according to necessity, and disposing of unnecessary things which is referred as 'Mooda'. In a broader sense 'Mooda' involves avoiding wastage of all unnecessary activities.
- SEITON: Systematize- It means all the materials, products, equipments etc, should be kept at a predetermined proper place following a definite system. Here, it is referred as- PEEP which means 'Place for Everything, and Everything at its Place.
- SEISO: Shine/Clean- It refers to cleaning your work place and all the machines and equipments. Machines, according to this term, must be constantly examined and kept in good condition to avoid the machine breakdown and work stoppages.
- SEIKETSU: Sanitize- It refers to improvements in work methods and procedures along with improvements in infrastructural facilities at the work place. For the purpose, it is essential to go to 'Gemba' (i.e. work place), and imagine over possible improvements.
- SHITSUKE: Self-discipline & Training- According to this term, it is necessary to have continuous training by each and every person working in the organisation. New better methods and procedures be adopted. Employees should display self-discipline.

(2) TPM and 5Why Technique: TPM means Total Productive Maintenance. According to this concept, attempt should be made to avoid the possible wastage of time which results due to the searching of certain things and items. This can be done by implementing 'SEITON' and 'PEEP' i.e. by keeping the equipments and other things at predetermined proper place. The '5 Why Technique' suggests that when a problem arises one need to ask question 'why' till you get the correct answer, may be in less than five times. However, care should be taken to ask the question 'why' (it happened), and not 'who' (did it). For example, if a machine is closed, you may ask following questions to get the real answer.

Q. - Why machine is closed?

A. - Because fuse has gone.

Q. - Why fuse is gone?

A. - Because it was overloaded.

Q. - Why it was overloaded?

A. - Because bearing was not working.



- Q. - Why bearing was not working?
A. - Because it could not get the grease.
Q. - Why it could not get the grease?
A. - Because grease gun was not at its place.

Thus by keeping things at their proper place (for instance, grease gun in the above example); problems do not arise at all. This Kaizen instrument believes that attempt should be at preventive action, and not at correction or corrective action. In this sense, the terms TPM and PEEP are important for the smooth and continuous flow of production.

(3) Kaizen Process and 5W1H Technique: Kaizen includes continuous and gradual improvement in performance. It includes three stages in which 5 W questions (what, when, where, why and who) & 1H (how) question may be asked to get the desired results. This may include following stages.

I. Understand the present situation: Before any improvement is done, it is basically essential to understand the present situation. For this purpose, 6 questions may be asked such as- What is being done at present? When it is being done? Where it is being done at?..etc.

II. Imagine Alternatives: In this stage, what alternatively could be done is imagined. It requires creativity and imagination power to think about alternative activities which could be undertaken. In this stage, again 6 questions are asked such as – What alternatively could be done? When alternatively it could be done? Where alternatively it could be done?...etc.

III. Select the best alternative: After comparing the available alternatives, the best possible alternative is finally selected. In this stage also, 6 questions are asked to get the ideal answer such as - What should be done? When it should be done? Where it should be done?...etc. Answers to these questions lead to establishment of an ideal or standard performance. Once it is established, again the Kaizen process is newly started with the first stage i.e. analyzing the present situation.

(4)TQM and QCCs: Kaizen and the whole Japanese style of management believe in the quality enhancement. Quite naturally, the two terms ‘TQM’ and ‘QCCs’ are very important in this context.

TQM means Total Quality Management. Total means everybody- from top to bottom in the organisation, is involved in quality improvement process. Quality refers to an ability to perform the desired function in a better manner. It is meeting expectations first time, and then every time. Management is a process involving three basic activities such as planning, executing and controlling. Thus, TQM takes care of quality in every task performed, from the beginning till end, and it involves wholehearted involvement of everybody- from top managerial person to the lowest level employee in the organisation. In comparison with ‘inspection’ (which refers to post-production or post-performance evaluation, TQM takes care from the beginning to ensure the quality performance.

QCC means Quality Control Circles. Under this concept, there is an emphasis on quality control. QCC is a group of employees usually including 8/10 members, with a supervisor as the leader. QCC not only identifies the problem, but tries to solve it. QCCs are established in different sections and departments. QCC not only tries to improve the quality of various activities, but tries to develop a sense of involvement and participatory management in the organisation.

5. Hypothesis

It is possible to apply the techniques and instruments of Kaizen in the office administration of a higher education institute like a college. Effective application of such Kaizen techniques and instruments helps in improvement of performance of the office administration of such college.

6. Research Methodology and Scope

The present research article is based on secondary data which is mainly collected from the books and websites on internet.

Although instruments and techniques can be applied in various types of higher education institutes like colleges, management institutes, professional training organisations, and, departments of universities, attempt is made here to focus on the possible application of Kaizen in administrative offices of colleges only.

7. Higher Education System & Administrative Offices in Colleges

The term ‘Higher Education’ is also referred as ‘Post-secondary Education’ or ‘Third Level Education’. It is an optional final stage of formal learning. Higher education is often available in various types of educational institutes like colleges, business schools, vocational schools, management institutes, and in departments of universities. India’s higher education system is the third largest in the world, next to United States and China. In India, higher education system is expanding in leaps and bounds. By the end of decade of 2001-’11, around India had 42 central universities, 275 state universities, 130 deemed



universities, 90 private universities and a very large number of colleges offering higher education to millions of Indian students. In this decade alone, 20,000 new colleges and 8 million new students were added to the huge Indian higher education system. Since colleges play a pivotal role in the higher education system, it is absolutely important to improve the quality of administrative efficiency of the colleges in India. Hence, the possible role and utility of Kaizen concept in the administrative offices of colleges need to be evaluated.

An administrative office of a college may have a specific organizational set up, in which the office registrar who is in-charge of administrative office is directly reporting to the principal. Registrar may be assisted by the deputy registrar and /or office superintendent and /or head clerk. Office may also include cashier and clerks, as well as attendants or peons. Clerks may be counter clerks and back-end office clerks.

The administrative office of a typical college, whether of science, or commerce, or arts, or engineering, or medical stream, may include mainly the following activities-

- Admission to students: On line or otherwise, various methods & procedures followed
- Accepting various types of fees and fines
- Financial Management: Budgeting, actual spending, Maintaining accounts and records
- Communication, written as well as oral, with the management, teachers, students, parents, office staff
- Recording attendance of students: Attendance sheets, Roll Calls etc
- Recording attendance of teaching and administrative staff: Muster, Biometric Attendance
- Conduct of examinations: Internal as well as University exams.
- Salary Administration
- Appraisal by external committees: University committees (LIC etc.), NAAC, Auditor
- Files and Documents: Personal files of staff, service books, Pension files etc.
- Facilitating the conduct of lectures, cultural programmes, sports tournaments etc.
- Purchase and maintenance of furniture, equipments, computers etc,
- Purchase, storage and issue of stationery
- Grievance settlement.

The list of activities and functions mentioned above is a representative, and not an exhaustive one. There are several other activities undertaken by the office administration of a college. Although the image of a college in the minds of a students and parents is basically created by the teaching staff, it is the administrative office which also influences the attitude of all the stake holders. The quality and efficiency of performance regarding the activities mentioned above hence need to be maintained and improved. In this context, one may imagine the possible role of techniques and instruments of Kaizen in the administrative offices of colleges.

8. Application of Kaizen in Administrative Office of Colleges

The concepts, techniques and instruments of Kaizen can be applied in administrative office of colleges in the following manner.

1. Basically, all the employees in administrative office should go the 'Gemba' (i.e. work place) and observe carefully the activities performed. After the detailed study, it is essential to identify 'Mooda' (i.e. unnecessary actions). Even equipments, files and stationery items not required, should be immediately disposed off.
2. Following the concept of constant improvement, PDAC and SDCA stages of process should be undertaken in respect of various activities like admission process, conduct of examination, recording attendance of students, filing system etc.
3. Office registrar should think in respect of implementation of 5 S Technique. Considering the principle of SEIRI, arrangement of equipments, furniture, computers, files etc. should be done in such a way that result into optimum use of available space. Remembering the terms SEITON, PEEP and TPM, care should be taken to see that there is place for everything, and everything should be kept at its predetermined place. This will avoid stoppage of work due to searching of certain required item or equipment or file or important document. Following the principle of SEISO, if all the computers, Xerox machine and other equipments are regularly cleaned and examined there will not be problem of stopping of work due to breakdown of these machines. Constant training and self-discipline, would help the employees in improving the performance.
4. TQM and QCCs can also play an important role in office administration of the colleges. Remembering the TQM concept, if everybody including principal and registrar to lowest level clerk is involved in the Kaizen process, it is easier to improve the quality of performance. If different Quality Control Circles are formed of office employees,

quality of various functions and activities can be improved. QCCs also encourage the creativity of employees and their involvement in the managerial decision making process.

5. It is also possible to apply other concepts of Japanese style of management like Kanban or Just-In-Time, Theory Z, and Oyabun-Kobun relationship in office administration. Following the 'Kanban' or 'Just-In-Time' system, office stationery and other day to day required items may be purchased in small quantity, to avoid the storage problem and unnecessary locking up of capital. Theory Z believes in mutual trust and cooperation among employees to achieve desired goals, which can be easily applied in college offices. 'Oya' means father, and 'Ko' means child in Japanese language. Office registrar is supposed to play a role of a father treat the office staff like his children. Such paternalistic approach can certainly lead the office into a family, and result into disciplined ambience yet an intimate bond among the employees.

9. Suggestions for Effective Application of Kaizen in Administrative Office of Colleges

It is possible to have effective application of Kaizen techniques and instruments in the colleges and other higher education institutes, provided following suggestions are taken into account-

1. Basically, there must be a total commitment towards the application of Kaizen in the administrative office of the college. It means all the persons working in that college i.e. from principal and registrar to lower level clerks and attendants should accept, appreciate and be ready to apply Kaizen in the concerned institute.
2. It is also essential that everybody working in the administrative office need to understand the meaning and various aspects related to the 5 S Technique, TQM and TPM, QCC, Kanban System, Theory Z etc.
3. It is necessary to offer the comprehensive and up to date training of possible implementation of Kaizen techniques to the administrative staff of the concerned college.
4. The real secret of success behind the success of Kaizen is the positive and enthusiastic mentality of employees in the organisation. Hence, efforts be made to develop the positive attitude among these employees to accept wholeheartedly the implementation of Kaizen techniques and instruments.
5. Everybody working in the office must understand the significance of constant improvement in quality. All should remember the motto-'Quality first, and always.' Everybody has to constantly imagine of the better ways and methods of performing his/her day to day work.
6. A system need to be developed for the maintenance of all the machines, equipments, computers etc. used in the office. There should not be single incident of stoppage of work due to breakdown of machine or equipment. Office should be utilized in an optimum manner keeping all the required items placed at proper predetermined places.
7. Attempt should be made to constantly satisfy all the groups associated with office such as management, teachers, students, office staff and parents, with the efficient performance of all the functions and activities.
8. Image of any college in general and administrative office in particular is dependent on the effective internal and external communication. Hence, conscious efforts be made to improve the quality of written communication (e.g. notices displayed on the notice board), and oral communication (e.g. face to face conversation with students). Such communication should develop the emotional bonding and offer best possible services to all the stakeholders.

10. Conclusion

Japanese economy has made a tremendous progress in the recent past on the basis of peculiar style of management. Kaizen has been the backbone of this Japanese style of management. With effective application of Kaizen, it is possible to achieve the continuous improvement in performance. However, it is a myth that Kaizen and other concepts of Japanese style of management can be applied only in business organisations, and that too in Japan only. The techniques and instruments of Kaizen can be and should be implemented not only in colleges, but in other types of higher education institutes in any part of the world including India for the better and improved performance.

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