



IMPLEMENTATION OF JAPANESE 5'S METHODOLOGY IN THE LIBRARIES

Mr. Harshal Bhimsen Pawar

Librarian, Prof. Sambhajirao Kadam College, Deur
Tal. Koregaon, Dist. Satara, Maharashtra (India)

Corresponding Author - Mr. Harshal Bhimsen Pawar

Email - harshalpawar24@gmail.com

DOI - 10.5281/zenodo.7293909

Abstract:

The main aim of this article is to know the implementation of Japanese 5's methodology in libraries. The article gives an overview of the 5'S principles (Seri, Seiton, Seiso, Seiketsu, Shitsuke) and their usefulness in library operations. It provides a qualitative 5'S approach to the library managers through which they can obtain sustainable and long-term results in the library work system. Furthermore, the specific examples in library operations for improving service efficiency with 5'S are discussed.

Keywords: 5'S, Seiri, Seiton, Seiso, Seiketsu, Shitsuke, Lean, Libraries

Introduction:

In the 21st century, great changes are taking place in the business, industries, education and service sectors. The 'transform' has become the watchword of today's changing era. It has become imperative for all organizations and their libraries to make drastic changes in their current operations in order to provide maximum customer satisfaction and help them to survive in global competition. 5'S is one of the useful Japanese methodologies accepted at the global level by many organizations and industries to improve their work systems. It's known for strong commitment from top to bottom management to bring quality and continuous improvement to an organization (Liker, 2004)

As a backbone of the organization, it is a major concern for the libraries also that they should adopt new techniques, tools, quality measures and practical methodologies for improving their work

system and offering quality services to their patrons. Implementation of the 5'S in the daily library work routines may help the library managers to maintain and organize the working environment effectively. There are also many benefits to using these methods in the libraries, such as a tremendous change in the working process, maintaining the workplace neatly, reducing wastage, following and using standardized tools, saving the time of users and staff, increase in efficiency of the staff, improving quality of services and many so on.

Origin of 5'S:

5'S is a Japanese philosophy that was introduced in the Toyota Corporation by Takashi Osada during the 1980s. There were two major frameworks proposed for applying the 5'S to business environments, the first one proposed by Takashi Osada (1995) and the other by Hiroyuki Hirano (1995). This philosophy emerged as a part

of the Toyota production system to improve the process and reduce wastage in the workplace. 5'S is also known as 'Lean Manufacturing' in western countries which involves the use of many tools such as *5S*, *Kaizen*, *Kanban*, *Jidoka*, *Heijunka*, and *Poka-yoke* (Velling, 2021)

5'S Methodology:

5'S is a systematic working methodology known for improving quality that focuses on locating and maintaining everything in its own place so that an individual can perform his work in the most efficient way. 5'S is a set of basic working principles that includes five Japanese words which start with the alphabet 'S'. Each 'S' indicates a particular process of all five steps that improve the work system within the organization. These principles are known as *Seiri*, *Seiton*, *Seiso*, *Seiketsu* and *Shitsuke* which lead an organization to success by applying standard tools, techniques, and procedures with the complete involvement of each employee to achieve the goals set by the organization.

1. *Seiri* 整理 (Sort Out):

Seiri means sorting out and organizing things neatly at the workplace. It recommends throwing out the useless things, removing the things that are not required temporarily and organizing the things handy that are most required at the workplace.

2. *Seiton* 整頓 (Set in order):

The second step *Seiton* means all required things are to be set in systematic order. Every item should be kept in its own place or should be rearranged as per requirement. This avoids unnecessary movement of employees and the time saved can be used for completing the assigned work in a minimum time.

3. *Seiso* 清掃 (Shine):

Seiso means to shine or clean the workplace. This principle states that if the workplace is clean, the employee will be happy and his efficiency will definitely increase. Therefore, the workplace needs to be cleaned regularly.

4. *Seiketsu* 清潔 (Follow Standardization):

The *Seiketsu* refers to standardization. Every organization needs to set standardized policies and use the standard tools as well as follow the Standard Operating Procedures (SOPs) in daily work routines for maintaining standardization and to obtain the best results.

5. *Shitsuke* しつけ (Discipline):

Shitsuke is a principle that promotes discipline within the organization. Every employee in the organization needs to follow the rules and regulations. He should follow the work procedures and maintain discipline while working in the organization. It begins with self-discipline and ends with the institution as a whole. Maintaining discipline helps for sustaining good results.

The 5'S methodology is used for constant improvement in work processes not only in the manufacturing sector but all other businesses and service sectors like in the libraries as well.

Related Studies:

There are several studies done related to 5'S methodology and its implementation in libraries and other service sectors. Each of these studies had a different research approach. Among them, selected studies are summarized as follows:

Mondal (2020) shared his experience regarding quality improvement in the library workplace through systematic

applications of the 5'S in the school library. He found that 5'S is an effective technique used for the betterment of the library workplace environment and it makes the library a learning hub for all stakeholders.

Randhawa and Ahuja (2017) investigated the implementation process of 5'S across all levels of organizations and highlighted the significant contributions of 5'S to the organizations.

Bahadorpoor et al. (2018) investigated the library readiness for applying the 5'S methodology in public libraries in Iran and other Islamic worlds. The study was an attempt to determine the possibility of the 5'S application in the library. The study found that librarians have sufficient knowledge of implementing 5'S in the library and according to them, implementing the 5S is relatively possible.

Chourasia and Nema (2016) reviewed the 5'S methodology as one of the effective tools of lean management in the services sector. He explained that the 5'S methodology helps in organizing a workplace for increasing efficiency, decreasing waste, and improving the quality of products and services. Results showed that 5'S can also be applied in the service industry to satisfy customers.

Maidhili et al. (2014) discussed the 5'S strategies for improvement in library space management. Researchers explained the different aspects of the 5'S, Kaizen and PDCA cycle. The study revealed that 5'S engages people by using standards and discipline.

Chuanjie (2013) also studied the implementation plan of 5'S in the university library. It was found that 5'S practices enhanced the quality of library services and increased satisfaction among the readers in the university library. It was revealed that the 5'S methodology implemented by the university library had

good extension value among the readers.

Terakhir (2010) revealed that the 5'S technique provides an effective possible way out of doing work through regular controls and a clear audit of the library system.

Liu (2006) shared his experience of applying the 5'S system in the Hong Kong Baptist University Library. The researcher found that the 5'S system provides a useful framework to maintain a pleasing environment for library staff in daily working and for library patrons to engage with the library.

Vanti (1999) identified the benefits of the application of the 5'S program in the university library in the context of finding concrete solutions to problems, significant advances in user services and maintaining quality in the workspace etc.

Implementation of 5'S in the Libraries:

As libraries are the servicing agencies, they have to offer useful and qualitative services to their patrons. Libraries have to always seek new ideas, methodologies, and tools and have to implement them in the work system to provide better services to the users. The smart use of 5'S enables libraries to make quality enhancements to their services. Following Figure 4 shows the flow of the 5'S process in the library.



Fig.: 5'S Process in Library

1. Seiri (Sorting in the Library):

The first step of 5S is a *Seiri* which means systematic organizing of required tools, equipment and furniture, materials in a library and further deciding what needs to be kept and what can be removed.

Seiri can be implemented by performing the following practices in the library:

- a) Removing unwanted items at working places in the library i.e., Book Processing Section and making better workspaces
- b) Arranging service desk and selecting suitable tools and equipment for delivering quick library services
- c) Maintaining routine care of library furniture and periodic maintenance of equipment
- d) Separating pass channels for library staff and for patrons
- e) Organizing Stack Room, Book Processing and other library sections etc.
- f) Making library space barrier-free

2. Seiton (Set in order in the Library):

The second step of 5'S is a *Seiton* which means all required things are to be set in systematic order. In this step, things should be considered which items are used most frequently in the library and which type of user required which items.

Seiso can be implemented by performing the following practices in the library:

- a) Orderly shelving of reading material in the stack section.
- b) Orderly placing
- c) Arrange the library workspace/ sections logically to save time and cost
- d) Arranging new arrivals, periodicals, and text-reference sections logically
- e) Preparing labels, pictures and other assistive indicators for the library users to assist them while locating

the required reading material.

- f) Keeping returned reading material in separate boxes/ trolleys
- g) Displaying the layout of the library building and sections
- h) Displaying notice-boards, library rules, and guidelines in places that can be seen
- i) Installing safety/ security equipment- fire extinguisher etc. at the proper place

3. Seiso (Shine the Library):

The third step of 5S is a *Seiso* which means cleanliness. This process is related to the different types of housekeeping operations performed in the library.

Seiri can be implemented by performing the following practices in the library:

- a) Maintaining the tidiness in the library
- b) Clean up the library work area and make it neat and easily accessible
- c) Cleaning various sections in the library such as the stack section, reading room, property counter, and IT section etc.
- d) Shelving books on time
- e) Arranging service desks on time
- f) Keeping the counters and service desk dust-free
- g) Putting private items at the property counter only
- h) Removing old reading material, newspapers and other garbage in the library frequently
- i) Following green practices and making the library environment pleasant and stress-free
- j) Applying Paste-control for the preservation of printed books and other rare reading material

4. Seiketsu (Follow Standardization in the Library):

The third step of 5S is a *Seiketsu* which means using the standard

process and standard tools in the working system.

Seiketsu can be implemented by performing the following practices in the library:

- a) Following standard operating procedures (SOP) in library operations
- b) Preparing standard rules and regulations for library staff and patrons
- c) Using standard classification, cataloguing and indexing tools/methods for technical processing of reading material
- d) Arranging library sections and architecture of library building according to the guidelines issued by the higher educational bodies, i.e. UGC, Affiliated University etc.
- e) Using standard licensed software
- f) A standard evaluation method should be used to assess the system and procedures

5. *Shitsuke* (Sustain/ Monitoring the Library):

The last and important step of 5S is a *Shitsuke* which means monitoring each operation in the library to sustain the development and good results

Shitsuke can be implemented by performing the following practices in the library:

- a) Following the discipline, rules and regulations of the library
- b) Organizing regular meetings of library staff
- c) Maintaining harmony and cooperation among the staff
- d) Keeping silence in the library
- e) Monitoring the library activities and keeping records and statistics regularly
- f) Seeking long-term solutions rather than temporary solutions to

problems occurred

- g) Perform the regular maintenance of computers, machinery, and other equipment that are most required.

Conclusion:

The libraries are known as service agencies. Since the existence of libraries is basically dependent on their patrons. They should be provided with the best services in the stipulated time. If techniques like 5's are implemented in the library skillfully, the services, facilities and overall work culture of the library can be improved and the results will definitely be game-changing for the library and library associates. It will definitely help in the smooth functioning of the library system. Sincere efforts to be fully involved through 5'S methodology enable the library staff to build a bright image among the library patrons. So, adopting new techniques like 5'S in routine library practices is essential in the libraries

References:

1. Bahadorpoor, Z., Tajafari, M., & Sanatjoo, A. (2018). Implementation of 5S methodology in public libraries: Readiness assessment. *Library Philosophy and Practice (e-Journal)*, 1636, 16.
2. Chourasia, R., & Nema, D. A. (2016). Review on implementation of 5'S methodology in the services sector. *International Research Journal of Engineering and Technology (IRJET)*, 3(4), 1245–1249.
3. Chuanjie, X. (2013). Research on implementation plan of 5'S management in university library. *Proceedings of the 2nd International Conference On Systems Engineering and Modeling (ICSEM 2013)*, 574–

- 577.<https://doi.org/10.2991/icsem.2013.113>
4. Hirano, H. (1995). *5 Pillars of the visual workplace*. Productivity Press.
 5. Liker, J. (2004). *The Toyota way*. Simon & Schuster Inc.
 6. Liu, M. L. Y. (2006). Library as place: Implementation of 5'S system. *Journal of East Asian Libraries*, 2006(139), 9.
 7. Maidhili, S., Meenambika, G., & Nithyanandam, K. (2014). *Application and usefulness of 5'S and KAIZEN for library space management*. Pdfslide.Net.<https://pdfslide.net/documents/application-and-usefulness-of-5s-and-kaizen-for-library-presentedp-s-8-5saa.html>
 8. Mondal, T. (2020). Quality improvement with 5S for school library. *SRELS Journal of Information Management*, 57(5), 253–257.<https://doi.org/10.17821/srels/2020/v57i5/153411>
 9. Osada, T. (1995). *The 5S's: Five keys to a total quality environment*. Asian Productivity Organization.<https://www.standardmedia.com/The-5Ss--Five-Keys-to-a-Total-Quality-Environment-1727-book.html>
 10. Randhawa, J. S., & Ahuja, I. S. (2017). 5'S implementation methodologies: Literature review and directions. *International Journal of Productivity and Quality Management*, 20(1), 48–74.
 11. Terakhir, T. (2010, July 5). Implementing 5S in the library. *MinD*.<https://yosevasilaen.wordpress.com/2010/07/05/implementing-5s-in-the-library/>
 12. Vanti, N. (1999). Quality environment in a university library: Application of 5S's program and a participatory style of administration. *Ciência da Informação*, 28(3), 333–339.<https://doi.org/10.1590/S0100-19651999000300011>
 13. Velling, A. (2021). 5S System in Lean Manufacturing. *Fractory-Engineering Blog*.<http://https%253A%252F%252Ffractory.com%252F5s-system-lean-manufacturing%252F>