Review on 5S in warehouse of Win Agency, Theni.

By

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20MBA155

Under the guidance of

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A PROJECT REPORT

submitted

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BONAFIDE CERTIFICATE

Certified that this project report titled "**Review on 5S in warehouse of Win Agency, Theni**" is for course completion of Major Project is the Bonafied work of **SURYA M R** who carried out the project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Faculty guide — Head of the Department

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Softcopy Submitted for the Project Viva-Voce examination held on

_____

Internal Examiner — External Examiner

(Signature with date) — (Signature with date)

DECLARATION

I hereby declare that this Research project report entitled as, **"Review on 5S in warehouse of Win Agency, Theni**" has been undertaken for academic purpose for the course submitted to Anna University in partial fulfilment of requirement for the award of degree of Master of Business Administration. The project report is the record of the original work done by me under the guidance of Dr. R. VINAYAGA SUNDARAM, Assistant Professor, KCT-BS during the academic year 2020.

I, also declare hereby, that the information given in this report is correct to the best of my Knowledge and behalf.

Place: Coimbatore Name and Signature

Date: STUDENT NAME

Acknowledgment

I express my sincere and heart-felt gratitude to our **Late Arutchelvar Dr. N. Mahalingam** and the **Management of Kumaraguru College of Technology Business School** for their direction.

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PROJECT COMPLETION LETTER

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Certificate of completion

This is to certify that Mr. Surya M R, Reg.no: 20MBA155 student of KCT Business School, Coimbatore has successfully completed the project from (01/07/2021 to 28/07/2021).

During this period, he has shown keen interest in his assignments.

We wish him every success in his life and career.

FOR WIN AGENCY

M. UTHAYAKUMAR

MANAGING PARTNER

ABSTRACT

This project deals with the review on implementation of 5S in warehouse of an Agency. Warehouse is used to store products and provide information about the conditions of inventory stored in warehouse, so that we can easily access to anyone needed. This project describes about the application of the 5S work culture in the warehouse area. The implementation of 5S concept is proven to eliminate waste. After getting order from the retail stores, it is odd for the employee to search the product in the huge warehouse and it also takes lots of time and movement while searching. In order to eliminate the time-consuming and reduce the movement. It is necessary to improve by the 5S implementation principles, namely Seiri (sort), Seiton (Set in order), Seiso (Shine), Seiketsu (standardise), and Shitsuke (Sustain).

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CHAPTER 1

1. INTRODUCTION

In the era of industrialization there was a sudden increase in the number of industries. And they were not able to promote and deliver their product to their customer in every place, in which they take help from an agency to promote their product to the retail stores and to the customer. The role of the agency is to buy bulk order from the company and then they split the product and sell to the retail store owner. Agency are the major players for the company to sell/delivery their product to their customers.

1.1 ABOUT THE STUDY

In this project, the review about implementation of 5S in warehouse of Win Agency, Theni.

1.2 STATEMENT OF THE PROBLEM

- Product in the warehouse was not arranged properly. They are arranged the product according to the time when they get product from the company.
- Consuming more time while taking the product and also, we need to search for a while to get a correct product for delivery to the retail store.
- While searching for the product the movement of the employee is also high and they get tired very quickly.

1.3 OBJECTIVES OF THE STUDY

Implementation of 5S

- Product should be arranged properly according to FMCG, FMCD, etc. So that employee can get product easily.
- Therefore, employee movement inside the warehouse can be reduced.
- Searching time for the product in the warehouse can be eliminated by using 5S.

CHAPTER 2

INDUSTRY PROFILE

2.1 BACKGROUND OF THE INDUSTRY

Name of the company	:	Win Agency
Year of establishment	:	2013
Authorized person	:	Mr. Udhayakumar M
Address	:	1,Rotary Charitable Trust Building, Theni Main Road, Chinnamanur, Tamil Nadu - 625515
Mobile	:	8098846124
Email	:	winagency46@gmail.com

2.2 Products:

A.V. Thomas & co

- Ghee
- Tea

FINOLEX CABLES LIMITED

- Cables, Bulb & Bulb holder.
- Switch Board.

DABUR

- Paste
- Hair oil
- Face wash

DETTOL

- SOAP
- HAND WASH
- SANITIZER

MEDIMIX

- SOAP AND FACE WASH

2.3 MAJOR PLAYERS:

1. Manikandan Agency
2. Senthil Agency
3. O.P Agency
4. Sivam Agency
5. Marun Enterprises

2.4 CHALLENGES FACED BY THE INDUSTRY:

- They have to market their product to the retail stores.
- Since the product which they distribute is a FMCG product. They need to distribute the product quickly.

CHAPTER 3

REVIEW OF LITERATURE

J. Michalska and D Szewieczek (2007), the aim of this work is to present the 5S methodology. In this study, 5S rules were analyzed and implemented into the manufacturing process. Based on our research, we have come to the conclusion that the application of 5S rules leads to big changes in the company, for example: improving processes by reducing costs, increasing the efficiency and effectiveness of the process, maintenance and improvement of machines. efficiency, safety and pollution reduction from industry, discretionary procedures. The 5S methodology allows for the analysis of processes in the workplace. 5S is a methodology for creating and maintaining well-organized, clean, high-performance and high-quality jobs. Our own research has convincingly shown that teaching 5S work rules is very important. The key is to break the activity down into several key steps and maintain continuous improvement. The 5S method launches every improvement program in the company [1].

S. B. Khedkar et al (2012), discussed that 5S is the basic foundation of a lean manufacturing system. It is a tool to clean up, categorize, organize, and create the necessary foundation for improving your workplace. This study focuses on the implementation of the 5S methodology. inside the S.P.Plastic Industry MIDC, Hingna Road, Nagpur 16. A detailed description of the 5S system is provided. This will affect trainers and industry workers working in the selected location. Consistent with the 5S methodology, this study could show significant improvements in levels of safety, performance, efficacy, and purity. The study documents improvements through the use of before and after images, and aims to build a stronger work ethic among workers and engineers who are expected to continue practicing [2].

Arash Ghodrati , Norzima Zulkifli (2013), discussed 5S as a systematic method used by organizations, comes from five Japanese words; Seiri, Seiton, Seiso , Seiketsu and Shitsuke . This system helps organize the workplace to improve efficiency, reduce waste and optimize quality and productivity by monitoring an organized environment. It also provides useful visual evidence for stronger results. Empirical research is needed in the field of new management systems and their impact on the company's performance. 5S on Organizational Performance, this document aims to define the elements and characteristics of activities in industrial organizations and determine the impact of 5S implementation on organizational performance. The survey method used and data collection was carried out by distributing questionnaires among five target organizations that have implemented the 5S methodology. Target organizations are selected from different industries and areas of work. and after the introduction of 5S. The results of this study show that 5S is an effective tool for improving the performance of an organization, regardless of its type, size, production or service. Consequently, 5S practices will strongly support the organization's goals of continual improvement and outstanding performance [3].

P. M. Rojasra and M. N. Qureshi (2013), discussed small industries that play an important role in the Indian economy and have become a powerful tool for generating relatively more employment alongside agriculture. It accounts for over 50% of industrial production in terms of value added and a third of export earnings. The global market is constantly changing and requires high quality and inexpensive products. Such products can be produced using Lean manufacturing methods, the 5S Management is a fundamental Lean tool for cleaning, organizing and providing the necessary basis for improvement. Method 5S at Krishna Plastics, Udyognagar, Amreli, Gujarat. Among the various lean manufacturing methods available, 5S

offers good potential for improvement on demand. A company in the business conducted a 10-week study, and the results after the implementation of 5S showed that the efficiency of the production system increased from 67% to 88.8% the next week [4].

Vipulkumar C. Patel and Dr. Hemant Thakkar (2014), this study explains the methods and techniques for using 5S to improve the efficiency of all processes in a company, with a particular focus on implementing the 5S system and eliminating losses in the company. The result is an efficient organization of the workplace [5].

Soumya R. Purohit and V. Shantha (2015), demonstrated that 5S is a step-by-step method for removing unwanted items, reducing the time spent searching for items, checking during cleanup, standardizing layouts to avoid wastage, and more. the above through self-discipline. This simple cleaning method effectively reduced waste and increased productivity. Over the past decade, it has become popular in India and has helped many industries grow without much investment. This document provides the step-by-step implementation guidance required to successfully incorporate the five principles into day-to-day management practices. This document shows how to organize each component of the 5S Seiri, Seiton, Seiso, Seiketsu and Shitsuke methodology in the industry. This document also shows the results of the phased implementation of the 5S methodology at Sphoorti Machine Tools Private Limited, Bangalore, India [6].

Saad Shaikh et al (2015 discussed that small businesses play an important role in the Indian economy; the quality of organization and productivity are paramount. production, working conditions, cleanliness, etc. This case study looks at the adoption of 5S in an industry where the implementation of 5S can lead to significant improvements in environmental performance in addition to improvements in cleanliness, health and safety, quality, productivity and productivity. conditions in organizations [7].

R. S. Agrahari et al (2015), discussed 5S adoption in small industries and showed significant improvements in the industry. Quality assessment is the first step of 5S. Here, the items are classified into necessary and unnecessary categories. This improves work efficiency by removing obstructions and avoiding the accumulation of unnecessary items. Here, cleaning is done as a check, a cleaning checklist is designed to ensure proper cleaning, Shine makes the workplace safe and easy to work with. Rather than in the standardization phase, standard rules are established to follow best practices in the workplace. For everything to be in order and in its place, it is necessary to follow the standard rules, and outdated rules should be discarded. Maintenance is a difficult stage 5S, here it is necessary to ensure that all the above stages are completed, adequate training of workers so that they can follow the process, perform periodic checks to check the actual condition [8].

M.Wasi Baig et al (2015), discussed that standardizing our labs with 5S can provide tremendous benefits in terms of efficiency and shortened delivery times. We need to consider introducing standard operating procedures for this process. All laboratories have office instructions, but in most cases, they are organized on a departmental basis rather than according to actual procedures such as theoretical sequences in practical aspects. if we follow the specified process and remove all useless steps. Therefore, in this document, we are moving towards our process, as in 5S [9].

Ravi Chourasia and Dr. Archana Nema (2016), discussed evaluating the implementation of the 5S approach as one of the lean management tools in the service sector. It is one of the fastest

growing sectors of the Indian economy. It accounts for about 52% of GDP. The 5S process is a core component of the Lean philosophy. 5S is the beginning of a productive life for everyone. The 5S system is designed based on Japanese management methods widely applied in manufacturing and business, helping to organize the workplace to improve efficiency, reduce waste, optimize quality, improve high productivity and customer satisfaction. The results show that 5S can be applied in the service industry with positive effects [10].

K. Balasundaram et al (2017), discussed the workplace as one of the main factors of productivity in any industry, be it micro, small, medium or large. The 5S method is one of the best workplace organization methods for creating the best working conditions in the workplace. The 5S methodology allows you to analyze the processes that identify and eliminate unnecessary products, tools and general clutter; at the same time, it will further develop new designs, better storage systems and new, better methods for identifying precision parts. This case study focuses on the adoption of 5S in the industry by OK Plastics, a corporation based in Addis Ababa, Ethiopia. This article explains the techniques and techniques for using the 5S to improve the efficiency of all processes in a company. The introduction of 5s shows that the application of 5S rules has brought big changes to the company, increased the efficiency and effectiveness of processes, improved structure, productivity, and improved the quality and working conditions in the company [11].

D. Selwyn Jebadurai et al. (2017), discussed the implementation of 5S in commercial warehouses in the manufacturing industry, which eliminates waste observed in the warehouse and its systematic disposal through 5 steps of 5S. Little use of space, unnecessary items, lack of proper hygiene. Outdated working rules are the main waste seen in the warehouse. By implementing multiple 5S steps, specific waste is eliminated and better space utilization is achieved [12].

Md Abdur Rouf et al (2017) discussed the registration of quality analyzes by hospitals that have implemented the 5s methodology. The 5S methodology helps achieve the goal of reducing time, waste and inactivity. This means cost savings and good service for your patients, improved staff productivity, and improved organizational efficiency and effectiveness [13].

Vikram Singh et al (2018), studied 5s systems methods and techniques used to improve the efficiency of all processes in the industry. The main goal is to reduce losses in the industry and implement the 5s system. It can be seen that thanks to the application of the 5-hour rule, the company has made big changes, for example: reducing costs, increasing the efficiency and effectiveness of processes, efficient maintenance and repair of machines, safety, accuracy and quality. and contamination control, optional. 5s to analyze current workplace processes and create clean, efficient and high-quality workplaces. Research clearly shows that worker training is so important to the 5-hour rule that it’s important to break down actions into several key steps and continually improve. This method can be used in all companies, resulting in an efficient workplace organization [14].

I Rizkya et al. (2021), describes the assessment and application of a 5S work culture in a warehouse. 5S is a proven concept for reducing waste. One of the factories for the production of packaging for oils has a small area of spare parts and is not well maintained. As a result, problems such as damage to spare parts that require special handling in the warehouse due to crushed metal arise. correct address. As a result, finding what you need is not easy. The assessment is carried out at the warehouse according to the 5S criteria. The development of the rating gives 1.82 points. This means that the use of 5S in the warehouse is more in line with

the current concept, so there is a need to improve the principles of 5S implementation, namely Seiri, Seiton, Seiso, Seiketsu and Shitsuke [15].

CHAPTER - 4

RESEARCH METHODOLOGY

Poor workplace conditions can lead to increase in wastes such as time wasted in searching for needed items or motion to avoid obstacles. It can also cause an accident Implementation can start by creating a good and clean working environment. 5S is a Lean workplace tool that is essential for implementing lean strategies. 5S is a reference to five Japanese works which described standardized cleaning. The 5S are

Fig.1 The 5S system

4.1 1 S – Sorting/ Seiri :

Seiri (sorting, organization of the workplace, elimination of unnecessary materials). Refers to the practice of sorting through all the tools, materials, etc., in the work area and keeping only essential items. Everything else is stored or discarded. This leads to fewer hazards and less clutter to interfere with productive work.

BENEFIT:

- process improvement by costs‟ reduction,
- stock decreasing,
- better usage of the working area,
- prevention of losing tools.

4.2 2 S – Set in order / Seiton

Seiton (set in order, place for everything). Focuses on the need for the workplace in order. Tools, equipment, and materials must be systematically arranged for the easiest and the most efficient access. There must be a place for everything, and everything must be in its place.

BENEFIT:

- process improvement (increasing of effectiveness and efficiency),
- shortening of the time of seeking necessary things,
- safety improvement

4.3 3 S – Shine / Seiso

Seiso (shine, cleaning, removing of wastes, dust etc.). Indicates the need to keep the workplace clean as well as neat. Cleaning in Japanese companies is a daily activity. At the end of each shift, the work area is cleaned up and everything is restored to its place.

BENEFITS:

- increasing of machines" efficiency,
- maintenance the cleanness of devices,
- efficiency,
- keep the clean workplace, easy to check,
- quick informing about damages (potential sources of damages),
- Improvement of the work environment, elimination of the accident's reasons.

4.4 4 S – Standardize / Seiketsu

Seiketsu (standardize, constant place for things, constant rules of organization, storage and keeping cleanness). Allows for control and consistency. Basic housekeeping standards apply everywhere in the facility. Everyone knows exactly what his or her responsibilities are. Housekeeping duties are part of regular work routines.

BENEFITS:

- safety increasing and reduction of the industry pollution,
- working out the procedures defining the course of processes

4.5 5 S – Sustain/ Shitsuke

Shitsuke (sustain, automatic realization of above-mentioned rules). Refers to maintaining standards and keeping the facility in safe and efficient order day after day, year after year.

BENEFITS:

- increasing of the awareness and morale,
- decreasing of mistakes quantity resulting from the inattention,
- proceedings according to decisions,
- Improvement of the internal communication processes,
- Improvement of the inter-human relations.

Chapter-5

Implementation of 5S Techniques

Sorting:

Firstly, sort the necessary and unnecessary product available in the warehouse. After that the necessary product available in the warehouse should sorted and classified according to FMCG product, FMCD products. Through the suitable sorting it can be identified as Food products, Cable, Soap, etc... and by this we can eliminate the waste and damage things. It helps to maintain the clean warehouse and improves the efficiency of searching time.

Set in order:

This means preparing the necessary items neatly and systematically so that they can easily be taken and avoiding time loss while searching for product. The goal is to minimize searching time and the number of moves that a employee moves for taking a product. So, it will help to improving the efficiency of the main objectives. Especially important is visualization of the warehouse. Eg: Providing name board (like Dettol soaps, Dabur paste, etc..) at which the product is kept, by this the product can be easily identified by the employee.

Shine:

In order to realize effective tasks, it is essential to create a clean and regular working and living environment. This is because dust, dirt and wastes are the source of untidiness, indiscipline, inefficiency, faulty production and work accidents. Cleaning should become a daily activity. Work place should be cleaned at regular intervals. To help identify dust lean factory floors, often painted in bright colors and enhance the light sources within the plant.

Standardize:

To establish standards of the best practice in the warehouse and to ensure that the standards are compiled and to undertaking that the warehouse is clean and tidy at all times. Creating instructions and audit sheets for proper maintenance. Creating small road map of warehouse where the product has been placed and it will help employee while searching.

Sustain:

compact self-discipline connected with implementing and obeying the rules of regularity in cleaning and sorting. It leads to increasing the consciousness of staff, and decreasing the number of non-conforming products and processes, improvements in the internal communication, and through this to improvement in the human relations. It is also important to understand the need of executing the routine inspections of usage the 5S rule. This inspection is executed by helping of so-called Check List and created on its basis the radar graph of the 5S, which serves to estimation of the workplace. The inspection of realization of the 5S rule is executed once a month by chosen team implementing the 5S rule – the control team.

5.1 Advantages of implementation of 5S:

The successful implementation and execution of the 5S principles in various organizations results several advantages as mentioned following.

1. 5S concept is very simple and easily understood by everyone because this only requires knowledge of the conventional discipline and high commitment. This practice can be implemented at all levels.

2. 5S will foster teamwork, discipline and will increase the sense of responsibility and compassion for company.

3. 5S will create clean, productive work environments and secure the delivery system towards a world-class.

4. On-going commitment from management and involvement are the cornerstone of all citizens for the successful implementation of 5S practices.

5. 5S is an on-going need to maintain excellent service delivery performance.

Chapter-6

RESULT AND DISCUSSION:

Implementation of 5S in Win Agency, Theni, what is effectiveness after implementation of 5S we have compared and recorded it with old records of the effectiveness of 5S before and after implementation is given below Table.1, Since reading of effectiveness, is given out of 1, for example working environment is taken 0.5 out of 1 before implementation of 5S now after it is 0.9 out of 1, similarly, the other process reading is given before and after implementation of 5S. From that comparison, we conclude that overall change is 80% which means increased it up to 30% after implementation of 5S.

Table -1: PROCESSES EFFECTIVENESS BEFORE AND AFTER IMPLEMENTATION OF 5S

S. No.	Processes	Before	After
1	Product Searching Time	0.6	0.9
2	Product Arrangement	0.5	0.8
3	Tool Arrangement	0.4	0.6
4	Working Environment	0.5	0.9
5	Working Efficiency	0.5	0.8
6	Overall Change in Percentage	50%	80%

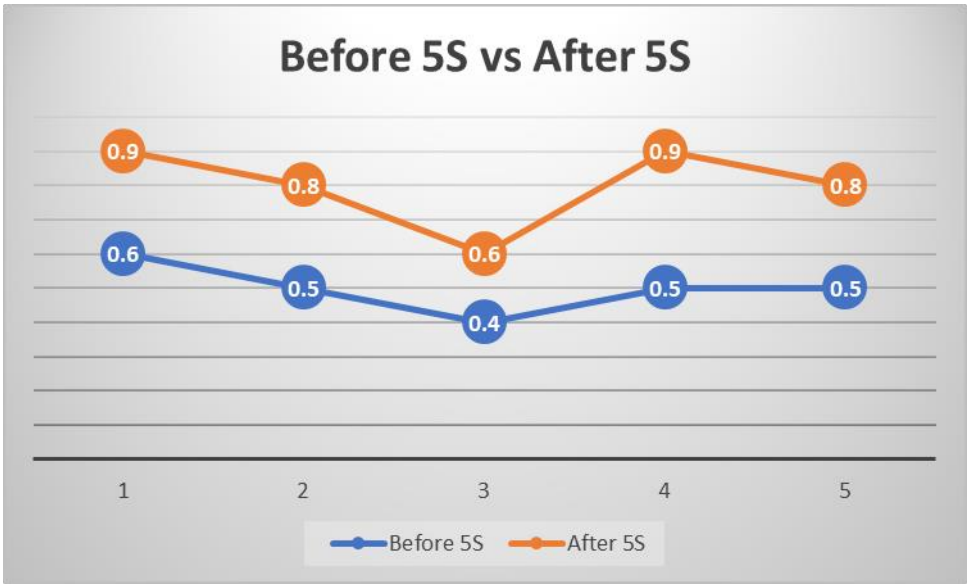

Fig 2: Before 5S vs After 5S

6.1 Findings & Suggestions:

- Awareness program should be given to the employee about 5S regularly. So that employee continuous follow the 5S steps.
- Inspection should be done on regular basis in order to avoid mistakes.
- Proper information about the product should be given to the delivery department. Therefore, the product will handle properly while delivery to stores.

Chapter - 7

CONCLUSION:

The study of these papers demonstrates the review of implementation of 5S methodology practice leads to improvement in working efficiency of the Win Agency, Theni. The 5S improves environmental performance and reduction of time wastes in warehouse. It shows that neatness in the storage products. The 5S implementation leads to the improvement in reduction of products searching time and organization become self-disciplined. The implementation of the 5S system gives the following effects regarding the improvement in quality such as workers get used to ordering and discipline, reduction of physical effort, eliminates unused, unwanted material from the warehouse. The final conclusion is that overall change is 80% which means increased up to 30% after implementation of 5S.

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