Analysis of The Impact of Inconsistency 5S Implementation Inconsistency in Japanese Companies in Indonesia; Case Study At PT Indonesia Toray Synthetics

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Abstract

Japanese companies tend to implement 5S as an autonomic nervous system in order to keep manufacturing activities running smoothly, as well as to avoid Muda. However, 5S implementation could potentially cause several impacts if it does not run consistently. Therefore, this study aims to analyse the impact of inconsistencies in 5S implementation. This research will be conducted with a qualitative method, using observation as primary data, and interviews as supporting data. Additionally, the descriptive analytics method would be implemented to adjust collected data with theories from a literature review. The result from the study is the inconsistency of 5S at PT Indonesia Toray Synthetics causing Muda. The Conclusion is that there are several forms of Muda due to the inconsistencies of 5S implementation. The main factors causing the inconsistencies in the implementation of 5S at PT ITS are the existence of cultural differences between management systems and the majority of local workers. The solution that can be done in this case is to hold training and simulations that are scheduled by the management and carried out routinely by all workers.

Keywords

Japanese Management, 5S, Impact, Inconsistencies, Muda, Japanese company.

1. Introduction

The manufacturing industry usually establishes a production system that functions to keep manufacturing activities running smoothly. Fujimoto (2012:33) explains that when some individual strategic routines such as kaizen, kanban, heijunka, jidoka, 5S (seiri, seiton, seiso, seiketsu, shitsuke), and a number of other lean management are integrated into a coordinating system to achieve stable competitive performance, it is called "organizational capability in manufacturing." The focus of the characteristics of most Japanese companies still running consistently now is to avoid waste (Ponanake, 2012:79). Based on the features and characteristics of the Japanese company's manufacturing work system, the author determines the research theme regarding the 5S management system implemented by a Japanese company operating in Indonesia, namely PT Indonesia Toray Synthetics (ITS). However, there is a particular condition in this study, namely the existence of an inconsistent attitude towards the application of 5S, so it is possible to assume the impact that will arise. Thus, the focus of the research theme is the impact caused by the inconsistency of implementing the 5S system in Japanese companies in Indonesia. Currently, PT ITS is in the middle of revitalizing

the 5S system. Therefore, the author conducted this research as reference material to support the revitalization of the management system in the company's work environment.

1.1 Objectives

This study examines the 5S system implemented by Japanese companies in Indonesia, especially PT Indonesia Toray Synthetics. In addition, this study was also conducted to present some accurate data that can answer a case-finding regarding the possible impacts if the 5S system is not implemented consistently so that it can be used as a reference for improvement. It is hoped that this research can be helpful to provide more insight into the general description of organizational capabilities in the manufacturing industry, especially regarding the 5S system, within the scope of Japanese companies in Indonesia.

2. Literature Review

5S systems are increasingly being adopted to help integrate various improvement initiatives in the development of an Integrated Management System (SMI) or Integrated Management System (SMT) framework (Kobayashi, 2009). Kobayashi's research entitled Ways of Experiencing 5S: A Means to Understand Management Practices concerns developing a framework of 5S management practices to improve organizational performance, especially in Western manufacturing environments. The research aims to compare the understanding of some practitioners in the workstation area with the 5S concept that is socialized by the organization where they belong.

In some cases, developing countries will usually face problems in terms of effectiveness and success in implementing the 5S and TPM systems. This is because there is no consideration for involving workers connected to the existing management system (Kareem & Talib, 2015:79). The focus of the research in the journal Kareem & Talib entitled Role Of Ethical Factors In 5s And TPM Implementation Study Of Kurdish Cement Industry is about what problems will arise due to the implementation of 5S and Total Productive Maintenance (TPM), which does not involve some workers. The research variable of Kareem & Talib refers to investigating the feasibility factor of the role in the implementation of 5S and TPM.

Some cases state that the 5S methodology demonstrates operational practices that can provide the best results due to its contribution to improving process productivity, quality, and the environment with fast results and low costs (Lamprea & Carreno, 2015: 107). Lamprea & Carreno's research journal, entitled Impact of 5S on Productivity, Quality, Organization Climate and Industrial Safety in Caucho Metal Ltda, focuses on the Impact of the implementation of 5S on a medium to low-income company.

3. Methods

After determining the theme of the 5S system implemented by a Japanese company operating in Indonesia at PT Indonesia Toray Synthetics, the observation method will be carried out by witnessing and adjusting some 5S practices in the manufacturing area of PT Indonesia Toray Synthetics with some theories. Based on some observational findings, the author will examine the implementation and impact of the 5S system inconsistency. The interview method was also carried out as data to support some findings from the documentation obtained. The descriptive-analytical method was used to analyze the data by reviewing the findings from observation activities. The data acquisition results will be adjusted first with the theory of the 5S system from some books and case studies from journals that discuss some cases about the 5S system. Some practices among those following the theory will be separated so that practices that are unsuitable will be discussed as an impact that will arise if the 5S system is not carried out in full at PT ITS. The hypothesis will be drawn before reviewing the analysis results to the point of completion. After the results of the review have been valid, conclusions will be made about the final step.

4. Data Collection

Data collection was done by observation and interview, the observation method will be carried out by witnessing and adjusting some 5S practices in the manufacturing area of PT Indonesia Toray Synthetics.

5. Results and Discussion

Within the PT Indonesia Toray Synthetics structure, a production division consists of three departments: the Nylon, Polyester, and Resin compounds. In this study, the author will make some observations in the Polyester department, especially in the Polyester Staple Fiber (PSF) section. In the production of Polyester Staple Fiber (PSF), there are

three production lines, namely the 1P, 2P, and 10P. Later, this research will focus more on implementing 5S in the 10P production line area.

The stages of work in the 10P production line area consist of three process activities: continuous polymer, continuous spinning, and continue after treatment. The continuous polymer process produces polyester polymer or plastic seeds which will be the raw material for the continuous spinning process. Then, continuous spinning will produce semi-finished goods called intermediate products and become raw materials for continuous after treatment. Meanwhile, after continuous treatment produces polyester staple fiber or synthetic cotton, these items are finished goods sold to the consumer market (Oky Syafwiratama – Assistant Manager of Section PT ITS, personal communication, 6 April 2018).

5.1 Analysis of the Forms of Waste in Seiri Practices in the Inconsistent Implementation of 5S in the PSF Department of PT ITS

Imai (2012) explains that the essential thing that must be done in implementing seiri is to do a classification divided into three things: equipment used, equipment that is not used, and equipment that must be discarded. The following is an analysis of the data obtained from observations and interviews in the genba area.

5.1.1. Analysis of Seiri Practices Applied in the PSF Department of PT ITS

Seiri is an activity to distinguish between needed and unneeded items in the genba area, and there is a need to dispose of items that have been used up a lot (Imai, 2012).



Figure 1 Pack body in the assembly room which is separated from the production area. (Source: PT ITS, 2018)

The one-pack data in the assembly pack room is a melting polymer mold that turns polymer into yarn. Use once every 40 days for batch processing.

The question I: "What is the management goal of implementing seiri practices on parts of equipment that are not used in genba?"

The informant stated that the application of seiri on parts of equipment that were not used was to facilitate work mobility (Oky Syafwiratama – Assistant Manager of Section PT ITS, personal communication, 7 June 2018 – 18:39).



Figure 2 Tags that function like red tags on the vacuum pump in the spinning area. (Source: PT ITS, 2018)

It uses tags as informational descriptions to indicate damaged equipment or machines. It is recognized that this method has the same function as the red tag. The tag in Figure 2 is given to the vacuum pump machine in the spinning area, which is usually used as a supporting process for sucking filament which is one of the processes of production activities for 10P.

Question II: "Is the method of marking equipment that is damaged or not being used applied through red tags?"

The resource person stated that the red tag method had not yet been implemented. However, the method whose function is the same as the function of using the red tag. It is applied using tags in the form of names or information descriptions of the condition of the equipment that is damaged or not (Oky Syafwiratama – Assistant Manager of Section PT ITS, personal communication, 1 July 2018).

Question III: "What is the management goal of implementing seiri practices in genba?" Based on the interview results, the interviewees revealed that management applies seiri practices to facilitate employee work activities (Oky Syafwiratama – Assistant Manager of Section PT ITS, personal communication, 7 June 2018).

Analysis:

PT ITS, especially the PSF department, applies the 5S part of the series. The activity of sorting work equipment is carried out in the genba area in data 1, which is strengthened by the results of the information from question I, namely that the purpose of applying series to the unused parts of the equipment is to facilitate work mobility. This practice follows the theory of Imai (2012), which is the primary thing to do when implementing the practice of seiri is to classify it into three things, namely separating the equipment used, equipment that is not used, and equipment that must be discarded. Data 1 is equipment that must be temporarily removed from the genba to facilitate the work and increase the value of time efficiency. Meanwhile, the assumption of goods that are not used within the next 30 days must be discarded to eliminate the definition of youth.

PT ITS applies the red tag method from the seiri practice with a different method based on Figure 2 and the results of the statement of question II. When analyzed in terms of function and use, the name tag has the same function as the red tag. This tag aims to provide value for work efficiency. According to Hirano (2009), using red tags helps build the foundation for improving the 5S management system by making a sort of equipment that is not needed in production activities. Imai (2012) also added that the red tag function is as visual information by using some cards that will be given to work equipment that is not needed or needs maintenance.

5.1.2. Analysis of Seiri Practice Inconsistency in the PSF Department of PT ITS



Figure 3 Material packs in the assembly pack room has not been tidied up. (Source: PT ITS, 2018)

Figure 3 is a material pack in the assembling pack area of the spinning area, which has just been released. Admittedly, it has not been compiled according to the practice because it is still waiting for the construction process.

Question IV: "Does the treatment of the pack in the picture have to wait for the process, or can it be done directly? Because actually, a suspension process like this can lead to a form of waste."

The resource person answered that on average, they were waiting for the process under work procedures. However, due to the limited number of workers, these items may be waiting for construction (Oky Syafwiratama – Assistant Manager of Section PT ITS, personal communication, 7 June 2018 - 18:39).

Question V: "Can it be concluded from the above series of practices, that there will be some waste in terms of wasted motion, waste of suspension, waste of process, waste of damage, and waste of time?" The resource persons agreed with the conclusion on a number of these forms of waste (Oky Syafwiratama – Assistant Manager of Section PT ITS, 1 July 2018).

Question VI: "With no data objects found in the practice of sporting goods before working in the genba area. Can it be concluded that the "method of sporting goods that will be used before working on the main practice of series" has not been fully implemented at ITS?"

The resource person clarified and stated that the method had been carried out as a general practice. However, it is acknowledged that its application has not been implemented thoroughly (Oky Syafwiratama – Assistant Manager of Section PT ITS, personal communication, 1 July 2018).

Question VII: "Can it be concluded that the imperfection of the method in seiri practice will lead to waste in terms of waste of motion, waste of procrastination, waste of process, and waste of time?

The resource person stated that this would literally happen if the implementation were incomplete (Oky Syafwiratama – Assistant Manager of Section PT ITS, personal communication, 1 July 2018).

Analysis:

Based on Figure 3, inappropriate seiri practices at PT ITS causes the organizational system at genba to be less than optimal. According to Hirano (in Lamprea & Carreno, 2015), unorganized sorting can reduce mobility because it does not provide enough space for work activities. From the data objects and the results of the information from the fourth and fifth questions, there are several forms of waste or youth from imperfect seiri practices in data 3 because the practice of arranging goods in the genba area has experienced a suspension of the work processes. The processes are motion waste, decaying waste, process waste, waste of damage, and also a waste of time.

5.2 Analysis of Waste in Seiton Practices Due to Inconsistency of 5S Implementation in the PSF Department of PT ITS

Seiton is an activity in managing all work equipment that has been sorted in the seiri process (Imai, 2012). Unused equipment cannot be removed too far from the work area due to the function of the tool, which is likely to be reused

at any time when needed. Therefore, classification in seiton practice can be useful to minimize the search for several items that are likely to be reused within a specific time (Imai, 2012).

5.2.1. Analysis of Seiton Practices Applied in the PSF Department of PT ITS



Figure 4 Equipment in the 10P cutter area that has been marked (Source: PT ITS, 2018)

Figure 4 is the equipment in the cutter area with markings (the red arrow shows a black marker area for each piece of equipment) according to the practice of Seiton. The equipment is used for the cotton cutting process in the after process.

Analysis:

The PSF Department of PT ITS applies seiton by applying labels or markers to the equipment used to work in the genba area based on data 4. In Ohno (in Imai, 2012), several work equipment and so on are placed in locations that have been designed by marking unique. This is done to indicate the exact and suitable location for each piece of equipment in the genba area.

5.2.2. Analysis of Seiton Practice Inconsistency in the PSF Department of PT ITS



Figure 5 Equipment in the 10P spinning area has not been marked (Source: PT ITS, 2018)

Data 5 is equipment in the spinning area that functions as a jig or work tool. A number of the equipment provided serves as a working medium to support safety because the work process with some existing machines cannot use hands directly. However, the application of seiton is incomplete because there is no marker at the place of the work tool for each of the existing work equipment.

The question I: "Are the applied seiton practices efficient according to management standards?" Based on the interview results, the interviewee said that the seiton practice was not following management standards. The statement is as follows (Oky Syafwiratama – Assistant Manager of Section PT ITS, 7 June 2018).

Question II: "Can it be concluded that the marking that has not been carried out on the work equipment above causes motion wastage, delays, process waste, damage waste, and time-wasting on the findings of incomplete seiton practices?"

The resource person stated that the equipment was used continuously by workers in the genba area. However, a 50:50 possibility could have happened if the workers did not review it (Oky Syafwiratama – Assistant Manager of Section PT ITS, 1 July 2018).

Analysis:

PT ITS has not fully implemented the seiton practice. This is because there is no marking for work equipment in data 5 and the results of information from questions I and II. Although it is recognized that workers can easily find out every piece of equipment they use in the area without any markings, according to Imai (2012), the practice of seiton that meets the standards is when each piece of equipment is designed with a name and location.

The author analyzes the possibility that there is a form of waste based on data 5, as well as the interpretation of the results of the information from question II, which states that the possibility of this form of waste can occur. Following Imai's (2012) theory, when someone takes one to two steps with no profit value, it can be ascertained that a movement is a form of waste.

5.3 Analysis of Waste in Seiso Practices Due to Inconsistency of 5S Implementation in the PSF Department of PT ITS

Seiso is an activity in keeping the environment around the workplace clean and well maintained. In this case, it is usually related to several machines, equipment, and of course, the condition of the workplace itself so that it can be maintained, both clean and tidy (Imai, 2012).

5.3.1. Analysis of Seiso Practices Applied in the PSF Department of PT ITS



Figure 6 Cleanliness media in the cutter area (Source: PT ITS, 2018)

Figure 6 is cleaning tools in the area after the cutter room. The cutter area is the process of cutting cotton as the final production activities in the 10P area. Question I: "What is the management goal of implementing seiso practices in genba?" The resource person explained that the seiso practice aims to maintain the quality of safety and productivity (Oky Syafwiratama – Assistant Manager of Section PT ITS, 7 June 2018). Question II: "Have you ever found malfunctions in several equipment or machines when doing seiso practice?" The resource person also responded that this was generally found through these activities (Oky Syafwiratama – Assistant Manager of Section PT ITS, 7 June 2018). Analysis: PT ITS, especially the PSF department, implements seiso practices based on data object six, which is one of the cleaning tools to support seiso practices, as well as the results of information from questions I and II,

which state that the purpose of seiso practice is to maintain a philosophy related to safety, productivity, and quality, with cleaning activities, carried out after every routine work. According to Kareem & Talib (2015), cleaning activities in an organization cannot be equated with general cleaning activities.

5.3.2. Analysis of the Inconsistency of Seiso Practices in the PSF Department of PT ITS



Figure 7 Clean media that has not been cleaned in the cutter area.

(Source: PT ITS, 2018)

Figure 7 is the same image as data 6, namely the cleaning equipment in the area after the cutter room. The equipment is a cleaning medium that has not been cleaned.

Question III: "Can it be concluded that cleaning and checking the above work equipment can cause a gap in wastage in terms of wasted motion, wasted suspension, wasted process, wasted damage, and wasted time?"

The resource person gave a statement that agreed that a number of these types of drilling could occur (Oky Syafwiratama – Assistant Manager of Section PT ITS, July 1, 2018).

Analysis:

PT ITS has not fully implemented the seiso practice. Based on data 7, the practice of seiso on inventory in genba is still not intact. According to Imai (2012), seiso is several activities related to cleaning activities, so several types of equipment in the genba area must be kept neat and clean. If these cleaning activities are not carried out regularly, it is impossible to imagine how much equipment will be damaged before the mass of use is exhausted. Based on the results of the information from question III, the author analyzes several forms of waste of seiso practices that have not been fully implemented. These wastes include motion waste because they have to redo work to clean and check the work equipment, postponement waste due to seiso practices that do not work can cause a gap in previous motion wasting, process waste due to work suspensions so that logistical problems have not been simplified, waste damage because if it is not cleaned or repaired the equipment immediately can be damaged, and a waste of time because the whole process is in the scope of time that continues to run.

5.4 Analysis of Waste in Seiketsu Practices Due to Inconsistency in 5S Implementation in the PSF Department of PT ITS

Seiketsu is an act of affirming the principle to oneself to maintain a clean and tidy work environment, by continuing to practice and experiencing firsthand the steps of previous seiri, seiton, and seiso (Imai, 2012).

5.4.1 Analysis of Seiketsu Practices Applied in the PSF Department of PT ITS

Question I: "Has the application of seiketsu been done before?"

The informant revealed that the practice of seiketsu had indeed been implemented, but the continuity was low (Oky Syafwiratama – Assistant Manager of Section PT ITS, 7 June 2018).

SCHEDU	JL	SAFETY PATROL SENIN BULAN :	M	I 2018					
MADY	T	PATROL				FOLLOW UP			
MARI	Г	SENIN - 1 07 MEI 2018		SENIN - 2 14 MEI 2018		SENIN - 3 21 MEI 2018		SENIN - 4 28 MEI 2018	
TANCCA									
GROUP	-	NYLON POLYMER Area Cutter 1N & 2N 2FL (DCS Room)		NYLON SPINNING Area Sorting OSP 1FL (Ruang Istrahat)	10-	NYLON POLYMER Area Cutter 1N & 2N 2FL (DCS Room)	1	NYLON SPINNING Area Sorting OSP 1FL (Ruang Istirahat	
		NYLON AFTER Area Sorting Kido (Ruang Istirahat)	н	POLYESTER SPINN, BT Area Spinning BT 4FL (Ruang Panel Elevator)		NYLON AFTER Area Sorting Kido (Ruang Istirahat)	з	POLYESTER SPINN. BT Area Spinning BT 4FL (Ruang Panel Elevator)	
	111	POLYESTER SPINN. CONT. Area Spinning Cont. 3FL (Spinn Inspection, Assembling Pack, Ultrasonic, T-EG, Dissambling	iii	PFY Area Drying PFY 1FL (Ruang Lapping/Honing, Sand Room, Ruang Panel Drying)		POLYESTER SPINN. CONT. Area Spinning Cont. 3FL (Spinn. Inspection, Assembling Pack, Ultrasonic, T-EG, Dissambling		PFY Area Drying PFY 1FL (Ruang Lapping/Honing, Sand Room, Ruang Panel Drying)	
	2	POLYESTER POLYMER BT Area Polymer BT 3FL (Office Room, DCS)	N	ENGINEERING (UTILITY) Area Dehydrator dan Belt Press WWT (Ruang Istrahat)	N	POLYESTER POLYMER BT Area Polymer BT 3FL (Office Room, DCS)	2	ENGINEERING (UTILITY) Area Dehydrator dan Belt Press WWT (Ruang Istirahat)	
	>	ENGINEERING (UTILITY) Area Cooling Tower BTG-1 (Fly Ash Silo BTG-1)	v	PURCHASING Area Penerimaan Tanki Solar, IDO dan BBM (Ruang Istirahat Sopir)	~	ENGINEERING (UTILITY) Area Cooling Tower BTG-1 (Fly Ash Silo BTG-1)	>	PURCHASING Area Penerimaan Tanki Solar, IDO da BBM (Ruang Istirahat Sopir)	
	5	LOGISTIC Area Gudang NFY-2	2	RESIN Ruang Inspection, Ruang Meeting Shift Imar 2FL (Locker Room)		LOGISTIC Area Gudang NEY-2	>	RESIN Ruang Inspection, Ruang Meeting Shi timur 2FL (Locker Room)	

Figure 8 Patrol Schedule (Source: PT ITS, 2018)

Figure 8 is a patrol schedule carried out by all managers at PT ITS. Patrol activities are carried out every Monday and are mandatory and are carried out by each group that has been divided alternately. This schedule is updated every month.

Question II: "Is there a patrol schedule for seiketsu practice?"

The resource person explained that the patrol schedule exists, and the schedule is always routinely carried out according to the schedule procedure (Oky Syafwiratama – Assistant Manager of Section PT ITS, July 1, 2018).

Question III: "What represents the 5S standards applied by management?"

The informant revealed that the standard of seiketsu practice is a goal that has been realized or not (Oky Syafwiratama – Assistant Manager of Section PT ITS, 1 July 2018).

Analysis:

From the results of the information on questions I, II, III, and data objects in data 8, the authors analyze that PT ITS, especially in the PSF department, applies the practice of seiketsu as a step to commit to work by keeping track of 5S implementation through the patrol schedule provided so that standards can be met. fulfilled. A number of data object findings are in accordance with the theory described by Imai (2012), namely that management must implement systems and procedures that function to ensure the continuity of seiri, seiton, and seiso.

5.4.2. Seiketsu Practice Inconsistency Analysis in the PSF Department of PT ITS

Question IV: "Can it be concluded that the implementation of 5S that has not been fully implemented is caused by a lack of awareness of employee discipline?"

The informant stated that the work priority factor was the main factor compared to the discipline factor (Oky Syafwiratama – Assistant Manager of Section PT ITS, 7 June 2018).

Question V: "Can it be concluded that the implementation of seiketsu that has not been fully implemented can lead to waste in terms of process waste and time wasting?"

The resource person also expressed his agreement with this (Oky Syafwiratama – Assistant Manager of Section PT ITS, 1 July 2018).

Analysis:

From the results of the information on questions I and IV, the author analyzes that PT ITS, especially in the PSF department, has not fully implemented the practice of seiketsu. This is because the expression of continuity of seiketsu practice is still low so there are obstacles in its application due to the work priority mindset of several employees in realizing seiketsu. This causes the implementation of 5S to be inconsistent.

5.5. Analysis of the Forms of Waste in Shitsuke Practice Due to Inconsistency of 5S Implementation in the PSF Department of PT ITS

Shitsuke is a step in building discipline and making habits on the basis of implementing 5S through standards built by the organization (Imai, 2012).

5.5.1. Analysis of Shitsuke Practices Applied by the PSF Department of PT ITS

Question I: "Has the practice of shitsuke been practiced before?"

The informant responded that the practice of shitsuke was actually also implemented, but its minimal implementation resulted in the results of the implementation not being in line with management expectations (Oky Syafwiratama – Assistant Manager of Section PT ITS, 7 June 2018).

Question II: "Are there records of 5S evaluation results in shitsuke practice?" The resource person explained that the recording was only limited to the findings as a corrective step through followup (Oky Syafwiratama – Assistant Manager of Section PT ITS, 1 July 2018).

Question III: "What are the management steps to build a 5S system at ITS, both in the past and now?" The resource person explained that the steps to build 5S which initially only started with socialization, now the method has developed with room modeling as a visual management to facilitate the work activities of all employees (Oky Syafwiratama – Assistant Manager of Section PT ITS, 1 July 2018).

Analysis:

Based on the results of the information from questions I, II, and III, the authors analyze that PT Indonesia Toray Synthetics, especially the Polyester Staple Fiber (PSF) department, applies the practice of seiketsu with the statement that seiketsu is applied but with weak intensity. In addition, although a proper evaluation has not been carried out, the follow-up results from the patrols carried out are always an effort to improve the system which is considered to be lacking. Then, steps to build 5S through socialization and then developing with a modeling system were also carried out to facilitate work activities. In accordance with Imai (2012) which states that there is a review from superiors and evaluations must be carried out regularly by factory managers and genba managers to assess the 5S standards that have been running.

5.5.2. Analysis of Shitsuke's Practice Inconsistency in the PSF Department of PT ITS

Question IV: "Can it be concluded that the implementation of shitsuke that has not been implemented in its entirety will lead to waste in terms of process waste and time wasting?"

The resource persons also agreed to this (Oky Syafwiratama - Assistant Manager of Section PT ITS, 1 July 2018).

Analysis:

Based on the results of the information from question I, the author analyzes that the practice of shitsuke has not been fully implemented by PT ITS, especially the PSF department, due to several constraining factors such as the lack of resources in the midst of high intensity of routine work if the performance of production activities is not going according to plan, so lead to weak continuity in its application. In addition, based on the results of the information from question IV, the author also analyzes that there is a form of waste that occurs due to the inconsistent application of shitsuke. Such wastage is a waste of process because all implementations will be restarted from scratch, and a waste of time because the whole process is in the scope of an ongoing timeframe.

Based on the above analysis, the author would like to emphasize this analysis that the 5S practice has indeed been implemented by PT ITS based on the results of its implementation experience. However, the author also analyzes that the implementation of 5S has not been carried out in full by PT ITS, so that it has an impact in the form of waste or youth, both in terms of possibilities and what has already occurred on the availability of existing data objects.

6. Conclusion

From the results of the overall analysis, the authors draw an outline of the main factors causing the inconsistencies that occur in the implementation of 5S at PT ITS, namely the existence of cultural differences, both between systems from management and the majority of local workers. The solution that can be done in this case is to hold training and simulations that are scheduled by the management and carried out routinely by all workers.

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Biography

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