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Analysis of the 6s Assessment Score in the Workplace of Ukm Suci Rizki Bekasi

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ABSTRACT

A successful company is a company with a work environment that supports both workers and machines in that environment. A good work environment can support the comfort and safety of employees so that the work done will be optimal. Therefore, the aim of this study is to ensure a safe work environment or area without hazards which can be identified by the 6S method which stands for seiri, seiton, seiso, seiketsu, shitsuke, and safety. The research method used is the observation of every 6S aspect in the work environment of Suci Rizki UKM. Based on the results of this study, it shows that UKM Suci Rizki gets a final score of 1.3437 which is included in the Unacceptable classification which means that the 6S method activity is not carried out or only a small part in the Suci Rizki UKM.

Keywords : Method 6S, UKM.

INTRODUCTION

The work environment has a great influence on the work of employees. Creating a comfortable, safe and pleasant work environment is one way for companies to improve employee performance (Maizir et al., 2020). UKM Suci Rizki in Bekasi is a business that produces various types of tofu. It has not created a clean work environment, such as stacking unused tofu pans, slippery work areas, containers placed anywhere. This can disturb the comfort and increase the high work risk for employees, for this reason it is necessary to analyze how much 6S culture has been implemented by UKM Suci Rizki in Bekasi. 6S Metode method

The 6S concept is a development of 5S, but work safety also needs to be added to minimize the occurrence of work accidents. so that combining safety into the 5S section will become 6S (Setiawan, 2018). The 6S method stands for seiri, seiton, seiso, seiketsu, shitsuke and safety. In English it becomes sort, set in order, shine, standardize, sustain, and safety. This method is a development of 5S proposed by Hiroyuki Hirano in 1990 (Nadira et al., 2018)

The first stage, seiri, refers to the selection and classification of elements in the workplace into two main categories, namely important and unimportant in an effort to eliminate unused or rarely used elements that accumulate and create distractions. The Seiton stage makes room for each item, Products must be classified as “essential” labels for bringing orders to work, and arranged and placed according to their frequency of use, so employees can quickly find, use, and return them to where they were before. Shine / Seiso aims to create conditions the best working environment (including machinery, equipment, floors and walls) to maintain the workplace in ideal condition. Standardization includes easy distinction between normal and abnormal conditions by applying simple rules that are visible to all operators. Shitsuke is a scientific discipline so that every 6S stage has become a habit, One of the steps is to provide training on 6S culture and routine audits to workers (Kartika & Rinawati, 2016). Safety aims to familiarize employees with work safety. Occupational safety ensures that workers or the work community obtain the highest possible degree

of health in physical, psychological and social aspects, as well as preventing and treating diseases or disorders caused by occupational and environmental factors as well as common diseases. (Enro & Hardi, 2016)

Work Environment

A good work environment will provide maximum work support to employees. If employees can carry out activities as well as possible, are healthy, safe and comfortable, the conditions of the work environment can be said to be good and appropriate (Sri, 2014). In the long term, the consequences of the suitability of the work environment for employees will be seen. In addition, an unfavorable work environment can absorb more manpower and time, and does not support obtaining an efficient work system design (Bhastary & Suwardi, 2018).

METHOD

The method used in this research is the method of observation, Observation as an activity to record a symptom with the help of instruments and record it for scientific purposes or other purposes. The observation method is a data collection technique in which the object of research is observed directly and looks closely at the activities carried out. (Nadira et al., 2018)

Data collection was carried out using the 6S assessment form, the 6S assessment form was used to assess whether the workplace environment had implemented a 6S work culture (Maizir et al., 2020). The 6S assessment form can determine the extent to which the implementation of 6S in the organization has been carried out so that employees can do work with guaranteed work safety.

RESULTS AND DISCUSSION

Data collection

The following is the result of observing the initial layout of UKM Suci Rizki before the 6S method was applied.

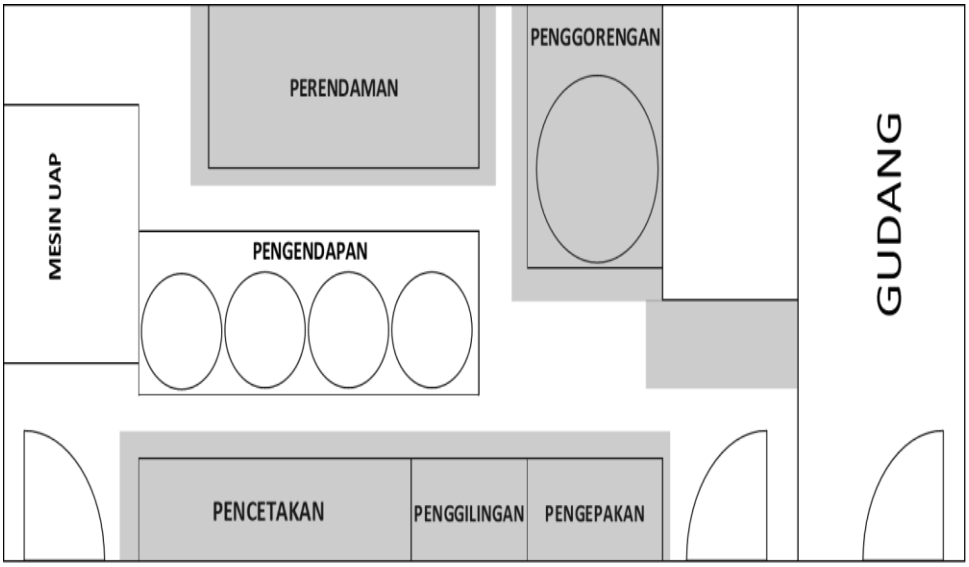

Figure 1. *Layout*the beginning of UKM Suci Rizki before the 6S method analysis was

carried out. Figure 1 shows the gray areas which are the points where the focus of the analysis is

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The 6S method will be carried out, namely at the milling, printing, soaking, frying, and packing stations.

Calculation of Total Score 6S

A newly developed industry that is relatively small and not too big, such as UKM Suci Rizki, is suitable for calculating the 6S checklist. The following is the result of the 6S checklist form.

Table 1. Research Results Form 6s Assessment

6S ASSESSMENT FORM					The place: MSME HOLY RIZKI			
					Date : December 16, 2020			
6S	No	ASPEC	No	OVERVIE	Score			
					1	2	3	4
SEIRI/ SORT/SU MMARY	1	Parts or materials	1	All equipment as neededBroken tools are			□	
	2	Equipment	2	separated	□			
	3	Office Stationery and Filing	3	All goods (hard and softfile) those that are not used are marked with handlingwith 6S redtag	□			
SEITON/ SET IN ORDER/ NEAT	4	*Labeling*identity	4	The storage area is well organized so that it is easy to view, retrieve and return			□	
	5	Storage area, materialsand tools	5	There is a clear indication of the amount of inventorymaximum or minimum	□			
	6	Quantity	6	All areas are equipped with a dividing line and all items within the line	□			
	7	Documentation	7	Equipment storage must be arrangedwell and easily so quickly found		□		
	8	Delimiter Area	8	Documents are neatly organized and easy to access	□			
SEISO/ SHINE/ RISK	9	floor, wall,palate	9	No dust, dirt, stains orinsect house Sufficient trash cans, identified and suitable for use	□			
	10	Equipment	10	Hygiene equipmentenough, neat placement,	□			
	11	Waste management	11	protectedfrom dirt				
	12	Equipment & Responsibilities cleanliness	12	There is a clear mechanism for the person in charge of cleaning	□			
	13	Ergonomics	14	Transporting goods beyond the limit		□		
			15	Material handling manual tools available	□			
			16	Normal working posture	□			
SAFETY/SAFE	14	fire extinguisher	17	There is an extinguisher with the appropriate type		□		
			18	There is an APAR sign and there is a procedure useappropriate		□		
			19	The fire extinguisher works well and the layout is easy to access	□			
			20	Regular fire extinguisher check	□			
	15	Poster/Signs :	21	There is a K3 sign or poster	□			
	16	Track Evacuation	22	There is an evacuation route sign	□			
			23	There is a map of the evacuation route	□			
	17	Personal Protective Equipment	24	Appropriate personal protective equipment is availableand according to standard		□		
			25	The cable connections are neatly arranged, the socket is	□			
	18	Panelelectricity	26	closedPanel is closed		□		
			27	Indicator panel that works		□		
	19		28	wellEmergency lights/genset	□			
	20		29	available. First aid kit and medicine available	□			
SEIKETSU/ STAND RDIZATION/ TREAT	21	Keeping the whole	30	There are efforts and mechanisms for 6S	□			
	22	Passion & Understanding 6S	31	There isan invitation to always implement 6S in the form of slogans, warnings, or other signs	□			
SITSUKE/S USTAIN/RA JIN	23	Learning	32	There are efforts for 6S learning andinvolvement of all employees and facility users	□			
	24	6S audits	33	There is a 6S internal auditperiodically	□			
				TOTAL POINTS	23	14	6	
				OVERALL POINTS	43			

Based on the 6S form assessment calculation table, the results of filling out the form using the 6S method, the table contains 6S aspects, namely Seiri, Seiton, Seiso, Safety, Seiketsu, Sitsuke, with a total of 32 factors that are reviewed in these 6 aspects. The score results are then identified based on the 6S score classification table.

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Table 2. 6S . Score Result Classification

1	*Unacceptable*	Activity not done
2	*Poor*	Less activity done (only a small part)
3	*good*	The activity is done enough (applied and clear in most areas)
4	*Excellent*	Activities well done (applied and clear in all areas)
5	*World Class*	Activities done with very good and there is evidence to support

The 6S classification table determines the results of the calculation of the 6S assessment score whether the workplace is declared to have implemented 6S well or not. The score is divided into 4, namely score 1 (activity is not carried out), score 2 (activity is not carried out), score 3 (activity is done quite well), score 4 (activity is done well), and score 5 (activity is done very well). .

Data processing

Calculation of total points and score 6S

Total points are obtained from the number of checklists on the 6S observation sheet then multiplied by the classification score. The calculation for each review is then added up by the five and then the total points are obtained

Total Points = 23 + 14 + 6 + 0 + 0 = 43

The score is obtained by dividing the total points by the number of reviews, because there are 32 on the observation sheet, so the total points are divided by 32.

$$\text{Score} = \frac{43}{32} = 1.3437$$

Problem Identification Based on Table 6S

From the results of the study, it can be seen that UKM Suci Rizki getsthe final score is 1.3437 and is included in the unacceptal classification, which means that the 6S method has only been carried out in a small part. The problems that exist in the research area based on table 6S are tools that are damaged and unused, not cleaned, no signs / labels are given for the items that are there, there are no dividing lines for objects in the research area, there are no posters. K3 or sign, unavailability of a first aid kit, no invitation in the form of a slogan or warning to implement 6S, and no periodic use of the whole 6S.

Radar chart creation 6S

Score on*form*The 6S assessment that has been analyzed is then entered into the Radar Chart. The score for that aspect is then multiplied by the number of checklists by the interpretation score. The following is a radar chart based on the 6S aspect score in this study.

Table 3. 6S Perspective Value

6S	Score
Seiri	1.67
Seiton	1.6
Seiso	1
Safety	1.47
Seiketsu	1
Shitsuke	1

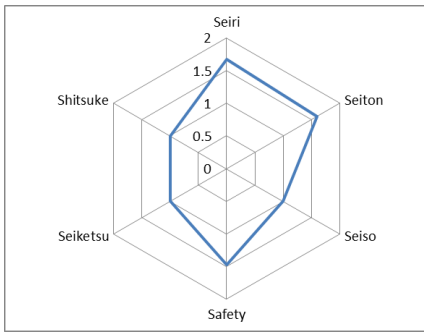

Figure 2. *Radar Chart*the 6S method of UKM Suci Rizki

It can be seen in table 3 and figure 2 that the highest value is obtained at the seiri stage with a value of 1.67, then seiton with a value of 1.6, safety 1.47, and the other three stages, namely seiso, seiketsu, and shitsuke, each of which is worth 1 .

CONCLUSION

The conclusion in this study is that 6S is a technique used to increase worker awareness of the 6S culture so as to achieve a work culture that is safe, comfortable, and ensures work safety. The 6S technique is easy to implement in any organization. 6S Engineering builds a good working environment in the manufacturing industry. The 6S technique is useful in increasing the work efficiency of workers in industry. 6S Engineering creates a more disciplined work environment in the industry. In this research, it is known that UKM Suci Rizki has not implemented 6S. This can be seen from the assessment score of the 6S form which is 1.3437 with the highest score being in the seiri aspect. This result is categorized as Unacceptable which indicates that there are still many activities that have not been carried out so that employees are still not getting good comfort and safety at work. From the 6S Identification Form, there are many problems related to the 6S indicator, so recommendations are given for each 6S indicator, such as paying attention to items that are not tidy, doing regular cleaning, having 6S slogans or warnings, conducting regular 6S internal audits, and so on. With the recommendations given, UKM Suci Rizki can understand and implement 6S culture. With a good organizational culture, of course, it will improve employee performance at UKM Suci Rizki so that the work results obtained will be maximized.

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