



Evaluation and Proposal Repair Safety Culture Maturity Use Safety Model Canvas in Manufacturing Companies

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Article Info

Article history:

Received 23 August 2024

Received in revised form 4 October 2024

Accepted 30 October 2024

Keywords:

Analytical Hierarchy Process
Safety Culture Maturity
Safety Model Canvassing

Abstract

PT. Rajawali Sumber Rejeki is one of the manufacturing companies that produces cigarettes in Indonesia. The cigarette production process involving large machines has a high potential risk of accidents for employees. This study assesses and proposes improvements to the company's safety culture maturity as a material for evaluating the company's K3 policy so that the number of work accidents in the production process can be minimized. The safety culture maturity assessment involves safety culture variables, namely commitment, leadership, responsibility, competence, engagement & involvement, information & communication, risk, and organizational learning. Data collection was carried out by distributing questionnaires to 60 employees working in the company. Three expert judgments were also involved as determinants of the weight of the safety culture maturity variable using the AHP (Analytical Hierarchy Process) method. In addition, fuzzy theory is also used to reduce the subjectivity of the company's safety culture maturity assessment results. Then the improvement proposal is given with a safety model canvassing based on the results of the safety culture maturity assessment. The results of the study showed that the safety culture maturity of PT. Rajawali Sumber Rejeki is 3.5 which is included in the Complaint level. Based on the safety canvassing model that has been created, the priority for improving the safety culture maturity variables from the first to the last is organizational learning, competence, commitment, information & communication, risk, engagement & involvement, responsibility, and finally the leadership variable.

Introduction

One of encouraging factors For achieved productivity is create environment comfortable work And safe for workers (Firdaus, 2022). On company the manufacturer does it production use machine big often there is risk accident high work . In fact Still Lots less company notice about security worker in the production process the . The country has arrange about safety And health Work in article 86 and article 87 of the Law Invite Number 13 of 2003 concerning employment. In Invite Invite the mentioned that every worker have right For obtain protection on safety And health Work (Alshaikh, 2020). In Invite Invite the Also arranged For every company must apply system management safety And health integrated work with system management company (Friend et al., 2023). Based on rule rule the Already become obligation for each company For notice management of SMK3 with Good And in accordance regulations that have been established (Hart & Zingales, 2022).

As effort For repair in management of the company's SMK3 done evaluation And evaluation to *safety culture* company (Wibowo & Sajiyo, 2023). On a number of case accident work , the investigators concluded that reason accident is company culture (Zhang et al., 2020). According to *the International Nuclear Safety Advisory Group* (INSAG), one of the causes of the *Chernobyl tragedy* in 1986 was due to poor *safety culture* (Aleksandrova & Timofeeva, 2020). The level of safety culture in industrial organizations plays an important role in reducing or eliminating accidents, incidents or near misses including human, economic and material losses (Siuta et al., 2022).

PT. Rajawali Sumber Rejeki is a manufacturing company that produces cigarettes in Indonesia. The machines used in tobacco processing are large machines with a high potential risk of accidents (Chao et al., 2020). So companies need to pay attention to the safety of operators and employees involved in the production process (Kaasinen et al., 2020). Based on field studies, the problem at PT Rajawali Sumber Rejeki is the lack of implementation of work safety (K3) rules by machine operators and all workers involved in the production process (Waluyo et al., 2022). As a result of the lack of implementation of work safety (K3) rules, an increase in the number of work accidents on the PT production floor was found (Ahmad, 2022; Hidayah & Zaman, 2022). Rajawali Sumber Rejeki from 2022 to 2023, namely 3 cases. One example of a serious accident that occurred was that an operator was splashed with chemicals in the eye and needed to be hospitalized (Yang et al., 2023). The accident occurred because the operator did not wear safety glasses while working. Companies need to improve *safety culture maturity* in their work environment to minimize the occurrence of work accidents (Williams et al., 2020). Based on these problems, this research was carried out with the aim of assessing and providing recommendations for improvements to the company's *safety culture maturity* using *the safety canvas model* (Guangul et al., 2020).

Safety Culture

The term safety culture *first* appeared by the IAEA (*International Atomic Energy Agency*), based on the results of an analysis of the nuclear disaster at *Chernobyl* in 1986. The results of investigations from the International Atomic Energy 13 Agency regarding the explosion showed that the accident was caused by poor culture. safety or what is usually called safety culture (Imaduddin, 2019). *The British Health and Safety 5 Executive* (HSE) coined the term "*Safety Culture*" which means the result of recognizing values, attitudes, perceptions, competencies and behavioral patterns that determine commitment, style and skills in managing health, work hygiene and safety in organizations (Siuta et al., 2022). *Safety culture maturity* is defined as a certain level or level that assesses work safety culture in a company based on previously established indicators (Williams et al., 2020).

Safety Culture Maturity Model

Based on Hamonangan (2018), *the safety culture maturity model* was first introduced by *the International Atomic Energy Agency* (IAEA) in 2002. According to the IAEA, there are three stages of *safety culture maturity development* that occur in organizations. Each stage involves awareness and a different impact on human safety. There are several studies that develop models of *safety culture maturity*. One of them is *Anglo American plc* which models *safety culture maturity* into 5 levels from lowest to highest, namely *basic, reactive, complaint, proactive, resilient*. The *safety culture maturity* model developed by *Anglo American plc* is as follows:

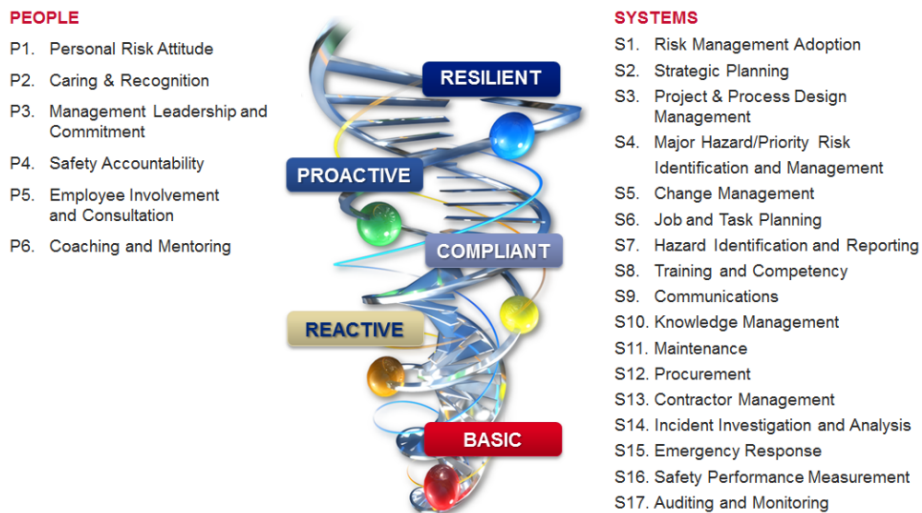


Figure 1. Anglo American Plc maturity model (Foster, 2013)

Safety Model Canvas

The *safety canvas model* is a new model that is being developed to describe safety conditions in the practice of an organization (Anderl jung et al., 2023). The *safety model canvas* uses a framework approach from *the business model canvas*, namely by mapping a condition in the organization which is written on the canvas in order to make continuous improvements until it reaches a better condition (Sudarni, 2020). The measurements in SMC consist of Seven Building Blocks or 7 building dimensions, namely the dimensions of *commitment, leadership, responsibility, competence, engagement & involvement, information & communication, risk, and organizational learning*. 7 building blocks *safety canvas models* are grouped into 4 categories. These categorizations include *primary key, enhance, catalyst, and ultimate goal* (Firdaus & Sudiarno, 2022).

Methodology

This research measures the company's safety culture maturity using a questionnaire distributed to company employees. The preparation of the research instrument involved eight safety culture variables consisting of commitment (C), leadership (L), responsibility (R), competence (CO), engagement & involvement (EI), information & communication (IC), risk (RI), and organizational learning (OL). The steps in this research are as follows:

Conduct an average assessment of eight *safety culture variables* in the company by developing a questionnaire that is distributed to workers in the company. The safety culture questionnaire developed consists of 30 questions with an answer scale of 1-5. The questionnaire will be distributed to 60 workers as a sample that represents all workers in the company. The selection of respondent samples was carried out using a purposive sample method with the following criteria: The respondent is registered as a worker and has worked for more than 1 year at the company. The respondent works on the company's production floor. The 30 questions in the safety culture questionnaire include 24 indicators from the variables commitment (C), leadership (L), Risk (RI), Competence (CO), information & communication (IC), and organizational learning (OL) (each The variable consists of 4 indicators), 6 indicators from the variables responsibility (R) and engagement & involvement (EI), (3 indicator variables each).

The next stage is measuring the weight of each safety culture variable which is carried out by expert judgment in the company using the AHP (Analytical Hierarchy Process) method. Weighting was carried out by distributing a pairwise comparison survey with a scale of 1-9 to measure the level of importance of each safety culture variable. The data obtained was then processed with expert choice v11 software.

The assessment of the safety culture maturity level in the company is carried out by multiplying the average value of each variable and the weight of each safety culture variable. In addition, fuzzy theory is also added to measure the safety culture maturity level of the company so that a comparison of measurement results is obtained. The safety culture maturity model used is a model developed by Anglo American plc with 5 levels of maturity level, namely: basic, reactive, complaint, proactive, and resilient.

After knowing the level of safety culture maturity in the company, we continued with preparing a safety model canvas as a proposed improvement to increase safety culture maturity in the company.

Results and Discussion

Average Rating of Safety Culture Variables

The assessment of the safety culture variable in the company was carried out by distributing questionnaires to a predetermined sample of workers, namely 60 workers. The sample of workers is representative of all work units at PT. Rajawali Sumber Rejeki is the primary work unit, boiler, SKM, SPM, warehouse and front office. Safety culture variables include: commitment (C), leadership (L), responsibility (R), competence (CO), engagement & involvement (EI), information & communication (IC), risk (RI), and organizational learning (OL). Evaluation done with look for average value on every indicator from each variable culture safety. Following This is Wrong One example calculation on commitment variable in the work unit *primary*:

$$\bar{X}C = \frac{\sum_{i=1}^4 \bar{x}Ci}{4}$$

$$\bar{X}C = \frac{3,09 + 3,77 + 3,95 + 3,05}{4}$$

$$\bar{X}C = 3,47$$

With use the same formula calculation done on all over variable culture safety Work that is *commitment, leadership, responsibility, engagement & involvement, risk, competence, information & communication* and *organizational learning* on all work units in the company . Results from evaluation variable can seen on table 1 below .

Table 1. Safety Culture Variable Score

No.	Work unit	Safety Culture Variables							
		C	L	R	EI	RI	CO	IC	OL
1	<i>Primary</i>	3.47	3.70	3.71	3.65	3.65	3.39	3.59	3.64
2	<i>Boilers</i>	3.65	3.85	4.20	3.87	3.60	3.35	3.30	3.35
3	SKM	3.36	3.68	3.62	3.40	3.48	3.30	3.46	3.34
4	SPM	3.46	3.67	3.61	3.50	3.71	3.54	3.63	3.29
5	<i>Warehouse</i>	3.54	3.61	3.62	3.90	3.46	3.79	3.64	3.36
6	<i>Front Office</i>	3.75	3.88	3.67	3.67	3.50	3.63	3.50	3.42
Company Score		3.54	3.73	3.74	3.67	3.57	3.50	3.52	3.40

Based on table 1, the average value of the safety culture variable in all companies shows that the smallest value for the organizational learning (OL) variable is 3.40, while the largest value for the responsibility (R) variable is 3.74.

Weighting of safety culture variables

The next stage is to weight each safety culture variable using the AHP (Analytical Hierarchy Process) method. Variable weighting is done by distributing pairwise comparison surveys with

an importance scale of 1-9 by 3 expert judgments in the company. Weighting with the AHP method has limitations, namely the subjectivity of the weighting results because the assessment is based on the opinion of each expert judge on 10 safety culture variables. To ensure the credibility of the weighting results, expert judges are selected based on the following criteria: having general knowledge of K3 (Certified) or having experience in the field of K3 in the company for more than 2 years, in addition, at the beginning of the data collection section, the researcher emphasized that the expert judges filling out the questionnaire were not under pressure from any party. The results of this weighting greatly affect the results of the company's safety culture maturity assessment, the smaller the weight given to a variable, the lower the safety culture maturity value of the variable. The results of expert weighting were obtained with the help of expert choice v11 software using the combined feature as output in Figure 2.

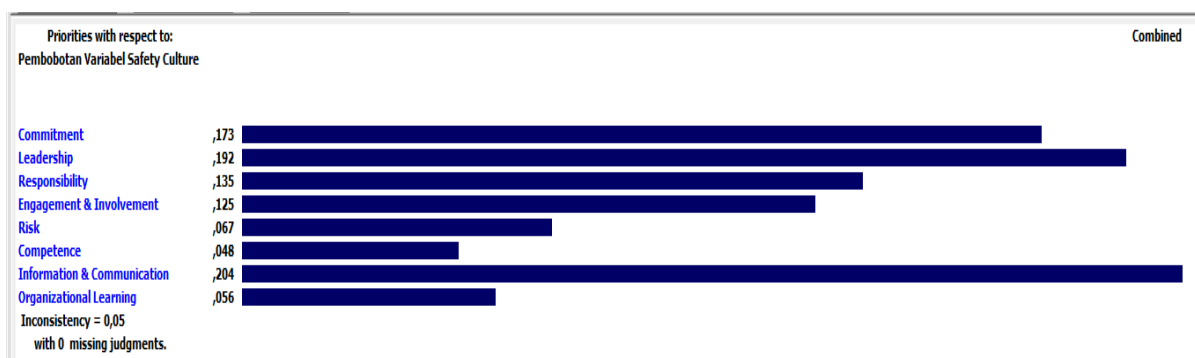


Figure 2. Expert Choice Software Output

Figure 2 above is the output of expert choice v11 software, which is the combined result of 3 expert judgments. From figure 2 we can see the weight value of the combination of the assessment of 3 expert judgments on each variable. In addition, we can also see the inconsistency value of the assessment results is 0.05, where expert judgment can be said to be consistent if the inconsistency value is less than or equal to 0.10 (10%) so that the weighting results can be used in the next stage. Based on figure 2 above, the weight of each safety culture variable is obtained in table 2 below.

Table 2. Safety Culture Variable Weight

No	Variabel	Expert 1	Expert 2	Expert 3	Combined
1	Commitment	0,128	0,176	0,189	0,173
2	Leadership	0,233	0,159	0,168	0,192
3	Responsibility	0,154	0,118	0,121	0,135
4	Engagement & Involvement	0,042	0,18	0,218	0,125
5	Risk	0,062	0,065	0,071	0,067
6	Competence	0,065	0,039	0,037	0,048
7	Information and Communication	0,243	0,216	0,148	0,204
8	Organizational Learning	0,073	0,047	0,048	0,056
Total		1	1	1	1

From table 2 above, we can see that the variable with the highest weight is the Information and Communication variable with a value of 0.204 while the variable with the lowest weight is the Organizational Learning variable with a value of 0.056. The weighting value shows the importance of each variable to the company's safety culture maturity level according to the opinion of experts in the company. The smaller the weight given to a variable, the lower the importance value of the variable in the safety culture maturity assessment, and vice versa. The weighted data will then be processed to carry out the safety culture maturity assessment at the next stage.

Company Safety Culture Maturity Assessment using the Analytical Hierarchy Process (AHP) method

There are 5 levels of safety culture maturity based on the model created by Anglo American plc from the lowest to the highest, namely: basic, reactive, complaint, proactive, and resilient (as in Figure 1). The average assessment of the safety culture variables by respondents that have been obtained in the previous stage is then multiplied by the weight of each safety culture variable by the company's expert judgment. so that at this stage we can find out the company's safety culture maturity level by using equation 1 for each variable.

$$\text{Safety Culture Maturity} = \text{Average} \times \text{Wheight} \quad (1)$$

One of example calculation For variable *commitment* on *Primary* units that is with multiply average value sbig 3.50 And mark weight variable *commitment* from *expert* of 0.173, calculation more clear can seen as following :

$$NPT_i = \overline{XC}_i \times w_{ci}$$

$$NPT_i = 3,47 \times 0,173$$

$$NPT_i = 0,60$$

Calculation like example on done on all over safety culture variable , namely *commitment, leadership, responsibility, engagement & involvement, risk, competence, information & communication* and *organizational learning*. Each maturity level value variable obtained with add up all over mark proportion measurable variable , false One example the calculation is on commitment variable as following :

$$TKBV_C = \sum_{i=1}^8 NPTV_C$$

$$TKBV_i = 0,60 + 0,63 + 0,58 + 0,60 + 0,61 + 0,65$$

$$TKBV_i = 3,67$$

Calculation like example on done on all over safety culture variable And results from safety culture maturity assessment on PT. Rajawali Source Fortune can seen on table 3 below .

Table 3. Safety Culture Maturity Assessment

No	Work Unit	Variabel Safety Culture							
		C	L	R	EI	RI	CO	IC	OL
1.	Primary	0,60	0,71	0,50	0,46	0,24	0,16	0,73	0,20
2.	Boiler	0,63	0,74	0,57	0,48	0,24	0,16	0,67	0,19
3.	SKM	0,58	0,71	0,49	0,43	0,23	0,16	0,71	0,19
4.	SPM	0,60	0,70	0,49	0,44	0,25	0,17	0,74	0,18
5.	Warehouse	0,61	0,69	0,49	0,49	0,23	0,18	0,74	0,19
6.	Front Office	0,65	0,74	0,50	0,46	0,23	0,17	0,71	0,19
Maturity level (x)		3,67	4,30	3,03	2,75	1,43	1,01	4,31	1,14
Safety Culture Maturity Level (\bar{x})		2,70							

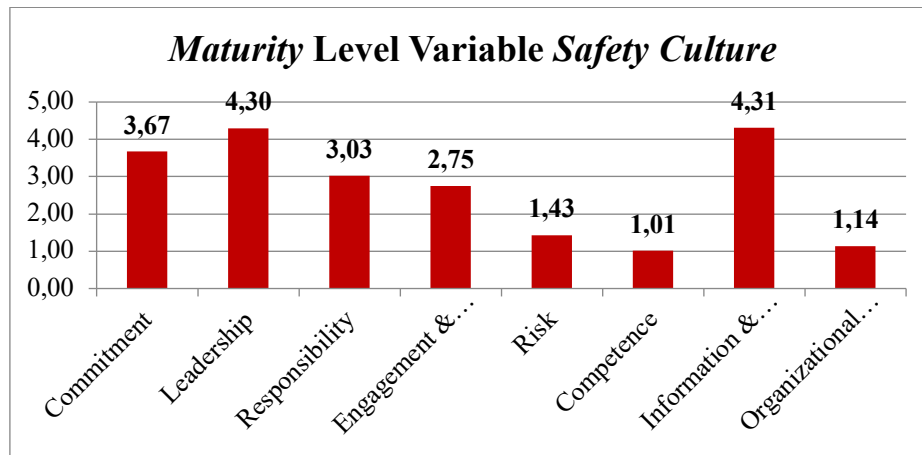


Figure 3. Each Maturity Level Diagram Variable

Based on table 3 above, it can be seen that the safety culture maturity value of PT. Rajawali Sumber Rejeki is 2.7 where this value is included in the complaint category. The Complaint Level is the 3rd of 5 levels of safety culture maturity based on the model created by Anglo American plc from the lowest to the highest, namely: basic, reactive, complaint, proactive, and resilient. According to Anglo American plc (Foster & Hoult, 2013) describes that in the complaint category, incidents and work accidents are purely the fault of the workers. These results were obtained by averaging all the safety culture variable scores so that the result was 2.7. The assessment carried out by previous researchers, namely Sudarni (2020) who studied manufacturing companies that produce steel, got a result of 3.65. When compared to the Safety culture maturity level of PT. Rajawali Sumber Rejeki is still considered a medium category so that improvements need to be made.

Based on the bar chart presented in Figure 3, it can be seen that the order of the variables from the lowest to the highest value is the competence variable, organizational learning, risk, engagement & involvement, responsibility, commitment, leadership, information & communication. The variables competence, organizational learning, risk, are the main priorities for improvement and increasing the safety culture maturity value, because these three variables have the lowest values when compared to other variables (Giannakos et al., 2022).

Company Safety Culture Maturity Assessment using Fuzzy Method

Evaluation *safety culture maturity* uses AHP method was assessed Still nature subjective (fuzzy), p This because use from *expert judgment* in give weight of 10 safety culture variables. On study This *Fuzzy* theory was added to assess *safety culture maturity*, which according to Sudarni (2020) research, the results can be seen as more accurate. The use of fuzzy theory in this research is the TFN (*Triangular Fuzzy Number*) concept, namely by defining the members of a set by three main numbers which are expressed as (l, m, r), namely the lowest value, middle value and highest value. The use of the TFN method can be seen on the existing safety culture maturity scale on table 4 below .

Table 4. *Safety Culture Maturity* Scale using the TFN Method

Scale <i>Safety Culture Maturity</i>	TFN Scale			Information
	TFN _l	TFN _m	TFN _r	
1	1	1	2	Basic
2	1	2	3	Reactive
3	2	3	4	Planned
4	3	4	5	Proactive
5	4	5	5	Resilient

From table 4 above results the answer given by respondents moment fill in value 1 on questionnaire , then TFN method defines with limit lower worth 1 and limit on value 2. TFN value can be known with use formula equality as following:

$$TFN (TFN_1, TFN_m, TFN_r) = \frac{((1,1,2) \times (Frequency1)) + ((1,2,3) \times (Frequency2)) + ((2,3,4) \times (Frequency3)) + ((3,4,5) \times (Frequency4)) + ((4,5,5) \times (frekuensi 5))}{Number\ of\ Frequency} \quad (2)$$

With equation 2 then will done example calculation on variable *commitment*. Total amount respondents' answers (frequency). For variable *commitment* on levels 1 to 5 respectively join in are 6, 18, 97, 90, and 29. Sum answer respondents maturity level then multiplied with TFN₁, TFN₂, and TFN₃ values on each each level . So that calculation done as following :

$$TFN (TFN_1, TFN_m, TFN_r) = \frac{((1,1,2) \times (6)) + ((1,2,3) \times (18)) + ((2,3,4) \times (97)) + ((3,4,5) \times (90)) + ((4,5,5) \times (29))}{240}$$

$$= (2,517; 3,492; 4,371)$$

Based on calculation on obtained that mark limit lower For variable *commitment* is of 2.517, limit middle amounting to 3,492, and limit on amounting to 4,371. Mark variable *maturity level safety culture* on company can searching for with method calculate the average of three number *fuzzy* already obtained on stages previously For each variable *the* . Following calculation mark *maturity level* on variable *commitment* :

$$Maturity\ level_{(C)} = \frac{TFN1 + TFN2 + TFN3}{3}$$

$$Maturity\ level_{(C)} = \frac{2,517 + 3,492 + 4,371}{3}$$

$$Maturity\ level_{(C)} = 3,460$$

Calculation This Also applies for evaluation on variable another *safety culture* . Following is calculation TFN average value at company :

Table 5. Company Safety Culture Maturity Value Fuzzy Method

No.	Variabel Safety Culture	TFN1	TFN2	TFN3	Average	Maturity Level
1	Commitment	2,517	3,492	4,371	3,460	3,460
2	Leadership	2,721	3,713	4,558	3,664	3,664
3	Responsibility	2,706	3,706	4,533	3,648	3,648
4	Engagement & Involvement	2,650	3,628	4,467	3,581	3,581
5	Risk	2,592	3,575	4,442	3,536	3,536
6	Competence	2,471	3,450	4,363	3,428	3,428
7	Information and Communication	2,571	3,538	4,429	3,513	3,513
8	Organizational Learning	2,496	3,454	4,317	3,422	3,422
Safety Culture Maturity (\bar{x})		2,590	3,569	4,435		3,531

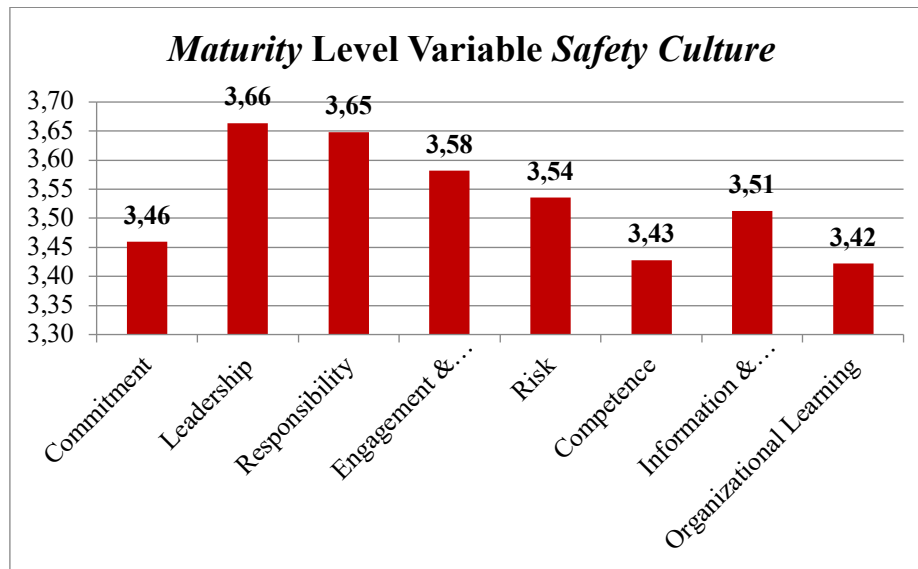


Figure 4. Maturity level diagram for each variable of the Fuzzy Method

Based on table 5 above, the safety culture maturity value of PT. Rajawali Sumber Rejeki is 3.5, which is included in the complaint category. The complaint level is the 3rd of 5 levels of safety culture maturity based on the model created by Anglo American plc from the lowest to the highest, namely: basic, reactive, complaint, proactive, and resilient. According to Anglo American plc (Foster & Houlst, 2013) describes that in the complaint category, incidents and work accidents are purely the fault of the workers. The results obtained using fuzzy theory at this stage produce higher values compared to the AHP weighting method at the previous stage (Zabihi et al., 2020). The results obtained using fuzzy theory produce more accurate values according to Sudarni research (2020). The safety culture maturity level of PT. Rajawali Sumber Rejeki is still in the middle category so that improvements need to be made.

We can also see that the bar chart presented in Figure 3 for the variable with the highest maturity level is the leadership variable with a value of 3.66 while the lowest value is the organizational learning variable with a value of 3.42. The variables of organizational learning, competence, commitment, are the main priorities for improving and increasing the safety culture maturity value, because these three variables have the lowest values when compared to other variables. From the results of this assessment, researchers can provide references to companies about which variables are the main priorities for improving and increasing the safety culture maturity value (Dirman, 2020; Barauskaite & Streimikiene, 2021).

There is a significant difference between the first calculation method, namely the AHP weighting and the second calculation method, namely the Fuzzy method (Liu et al., 2020; Munier & Hontoria, 2021). The calculation of the first method produces a company safety culture maturity value of 2.7 and the calculation of the second method produces a company safety culture maturity value of 3.5. However, these values are still the same, including at the complaint level. The results obtained using fuzzy theory produce more accurate values according to Sudarni research (2020), because the safety culture maturity assessment using the AHP method is considered to be subjective (vague) due to the use of expert judgment in providing weights. Based on this statement, the results used are the results of using fuzzy theory with a safety culture maturity value of 3.5. Similar research conducted by Sudarni (2020) on one of the manufacturing companies that produces steel in Indonesia got a value of 3.7. Another study conducted by Imaduddin (2019) on airline companies in the airworthiness management unit in Indonesia received a score of 4. When compared to similar companies in Indonesia, PT Rajawali Sumber Rejeki's position is included in the standard category, not far behind other

companies. However, the company's safety culture maturity level certainly still needs to be improved to a resilient level.

Proposed Repair with Safey Model Canvas

After obtaining the company's *safety culture maturity value*, a *safety canvas model* was prepared which was based on 8 variables in measuring *safety culture maturity*, namely *commitment, leadership, responsibility, engagement & involvement, risk, competence, information & communication* and *organizational learning* (Siuta et al., 2022). The *safety model canvas* is a concept development from *the business canvas model* which is used to create activities that prioritize occupational safety and health in work security. In *the safety canvassing model*, the 8 variables in *safety culture maturity research* are divided into 4 parts as the basic properties of these variables. These parts are *primary key, enhance, catalyst* and *ultimate goal*.

Variables included in *primary keys* are *organizational learning, commitment, and leadership*. The variables included in *enhancers* are the dimensions of *competence, responsibility and engagement & involvement*. The variables included in *the catalyst characteristic* are *information & communication*. Variables included in the nature of *the ultimate goal* is *risk*. Priority proposal repair In the safety canvas model, it is formed based on the results of measuring the maturity level for each safety culture variable which has been carried out previously in table 5 of mark lowest until mark highest . Mark lowest that is on organizational learning variable with value 3 .42 And mark highest on leadership variable with value 3.66. So that obtained safety canvas model as in Figure 2 below .

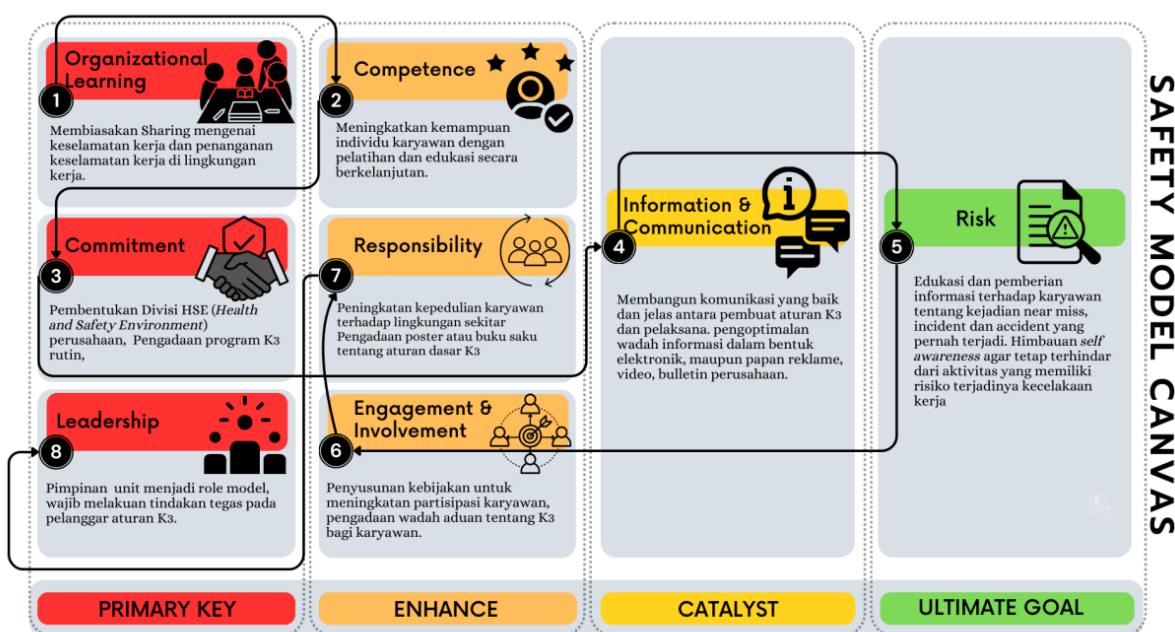


Figure 5. Improvement of Company Safety Culture Safety Canvas Model

Based on Figure 2, the priority can be determined in making improvement proposals in the company based on 8 safety culture maturity variables where the order from the first to the last is the organizational learning variable, competence, commitment, information & communication, risk, engagement & involvement, responsibility, and finally the leadership variable. In Figure 2, there are also recommendations for actions that can be taken by the company to increase the maturity level of each variable, more details can be seen in table 6 below. The recommendations will be given to the person in charge of the K3 management system (SMK3) at PT. Rajawali Sumber Rejeki with the hope that they can be applied to the company and can increase the company's safety culture maturity.

Table 6. Recommendations for Improving Company Safety Culture Maturity

Variable	Blok	Recommendation
Organizational Learning	Primary Key	Get into the habit of sharing work safety and handling work safety in the work environment.
Competence	Enhance	Improve individual employee capabilities through ongoing training and education.
Commitment	Primary Key	Establishment of the company's HSE (Health and Safety Environment) division, provision of routine K3 programs.
Information & Communication	Catalyst	Building good and clear communication between K3 rule makers and implementers, Optimizing information containers in electronic form, as well as billboards, videos, company bulletins.
Risk	Ultimate Goal	Education and provision of information to employees about near misses, incidents, and accidents that have occurred, self-awareness appeals to avoid activities that have a risk of work accidents.
Engagement & Involvement	Enhance	Formulation of policies to increase employee participation, provision of complaint forums regarding K3 for employees.
Responsibility	Enhance	Increasing employee awareness of the surrounding environment, providing posters or pocket books about basic K3 rules.
Leadership	Primary Key	Unit leaders are role models and are required to take firm action against violations of K3 regulations.

Conclusion and Suggestion

The measurement of safety culture maturity level at PT. Rajawali Sumber Rejeki has a value of 3.5 where the value is included in the complaint category. In theory, according to Anglo American plc, at this level the company has implemented an occupational safety management system but only as a fulfillment of regulations so that the business remains legal and legally recognized. There is a match between conditions in the field and existing theories. For a company that has only been established for 2 years, successfully achieving safety culture maturity at the complaint level is quite good but continuous improvement is needed. When compared to similar companies in Indonesia, PT Rajawali Sumber Rejeki's position is included in the standard category, not far behind other companies. However, the company's safety culture maturity level certainly still needs to be improved to the resilient level. Based on the safety model canvas that has been created, priorities can also be determined in making improvements to the company based on 8 safety culture maturity variables where the order from first to last is the organizational learning variable, competence, commitment, information & communication, risk, engagement & involvement, responsibility, and finally the leadership variable. The formation of this priority is based on the maturity level value of each safety culture variable from the lowest to the highest. It is hoped that the proposed improvements that have been made can be applied by the company so that it can improve the company's safety culture maturity.

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