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#### **Abstract**

Safety culture is a concept defined at a group level or higher that refers to the shared values between all groups or companies, corporations, or organizational members. Safety culture relates to formal safety issues within an organization and is closely related to, but not limited to, management and supervision systems. A safety culture emphasizes the contributions of everyone at every level of the organization. In business entities this impacts the behavior of all workforce members in the workplace which is usually reflected in the relationship between reward systems and safety performance. This research examines how much regulatory factors and management commitment can influence the implementation of safety culture, as well as what strategy suggestions can be made to improve safety culture. The research was conducted within the PT. Wijaya Karya (Persero) Tbk Operations Department 1 Sumatra Region using the Explanatory Sequential Design method or known as the two-phase method where quantitative data as the first phase is used as a base and qualitative data as the second phase for supporting, or in other words the quantitative approach is the main priority which is supported by a qualitative approach (Sinulingga, 2021), Qualitative research using Likert questionnaires was carried out on 44 employees from various positions, as well as qualitative interviews as support for the 4 selected employees. From the research results, it was found that regulations and management commitment have an important influence on safety culture, both partially and jointly. This strategy can work well if management has a full commitment to making safety culture part of the company culture. Without this, inconsistencies and tolerance for deviations will arise, which if left unchecked will hamper or possibly thwart the process of creating the expected safety culture.

Keywords: Regulations, Management Commitment, Safety Culture, Occupational Health and Safety Management System, Strategy

#### 1. INTRODUCTION

Construction work is one of the most dangerous jobs in the world, resulting in more work-related deaths than any other sector. Incidents or accidents that occur on construction sites lead to reduced project performance, such as delays in project completion, increasing project costs, reducing productivity and creating negative impression for the organization (NH Abas et al, 2020). This fact shows that accidents can have detrimental consequences for employees and the organization, so it is very important to ensure the health and safety of workers and compliance with SHE (Safety Health Environment) requirements in Work environment in the Construction Services Industry. WIKA (PT. Wijaya Karya (Persero) Tbk) as one of the BUMN Karya companies whose core business is in the Construction Services Industry is fully aware of the importance of implementing SMK3 (Occupational Accident and Health Management System) in every business activity. It is hoped that the implementation of SMK3 will create a safe and comfortable work environment, so it is hoped that this work environment will have an impact on increasing the performance and productivity of workers which will impact on increasing the quality and quality of products produced in the business process.

This seriousness and commitment is also implemented in the Organizational Structure of the WIKA Board of Directors, where QSHE (Quality Safety Health and Environment) is led directly by a Director who reports directly to the President Director in a position equal to the

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Director of Operations and Human Capital, and is supported by Safety organs at various levels of Management up to the spearhead level of the business, namely Projects.

In the application of SMK3 in daily work activities, WIKA Regulations refer to the implementation of K3L Management in accordance with Republic of Indonesia Government Regulation No. 50 of 2012, RI PUPR Ministerial Regulation No. 10 of 2021, Joint Decree of the Minister of Manpower and Public Works No. KEP.174/MEN/1986, International Standard ISO 45001:2018, International Standard ISO 14001:2015 / SNI 19 14001:2005 and Safety, Health & Environment Plan (SHE PLAN) Procedure No: WIKAPEM-PM-03.03 as a basic planning reference K3 in work units/projects. However, under these conditions, there are still problems in implementing the SMK3 program. This is mainly related to the lack of commitment and compliance of workers with the SMK3 rules and regulations that have been created and implemented in each work unit. Although in general WIKA has succeeded in implementing SMK3 so that the fatality rate in the 2021 period can be reduced to only 10 (oneZero) incidents, as shown in Figure 1.1, there are still work activities that cause Nearmis (near misses), Non Lost Time Injury, Minor Accidents and Temporary Absence (PT. Wijaya Karya (Persero) Tbk, 2021) as shown in Table 1.1, which in this case shows that there were incidents that occurred but were quite fortunate. This does not turn into an accident whether light or serious.

Conditions where an incident occurs due to poor implementation of SMK3 in the work environment, from near-miss conditions to serious accidents, have consequences ranging from mild to severe for employees and organizations (companies) as can be seen in the table The simulation is shown in Table 1.2 below. In Table 1, Appendix 1.2, the table in Appendix 1 can be seen estimates of variations in the possible impacts that occur due to events that result in incidents at work sites, starting from near-miss levels to serious (fatal) accidents. These things can have various impacts, both in terms of costs, material losses and non-material impacts, such as public trust and company reputation.



The theory of the causes of construction work accidents has developed, not only looking at the worker (personal) aspect, but also looking at the management and organizational aspects. (Endroyo et al. 2007). So it can be concluded that work accidents are not only caused by individual or personal factors, but are also related to systems within an organization. Successful implementation of a Safety Management System will greatly motivate workers' participation in safety activities and compliance with regulations. Managers' strong commitment to safety is critical to driving safety performance. Increasing managerial safety commitment such as caring about worker safety participation and participation in safety activities will directly motivate worker safety participation. (Wen-Jywan Su, 2021). Identification of the implications of the implementation of regulations and commitment to the implementation of the K3 Management System in creating a company safety culture is expected to contribute to the creation of an even better safety culture for



the company, as an effort to improve the company's performance and competitiveness, not only at the National level, but also at the International level.

## Regulations

A set of rules that regulate the order or procedures in implementing SMK3 in an organization or work unit.

## **Management Commitment**

A form of dedication or obligation that binds Management and shows the extent to which Management feels bound, involved and loyal to the implementation of SMK3.

## **Safety Culture (Safety Culture)**

The product of an individual or group of people's values, attitudes, perceptions, competencies and behavioral patterns that show commitment and forms of implementation of Occupational Safety and Health (K3).

## 2. IMPLEMENTATION METHOD

## **Types and Nature of Research**

The type of research taken in this research is a type of research that combines quantitative methods with qualitative methods with a design using the Explanatory Sequential Design method or known as a two-phase method where quantitative data as the first phase is used as a base and qualitative data as the second phase for supporting. or in other words, a quantitative approach is the main priority which is supported by a qualitative approach (Sinulingga, 2021). This method was chosen because in this research we wanted to know how much influence Regulations and Management Commitment quantitatively have on Safety Culture, either partially or simultaneously, then with the qualitative method it is hoped that the data and information obtained will strengthen and support the results of the quantitative research that has been carried out first. formerly. Apart from that, the qualitative data carried out will also gather more in-depth information about what things have or have not gone well in the area of Regulations and Management Commitment, where this data will also be used to provide suggestions for strategic plans.

## Place and time of research

The location of the research was carried out in work units and projects within the operational scope of PT Operations Department 1. Wijaya Karya (Persero) Tbk (Sumatra area).

## 3. RESULTS AND DISCUSSION

## **Hypothesis testing**

## a. t Test (Partial)

ANOVAa											
Model		Sum of Squares	df	Mean Square	F	Sig.					
1	Regression	11064.866	2	5532.433	142.214	,000b					
	Residual	1594,992	41	38,902							
	Total	12659.858	43								
a. Dependent Variable: Safety Culture (Y)											
b. Predictors: (Constant), Management Commitment (X2), Regulation (X1)											

Based on the output above, it is known that the Fcount value is 142.214 with a p-value (sig) of 0.000, using  $\alpha = 0.05$ . Because the p-value (sig)  $< \alpha$  or 0.000 < 0.05, H0 is rejected, meaning that regulations and management commitment together have a significant influence on safety culture.

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## b. TestF (Simultaneous)

Coefficientsa											
		Unstandardized	d Coefficients	Standardized Coefficients							
Model		В	Std. Error	Beta	t	Sig.					
1	(Constant)	-1,266	5,130		247	,806					
	Regulation (X1)	,439	,231	,215	1,903	,064					
	Management Commitment (X2)	,879	.134	,741	6,556	,000					
a. D	a. Dependent Variable: Safety Culture (Y)										

From the calculation above, the t-value for the regulatory variable is 1.903 with a p-value of 0.064. Because the p-value (sig) >  $\alpha$  or 0.064 > 0.05, H0 is accepted, meaning that there is a positive but not significant influence of regulations on safety culture. From the calculation above, the t-count value for the management commitment variable is 6.556 with a p-value of 0.000. Because the p-value (sig) <  $\alpha$  or 0.000 < 0.05 then H0 is rejected, meaningthere is a significant positive influence on management commitment to safety culture (Safety Culture)

## 2. Qualitative Research Results

Qualitative research in this study was carried out to follow up on the results of quantitative research, as part of research using the Explanatory Sequential Design method, as well as in an effort to find factors and strategies that can influence the implementation of safety culture in the work environment, especially from reviewing the influence of regulations and management commitment. This qualitative research was carried out by interviewing 4 respondents who were considered to understand the conditions for implementing SMK3, because they were WIKA personnel at the Project Management level. In this case I took respondents consisting of 2 Project Managers and 2 people at the level of Section Heads. The interviews were conducted in a semi-structured manner, at different times, with the main points being a review of the respondents' viewpoints regarding the implementation of SMK3 and safety culture in the work environment, the factors they felt had the most influence and what strategies could be a solution in building a safety culture.

The important points obtained from the results of interviews with respondents are as followsfollowing:

## 1. Management Commitment

The influence of Management Commitment on the implementation of SMK3 and Safety Culture was found directly or explicitly from the results of each interview with the four respondents. Respondent 01 explained several problems with the implementation of K3 which were hampered by the budget for implementing SMK3 which was felt to not be able to meet the required needs, this can be seen from the explanatory quoteand respondent 01 as follows:

"Our K3 culture, actually in terms of projects, is still lacking, sir, because this K3 culture is directly proportional to costs" (Respondent 01, 2023)

"How can we fulfill WIKA's standard K3 procedures if it is not proportional to the costs." (Respondent 01, 2023)

"So yes, with the existing costs we are maximizing it, it seems that even though it is not 100% fulfilled, the aspects of K3 with the minimum existing costs can be fulfilled." (Respondent 01, 2023)

"Management wants WIKA's standards to be met, while we who are in the field to make this happen are faced with the costs of K3 itself." (Respondent 01, 2023)

Apart from that, Respondent 01 also explained the importance of selecting human resources in the safety sector which is also related to costs as follows:

"The character of the project team, for example, is SHE personnel. Depending on the project cost, there are SHE personnel who are truly SHE, but sometimes, for example, in small projects like this, it is possible to take SHE personnel from outside WIKA" (Respondent 01, 2023)

From the explanation given, Respondent 01 felt that in implementing SMK3 in the field, cost constraints caused the implementation of SMK3 not to be carried out optimally in the field, in this case the use of the budget related to SMK3 is one of the things that is quite important, where its application is very much determined by decisions and management's commitment to the SMK3 program, whether it is considered important or not.

While RespondentAnother, namely Respondent 02, explained the importance of management commitment in the application of SMK3 implementation in the field.

"Management is still inconsistent, especially project management as the spearhead in implementing regulations and procedures related to K3, this causes things or deviations that occur related to K3 to be tolerated by project management, so this tolerance and omission can cause problems for K3 in a condition, whether it is a small problem or accumulates into a big problem" (Respondent 02, 2023)

"Regarding this, I see it because the implementation is sometimes inconsistent, at the beginning the program may be strict, but as time goes by it loosens up, maybe for some reason it starts to become strict again" (Respondent 02, 2023)

In this case, what is highlighted is management's commitment to consistently carry out procedures and regulations related to SMK3. Because this inconsistency results in tolerance towards deviations in procedures and implementation, which leads to neglect of the violations that occur.

"Why management, because apart from being an example, management also has the ability and power to enforce and ensure that the established procedures and regulations run well." (Respondent 02, 2023)

"I see the importance of management's commitment in carrying out the agreed programs, so that management really feels that the K3 program is part of its interests, and will try to be consistent in implementing it." (Respondent 02, 2023)

It can be seen from this answer why Management's commitment is important in enforcing regulations and carrying out procedures in a system. From respondent 02's answer it can be concluded that Management has the ability and power to carry out coercion to ensure that the established SMK3 procedures and regulations run well and consistently implemented continuously

"In my opinion it is very important, because I see, even though regulations and procedures regarding K3 have been made which regulate the K3 programs run by the company, without commitment from management to carry it out, these programs will not run well." (Respondent 02, 2023)

From this answer, respondent 02 drew the conclusion that even though the regulations, systems and procedures that have been created are good, without the role of management's commitment to implementing them, the regulations, systems and procedures that have been created will not work well.

#### 2. Regulations

The influence of regulations on the implementation of SMK3 is one of the influencing factors, this can be captured from the interview results of Respondent 02,

"According to my experience so far, as a project manager, I see that the K3 regulations, rules and procedures at WIKA are quite good, in my opinion they are good, but sometimes there are problems in execution or implementation in the field." (Respondent 02, 2023)

From the answers above, it can be seen that the K3 regulations, rules and procedures that apply in the company have been running quite well, but sometimes there are problems in implementing these regulations. Apart from that, new regulations have also emerged which make the K3 program increasingly considered important and attached to daily work activities, this can be seen from Respondent 03's answer as follows:following:

"So if we look now, there is already this, the current regulation is that RCA (Root Cause Analysis) must be carried out 22 times in one month, have you copied it yet? This means that in 1 month there is only 8 days off to report on the condition of the RCA in the ongoing project," (Respondent 03, 2023)

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RCA or Root Cause Analysis is a process designed to be used to investigate and categorize the root causes of events in safety, health, environment, quality, reliability and production impact, designed to help identify not only what and how an event occurred, but also why it happens. Only when investigators can determine why an event or failure occurred can they determine the implementation of corrective measures that prevent similar events from recurring in the future (J. Rooney et al, 2004). This is increasingly seen as important in the implementation of SMK3 in the field. Because of this, central management launched the RCA program to be monitored and reported 22 times every month. So that the more intense the implementation of RCA in the work environment, it is hoped that it will be able to identify the causes of events that have the potential to become incidents, find the root of the problem and find solutions. So this can reduce unwanted incidents in the field.

## 3. Strategy

In interviews related to the implementation of the SMK3 program in the WIKA work environment, several interesting things were found regarding strategies or effortswhat might be done or improved to improve the K3 culture in the work environment. Some of these things include:

## **Role Models**

A role model is a person whose behavior, example, or success can be imitated and inspired by others. This is indeed considered important by several respondents in efforts to implement K3 procedures and safety culture. This can be seen from the answers of several respondents.

"In my opinion, what we need in an effort to implement good K3 regulations and procedures is a role model, who can provide a good role model and example in implementing the K3 program. Like it or not, what we are working on is a role model from the management side, in this case of course project management is the spearhead" (Respondent 02, 2023)

"Because in my opinion a role model is an example that can be imitated, for example if we talk about implementing K3, then this role model can provide a good example of how someone should implement K3" (Respondent 02, 2023)

The two answers of Respondent 02 above show the importance of a role model as a role model and example in implementing SMK3 and Safety Culture.

"So from what I see, sir, especially at WIKA, from a cultural perspective it is more inclined towards commitment from the leadership as a role model" (Respondent 03, 2023)

"again, from the leadership as a role model who must be able to mobilize the initiative or enthusiasm of friends in the field so that it can lead to the goal rather than why safety is necessary, why safety must be present in project implementation" (Respondent 03, 2023)

It can be seen from Respondent 03's answer that the role model as an example must have a commitment to the K3 program and be able to mobilize the initiative and enthusiasm of team members to run OHSMS well.

"In my opinion, role models are very important, because so far it has been like without role models who don't carry out this will be a boomerang for all of us" (Respondent 04, 2023)

Respondent 04 said that the role of a role model is considered very important and needed in carrying out a system or procedure, especially in SMK3 applications and creating a safety culture in the work environment.

#### **Involvement of All Parties**

From the interview results, it was also found that the success of a program, especially the K3 programwill be influenced by the involvement of all parties involved in it, this can be seen from the interview answers of several respondents.

"So the procedure is not only the responsibility of management, so its application must also be understood by several workers at the lowest level such as daily workers," (Respondent 03, 2023)

This answer emphasizes that procedures and applications, in implementing K3, are not only the responsibility of management, but also all matters down to the lowest level must take part

in responsibility in implementing the K3 program according to their respective portions and contributions.

"It's just that maybe the role has to be in the field often, sir, so it's not just about receiving reports from the project, so there needs to be some kind of confirmation too, it has to be done directly. If the system is okay, it's just maybe based on the level of participation or wanting to visit the field that's something that must be frequently put on the agenda," (Respondent 03, 2023)

"The hope is that friends at the center can formulate policies or evaluate existing policies so that they can be more useful for the project, not burdensome, so the focus is on the field, not just on reports, so the focus is instead on implementation in the field." (Respondent 03, 2023)

It can be seen that respondent 03's hope is that central management or a team from head office can visit the field more often to go directly, see, monitor and confirm field conditions, so that central management can better understand field conditions, so that in the process of making regulations, rules and procedures will more precise targets and objectives because it directly addresses the main problems that occur in the field.

"So in creating policies or work instructions as much as possible the central management team must be involved, and more project management teams are involved, so if a quorum consists of 10 people, then 7 people come from the project. So 3 are from the center, and "We should also listen to more input from projects, where projects have direct experience in implementation activities" (Respondent 03, 2023)

Respondent 3 also hopes that field parties can often be involved in making decisions regarding SMK3 rules and regulations that will be issued by central management, even if necessary, the share of votes from the field can be greater than that of central management.

"This K3 person is useless and won't work if from top to bottom we are not involved at all, that's the point" (Respondent 04, 2023)

"If the boss comes, everyone comes straight away, if not, everyone doesn't come, so tell me sir" (Respondent 04, 2023)

Meanwhile, Respondent 04 in his answer explained how the conditions for involvement of all parties are very important, especially the involvement of a superior or top management in carrying out SMK3 programs or activities in an organization.

## **Knowledge Management**

Knowledge Management or knowledge management are tools, techniques and strategies for maintaining, analyzing, organizing, improving and sharing expertise or knowledge (R. Groff et al, 2003). This is important as a form of communication and knowledge sharing, so that there is equal distribution of information and a common understanding of the SMK3 program, as well as being able to share the knowledge and expertise needed to be able to run the SMK3 program well.

"If we talk about K3, which WIKA has not yet implemented, what I see less than mining or oil and gas is the culture of learning from experience,"

"In mining, if an accident occurs, he will immediately learn a lesson, for example where the location is, perhaps the name of the PT was not announced, I also said yesterday, if the name of the project is sensitive, it doesn't need to be conveyed, so if an accident occurs, the cause is mentioned, the consequences are conveyed, and the prevention is "How about it, because those who have experience in one project, if this is done it shouldn't happen again in another project" (Respondent 04, 2023)

From Respondent 04's answer, it can be seen that sharing information and knowledge, especially in the implementation of SMK3 is very important and can have a positive impact, this will prevent the recurrence of the same event or incident in other places, as well as sharing information about solutions or resolving problems in other places. maybe it can be done at our place. This can increase the knowledge and experience of everyone in the team in carrying out the established K3 program.

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"We should not be embarrassed and think that accidents are a disgrace. We build a culture of safety. Sometimes we forget that the goal of a safe culture is without accidents. In my opinion, it's more in that direction. It's like a culture of safety and a culture of sharing. Learn from mistakes so they don't happen again. ," (Respondent 04, 2023)

Apart from that, Respondent 04 also commented on the problem of hampered information sharing due to habits and perspectives that still often prevail in work environments or construction service company organizations, where incidents or accidents are things that are always covered up, as if they were a disgrace. This results in information not being disseminated regarding a dangerous condition that causes an accident to other team areas, so that the risk of the same incident recurring in other work areas will be very large. Because there is no information being disseminated and learning from the dissemination of that information.

## **Communication and Socialization**

Communication and socialization also seem to be an important part of efforts to form a safety culture within an organization, this can be seen from the answers of several respondents in their answers.

"Sometimes it's because it seems like it's just a new person who has no experience or previous experience and if we don't tell them what the WIKA procedures are like, they will definitely have their own standards." (Respondent 01, 2023)

Respondent 01 saw that existing procedures or systems must be communicated. Without good communication, no matter how good the procedure is, it will not be known to many people and applied well. In this case, a good form of communication may be needed to convey existing SMK3 programs, as well as ensuring that what is communicated has been delivered. Don't let each personnel have a different understanding of a set rule or regulation.

"I think what is also needed here is education and socialization related to K3, I mean socialization and education related to programs, related to dangerous conditions and efforts to avoid or prevent them, meaning that with this socialization and education all parties in the organization understand how important it is K3 program, so that the K3 program can be made part of daily work culture." (Respondent 02, 2023)

In the answers to the results of Respondent 02's interview, it can be seen the importance of socialization and education to workers as an effort to communicate the importance of the K3 program, as well as making K3 a part of daily work culture, namely safety culture.

"Management must be able to understand friends at the lowest level, namely daily workers, perhaps by adapting to existing language conditions. Sometimes the workers below, when we are during safety activities, speak too formally, right? It's a bit disconnected, isn't it," (Respondent 03, 2023)

"In my place, sometimes I empower local people to fill in the SMW so that their language is used for the lower workers. Especially local workers" (Respondent 03, 2023)

Respondent 03 this time saw that the form of communication to workers must be in a way that is relatable and can be understood by workers. The form of communication adapts to the conditions and level of understanding of the audience. In some work locations, especially in regional areas, the use of local regional languages is considered quite effective in conveying messages, programs and regulations that we want to implement to local workers.

"A way of communicating to understand company culture that must be understood down to the very tip level, the spearhead is the implementer" (Respondent 03, 2023)

Regarding the form of socialization communication, field implementers (field supervisors) are the spearhead in bridging the desires and expectations of management with the workers who are the responsibility of the field implementers.

## Selection of HR in the Safety Sector

The selection of human resources who are responsible for carrying out supervision and advisory related to the SMK3 program in the project also plays an important role in the growth and development of a safety culture in the project. This was conveyed by Respondent 01 in his interview as follows:

"If, for example, he has good standards, maybe he can follow and apply WIKA's standard procedures, but if, for example, he comes from a private project which has the habit of "what's important" then this will be a problem for us," (Respondent 01, 2023)

"So the character of the SHE person in the project also determines its application." (Respondent 01, 2023)

Sometimes due to limited safety personnel who can be placed in all WIKA projects, the project party recruits professional personnel in the safety field from outside WIKA, so it is felt to ensure that the basic standards or professional specifications and character of these personnel regarding safety can be maintained.

"Yes, automatically before we take people from outside to enter WIKA we have to provide training regarding WIKA standard procedures" (Respondent 01)

Regarding the required standards and personnel specifications, WIKA is also expected to provide training, so that personnel who join WIKA can understand and carry out WIKA safety procedures well, in accordance with Management's expectations and targets.

#### **Rewards and Punishments**

In an effort to ensure that the regulations, procedures and systems that have been established can run well, management must also have a mechanism to enforce and ensure the implementation of the regulations, procedures and systems that have been established by the company using a reward and punishment model.

"In my opinion yes, because just giving an example is still not enough, there must also be a reward and punishment mechanism in carrying out the K3 program, this will show the members that management is serious in carrying out the program, and there are clear consequences regarding achievements or violations that occur related to the K3 program" (Respondent 02, 2023)

According to Respondent 02, role models alone are still not enough to be able to run the program well, a mechanism for giving rewards and punishments is needed with clear and fair consequences for achievements or violations committed, so that everyone in in the organization complying with and implementing the procedures and systems that have been established, this also shows the seriousness of management in carrying out its programs.

"We K3 people have to be forced from our knees first, forced and then used to become a culture," (Respondent 04, 2023)

"Projects that previously had not been implemented are now starting to move towards implementation, so they are forced, forced and starting to get used to it, in the future they will start to move towards being independent." (Respondem 04, 2023)

"If now the project management does not carry out K3, there are already sanctions, if I'm not mistaken, this sanction process has already entered the procedure, apart from making the project suffer losses, starting from lowering the grade to not being able to get loan facilities and so on, so that's not bad, it's a trigger that others to get involved in K3. If everyone doesn't get involved in the K3 culture, it won't work." (Respondent 04, 2023)

Meanwhile, according to Respondent 04, there needs to be coercion and involvement of all parties in implementing the programs set by management, with the hope that when workers carry out the programs set by force at the start, then this can gradually become a habit, until in the end become a culture within the company or organization. It is hoped that at this level, the established programs will run independently, because they have become a culture.

## **Procedure**

The procedureGood is a guide that must be followed in carrying out SMK3 programs, so that the objectives of SMK3 itself can be achieved as expected. From Respondent 01's point of view it can be seen as follows:

"Yes, the hope is that if we have a procedure regarding K3, there is a cost procedure for K3, or maybe it can be determined by management"

Respondent 01 hopes that a procedure will emerge that will ensure that he gets sufficient budget to be able to run SMK3 programs in the field.

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"Sometimes misperceptions occur, in fact in the field the direction is that we do the work, we inform, we also do the work. If there are findings, we are also the ones who close them, so K3 is the one who reports it, ultimately K3 must also be the one who has to resolve it. That should be the domain of the implementer. Duties and responsibilities should be emphasized to everyone." (Respondent 04. 2023)

Meanwhile, Respondent 04 saw the need for procedures that were clear and understood by all parties involved in the field, so that in implementing these procedures there would be no differences in perception or misunderstanding regarding the procedures that had been determined to be carried out.

#### DISCUSSION

## 1. The Influence of Regulations and Management Commitment

From the data from Quantitative research, which was then followed by Qualitative research, a mutually reinforcing pattern can be seen between the influence of Regulations and Management Commitment and their influence on safety culture in terms of quantitative research conclusions, as well as from the results in terms of Qualitative research results. Referring to the results of quantitative research, it was concluded that there was a positive but not significant influence of regulations on safety culture (Safety Culture) of 18.51%. Similar results can also be seen from the results of qualitative research interviews conducted with respondents. Regulations are considered an important part, but in terms of regulations themselves, what has been going on at WIKA so far has been assessed quite well by the respondents.

Meanwhile, from the results of the quantitative research, a hypothetical conclusion was also obtained that there was a positive and significant influence of management commitment on safety culture of 68.84%. This is reinforced by the results of interviews with respondents, almost all of whom have the same view, that no matter what SMK3 procedure or system is used and implemented, the implementation and results will not be in accordance with the objectives if management is not committed to the objectives and process. Meanwhile, regulations and management commitment together have an influence of 87.4% on safety culture. This is also illustrated by the results of interviews with several respondents who support the statement about the important role of regulations and management commitment to safety culture in the work environment.

## 2. Strategy Proposal

From the data resulting from the quantitative and qualitative research carried out, several important points can be seen that can be explored to become a strategy that will become a reference or way to create a safety culture within the WIKA environment:

## Making regulations that are right on target

One strategy that is expected to improve safety culture in work organizations is to create regulations that suit needs and are easy to understand and apply in organizations that contain various member backgrounds. With good regulations, it is hoped that everyone will have clear directions and stages as well as clear signs in an effort to achieve Management goals, in this case related to SMK3 and safety culture. Of course, these regulations must refer to applicable laws or regulations and always be updated with developments in the technology used, so that the regulations used will be able to accommodate current field conditions.

#### Creating role models and role models

From the results of the interviews it was found that in order to invite all members of the organization to take the initiative and contribute to a program, a role model is needed to be an example and role model in implementing these programs. People who are considered role models will be able to easily accept their suggestions, opinions or directions by other members. Even his daily behavior will be imitated by the people around him. In an effort to improve safety culture, a role model is needed who can invite and make other members aware of the importance of implementing safety culture, as well as inspire other people to participate in implementing SMK3



and creating a safety culture in their respective work environments. In a study it was found that a manager who acts as a role model in safety (Safety) will distribute information about safety and give priority to safety, contributing to efficacy, namely the individual's confidence or self-confidence regarding his ability to organize, carry out a task, achieving a goal, producing something and implementing actions to achieve certain skills, in the field of safety (Tal Katz-Navon, 2006). In an effort to create role models, it is hoped that WIKA will be able to instill awareness about the importance of safety culture and how to carry out good and correct SMK3 procedures, especially for members of the organization or employees who are being prepared to become WIKA leaders in the future in various work units. what's in it. So that the existing leaders will have a good enough understanding so that this understanding will be reflected in all their actions and decisions that they will make. So that subordinates and colleagues will be inspired to follow and imitate the role model. In this case, training and competency development for SMK3 personnel is needed, both in terms of soft skills and hard skills, so that the personnel who are trained and developed are able to become Role Models of safety culture for the surrounding environment.

## **Creating Involvement of All Related Parties**

According to the results of interviews conducted with several respondents, in its implementation, SMK3 requires the involvement of all parties within the organization to be able to jointly carry out the program that has been determined. The success of a program in an organization requires contribution and involvement from all existing departments, according to their respective levels and competencies. Dimensions of organizational strategy and implementation, organizational commitment and team commitment are factors that have a significant influence on employee involvement (Nienaber et al, 2019) in a program within the organization, in this case the SMK3 program.

Several steps that can be taken to increase the involvement of all parties include:

- 1) Placing the right people in carrying out the SMK3 program, means that when selecting personnel, people must be selected who, apart from having good skills and abilities, also have character and traits that can adapt to the needs and desires of the organization, so that it is hoped that these personnel can follow and comply with regulations. and regulations set by the company, and can be actively involved in activities held by the company,
- 2) Holding training related to the SMK3 program, it is hoped that with the training, personnel abilities will increase followed by awareness about the importance of SMK3 which will also increase so that the personnel concerned will be able to be more involved in SMK3 implementation activities, because they have sufficient knowledge and awareness.
- 3) Carrying out monitoring and evaluation communications, where by carrying out good communication regarding the SMK3 programs established by the company, the programs can be accepted and well understood. So it is hoped that the company's goals in the SMK3 application can also be achieved well,

## Knowledge Management in the SMK3 Implementation Area

Sharing knowledge and information, according to the interview results, is also an effort to increase insight and knowledge in order to understand and implement the SMK3 program better. In this case, through Knowledge Management, it is hoped that knowledge and information can be organized and processed in a structured and orderly manner, so that the information and knowledge disseminated has gone through a clarification and confirmation process, so that its validity and quality are guaranteed. Apart from that, it is hoped that with good knowledge management, we can share problems or solutions related to SMK3 that occur in one place, to be a lesson for colleagues in other places, so that similar problems do not happen again in other places, similar solutions can be applied in other places, or even get new information or new methods that we can use in our work environment. Apart from that, it is hoped that there will be controlled and organized openness in the dissemination and exchange of information and knowledge.

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Based on these conditions, WIKA should improve its Knowledge Management system, especially in the field of safety, by implementing several key points in Knowledge Management (Despres, 1999), among others.

- 1) Map individuals or organizations functioning in an information environment of their own creation.
- 2) Obtaining, capturing or creating appropriate information from the environment (point 1), or combining elements that are considered valuable.
- 3) Creating packages or categorization of information involving media that combines information, whether in the form of paper, electronic, sound, multimedia and so on.
- 4) Storing information in various types of memory systems
- 5) Apply, share or transfer information or knowledge
- 6) Develop, innovate and change in line with environmental changes.

#### **Communication and Socialization**

One way to convey an organization's program or goals so that they can be well understood and implemented well according to the aims and objectives is by using appropriate communication methods. This is to ensure that the information transmitted is received well, there are no biases or differences in perception, and reduces misunderstandings in the communication process and information dissemination. Good communication is also expected to be accepted and understood by all parties with various educational backgrounds or experiences, as well as various ethnicities or nationalities, each of whom may have different communication habits or cultures.

To be able to create good communication, especially in the context of implementing SMK3, several stages in communication that must be implemented include:

- 1) Planning stage, this stage is the initial stage of the SMK3 Communication process by creating programs that will be used for long-term program implementation based on:
  - a. Statistical analysis of incidents or events that occur
  - b. Hazard Identification
  - c. Identify applicable laws or regulations
- 2) Implementation Stage, at this stage an effective form of communication is implemented, where SMK3 is communicated to all levels of Management, from the top level to the lowest level. Aspects communicated include SMK3 policies and regulations, K3 management targets and programs, the role of workers in reducing the negative impact of unsafe conditions and increasing the positive impact of work, as well as understanding emergency preparedness and response conditions which are communicated to all workers and work partners. The facilities used as media include:
  - a. Active Communication: through meetings, briefings, counseling, socialization, etc
  - b. Passive Communication: through announcements, brochures, posters, banners, reports and so on
- 3) The Evaluation Stage is the stage where to determine the effectiveness of SMK3 performance, measurements and monitoring are carried out, the results of which will be reported to management. This measurement and monitoring is carried out objectively to determine whether the SMK3 application that has been determined by the company has been fulfilled and is running well.

## **Selection of Safety Personnel Resources**

Safety Officer, safety man, SHE Manager and SHE Head are some of the positions or positions in the project work environment or the world of construction services. They are personnel who have better basic knowledge and experience regarding Safety and the implementation of SMK3 than the average of other workers. With their abilities, it is hoped that they will have the ability to identify, supervise and provide direction and solutions to safety-related problems that occur in the work environment. Because of the importance of personnel in the safety sector in ensuring the proper implementation of SMK3 and the creation of a safety culture, the selection and recruitment of Safety personnel must really look at the quality and capabilities of these personnel.



So that the selected personnel are truly qualified and can carry out SMK3 programs well according to the company's programs and plans, as well as creating a safety culture in a safety culture environment. Regarding human resource issues in the safety sector, the recruitment process must be able to take into account the specifications of the personnel required, as well as meet the standards required, both by the job owner and the regulator. In addition, efforts are made to carry out regular training at various levels, which is designed to improve skills and knowledge in the field of safety and increase awareness of the importance of safety culture.

#### Fair and Fair Reward and Punishment Mechanism

In an effort to ensure that a regulation, rule or program from management goes according to plan, a mechanism is needed in its implementation, where deviations and mistakes will be punished, and achievements, loyalty, hard work and others will be given prizes or awards for appreciate it. This condition is implemented because with this punishment, it is hoped that people will try to avoid mistakes, and if a mistake occurs, the person is expected not to repeat the mistake or deviation. Meanwhile, if the person is given a prize or appreciation if they excel or carry out the program well, it is hoped that the person will feel appreciated for their efforts and performance, then will be interested and motivated to achieve better and be consistent in carrying out the SMK3 program and be involved in creating a safety culture. in the workplace. These rewards and punishments are assessed and implemented transparently and adhere to the principles of justice, so that the purpose of providing rewards and punishments can be carried out according to its objectives.

## 4. CONCLUSION

The conclusion of this research is that regulations and management commitment have an important influence on safety culture, both partially and jointly, but the one that has a positive and significant influence is management commitment. This condition can be seen from the results of the quantitative analysis data and qualitative data carried out. This research uses a mix method research method, The Explanatory Sequential Analysis Process, where the first thing that is carried out is quantitative research, then based on the data from the quantitative research, qualitative research is carried out, where the results of the qualitative research strengthen the conclusions obtained from the results of the quantitative research.

Furthermore, from the results of respondent interviews, several conditions were found in the implementation of SMK3 which can be implemented as part of a strategy to build a safety culture which can be divided as follows:

- A. Strategies for the Regulatory area include:
  - Make regulations that are right on target
- B. Strategies for the Management Commitment area include:
  - a. Creating role models as role models and role models
  - b. Create involvement of all parties
  - c. Knowledge Management in the SMK3 implementation area
  - d. Communication and Socialization of the program
  - e. Selection of resources in the field of Safety
  - f. Implementation of transparent and fair rewards and punishments in the implementation of SMK3

This strategy will only be able to work if management really has a full commitment to making safety culture a part of the company culture, which must be implemented. Because without this commitment, inconsistencies and tolerance for violations that occur in the implementation of the SMK3 program will arise, which if left unchecked will hinder or possibly thwart the creation of the expected safety culture.

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