



# SAFETY CULTURE ASSESSMENT

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# Improve Safety with Safety Culture

The major safety improvement potential today is on culture based factors. Focus on safety culture requires acknowledge to the fact that over 80% of incidents are caused by human (and safety culture) problems.

"Safety culture is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management"



## Why measure safety culture?

Safety culture must be measured systematically and continuously in order to identify the compulsory improvement implementation status and defects in working environment and management system.

Monitoring and assessment on processes, products and production activities of an organization through safety culture measuring lead to understanding and identifying cultural backgrounds that are latent in the organization's system, and thus can cause accidents.

In addition, using information obtained by measuring safety culture, safety culture in each measuring time and plant can be benchmarked.

As a result, the continuous development status of an organization in relation to safety culture can be examined. Moreover, by benchmarking external industries or the same industry, an organization can identify its current position and set the direction of development to be pursued in the future.

Safety culture can be developed by stages from the currently measured position. The higher the level is, the stronger the communication, trust and commitment of an organization become. Therefore, after the current culture of an organization is checked, it can be improved to the next level.

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# Definition of Safety Culture



## What is safety culture?

It was first introduced in 1975 in its original form as organizational climate, defined as being an area of research into the perceptions that employees share about their work environment. It was proposed that these shared perceptions guided the attitudes and behaviors of the employees and in turn had an impact on the efficiency of the organization. The publications of reports into industrial disasters have provided a cornerstone in the concept of organizational safety, instigating a move away from the traditional engineering approach to a behavioral approach, which focuses on the social and organizational preconditions that enhance safety performance. This shift constitutes a move away from 'reactive' organizational learning to 'proactive' measures of enhancing safety. The Chernobyl nuclear accident in 1986 (resulting in the death of 31 people and environmental pollution) triggered in-depth discussion of safety culture. This is when the international nuclear agencies began using the term "safety culture."

Rather than to simply think that employees' behaviors affect their jobs, the company's safety management system and safety culture established across the organization compositely influence employees' behaviors during work hours. Therefore, the management and executives, which are responsible to map out overall safety management for the company and to handle accidents, and manufacturing/ production officers and managers who are to manage safety with employees in the

manufacturing and production sites must achieve in-depth understanding of the relationship between the organization's safety culture and employees' behaviors.

### DNV GL safety culture definition

DNV GL defines safety culture as the "values and norms of the organizational structures and technical functions shared through interaction for the purpose of developing and maintaining a safety management system targeting all classes in a company or a plant."

Safety culture enables an organization to breathe and move alive. Positive safety culture is a basis of manufacturing and production activities. It is directly relevant to safety behaviors and results of managers and field employees. Safety culture assessment contributes to establishing a safety management system with which to build trust between managers and employees within an organization. It also ensures the best method for achieving the maximum safety performance and value for organizational development.

By continuously improving on insufficiencies in the safety culture, the organization can develop positive safety culture and manufacturing/ production process accompanied with organizational structure and performance. Safety culture is the basis of quality management system.



# Safety Will™ for Safety Culture Assessment

This is a tool developed with the independent technology of DNV GL based on the technological power of ISRS, a safety culture assessment program. It enables quantitative measuring of the level of a company's safety culture. DNV GL developed "Safety Will™ (Safety Culture Assessment version 4.0)" in order to create a world's top-level safety management program.

With Safety Will, DNV GL assesses safety level of a company by checking the employees' positive mind and recognition about the deeply rooted safety values, norms and rules of the company.

The world's top-level safety culture as promoted by Safety Will is as follows:

- Organizational culture where all employees have a sense of ownership for the company and have dedication for and determination to practice safety from deep in their mind, and thus participate voluntarily in safety activities
- Organizational culture where all employees have trust for safety rules and work standards and perform their given tasks and operations correctly
- Organizational culture where all employees creatively improve on unsafe behaviors and structures
- Organizational culture where all employees help one another like family based on fellowship without asking for or expecting anything in return

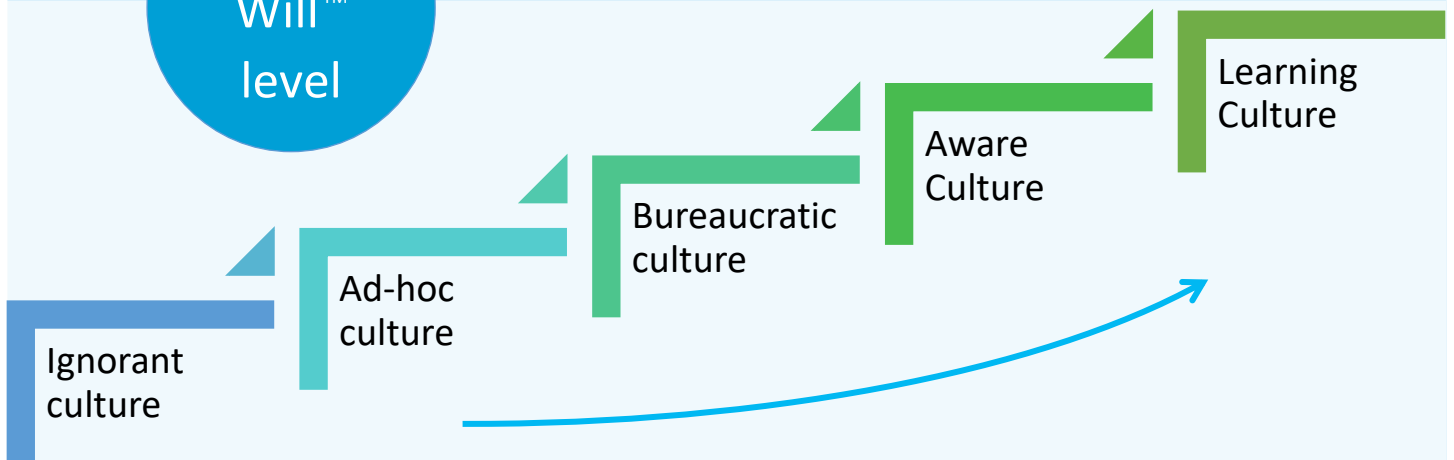
Ultimately, Safety Will is aimed at printing in the employees' mind the notion that safety operation is the responsibility of all employees rather than of managers of safety department only. Safety must be emphasized not only in ordinary manufacturing/ production activities, but also during activities outside the company.



## Safety Will™ level

Safety Will assesses the thoughts and feelings of all employees that create the safety awareness and organizational culture, and thus measure if the employees have destructive or creative/ considerate habits.

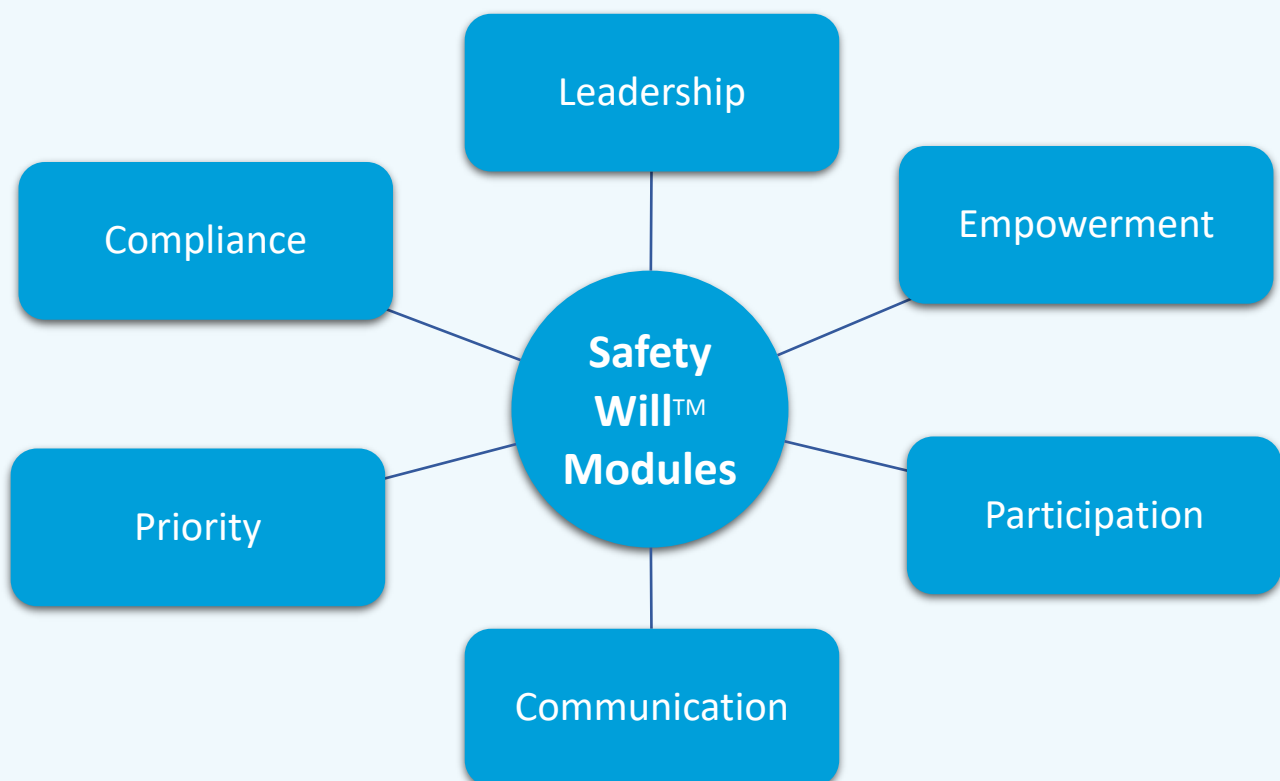
Safety will activities are divided into five levels as follows:



# SAFETY WILL™

Safety Will survey is comprised of 60 questions.

For each question, quantitative assessment is carried out through a link with the five safety culture levels and the six Safety Will modules listed below.



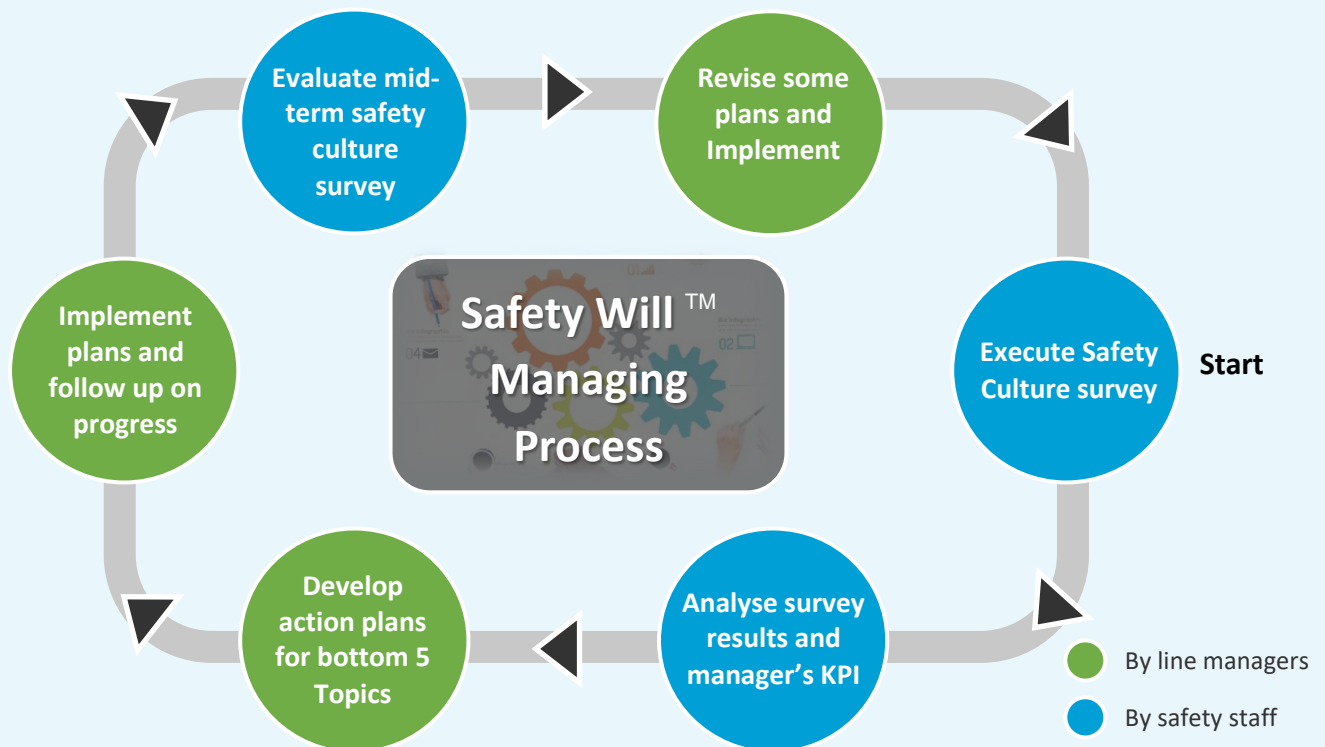
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# Safety Will™

## Survey Process



# Safety Culture Improvement



## 1. Safety Culture Survey

Safety department surveys safety culture of the organizational members annually by establishing Safety Will plan.

## 2. Survey Result Analysis and Manager KPI Setting

Data for the entire company and each department are secured through analysis of the results. In addition, safety culture improvement items are reflected in KPI of the manager group, which corresponds to people in the position of department head.

## 3. Improvement Planning for the Bottom 5 Items

The company/ plant or each department establishes improvement plans through discussion, meeting or workshop for substantial improvement on the bottom 5 items. The improvement to be applied to the entire company/ plant is implemented by the management. In each department, improvement plans must be established under supervision of the departmental head. For the improvement plan of Safety Will program, all employees are the implementation entities. The overall organizational culture of the company must be changed through alteration of consciousness about safety.

## 4. Improvement Plan Implementation and Progress Tracking Management

Each activity is performed according to the improvement plan established and the status of improvement is checked on a regular basis. In addition, the improvement performance must be presented once a year or more at the management review meeting.

## 5. Assessment of Improvement Activities in the Last Year

Under supervision of safety department, it is assessed if the activities performed according to the improvement plans over the past year have been effective on the whole.

## 6. Improvement Plan Adjustment

According to the improvement activity assessment result, improvement plan is adjusted and supplemented, or an additional implementation is promoted.

## 7. Safety Culture Reassessment

Changes in the safety culture levels are identified through re-administration of Safety Will every year. The results of each department and overall results are concurrently checked and are reflected in the improvement plans for the future.

## Contact us

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## About DNV GL

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