



Corporate culture - Create safety awareness

1 Introduction

This information is intended to encourage discussion of the safety and corporate culture and to show, using simple examples, that an existing safety management system can be adjusted sustainably and that the resources used for this do not necessarily have to increase the cost pressure on the company. Its aim is neither the evaluation nor the scientific appropriation of management instruments and management cultures used or available.

2 ISM Code and management tools

The application of the ISM Code results in the obligation for the shipping companies to set objectives for the organization of a safe ship operation. In addition, the company usually has other objectives such as customer service, financial objectives of the company and investors, or objectives that are derived from an ISO, industry or customer standard.

A large number of management tools, methods and cultures are available for the implementation of the objectives, but which of them are suitable for the respective shipping company and how has to be checked individually.

The ratio between effort, costs and benefits has to be right to match the type and size of the company and the resources available.

Companies and their ships are not all on and the same; management structures, needs and resources are just as diverse as the number of crews, cargo, trading areas, technology and the actual risks on board. That is why it is important to establish comprehensive instruments, on the one hand, and to break them down to the specific needs of the respective ships and the shipping company, on the other.

The decision how regulations are met and objectives achieved, which procedures are used and to what extent, should be solely left to the company. It should not be the task of external institutions such as authorities to determine a delimitation and assessment of suitability.

3 Safety Culture and Corporate Culture

The **safety culture** consists of common attitudes, rules and behavioural patterns within an organization with regard to safety (similar to ACSNI, UK 1993) and is to be established and updated for shipping companies under the ISM Code.

In addition, there is another commonality in every organization: there is always an individual **corporate culture**.

INFO: ISM Code

The ISM Code is an important instrument for establishing and promoting a **safety culture** in shipping.

This safety culture is intended to guarantee low-risk ship operations in order to avoid damage to people, the environment and property.

To this end, the shipping company must implement a mandatory safety management system (SMS), which is used to identify and reduce risks in ship operations - including risks from human error (human element) and organizational weaknesses.

The day-to-day use of and compliance with the SMS determines how a safety culture is implemented within the company.

INFO: Safety Culture

"Safety" refers to the state that is free from unacceptable risks and dangers for individuals, communities and other living beings, objects and systems. "Culture" in the broadest sense describes the self-image, values and expected behaviour within a community.

A "safety culture" is thus the sum of all characteristics and attitudes in organizations and of individuals, which ensures that issues of safety receive top priority and attention.

If you take safety culture in shipping as the ultimate objective to be achieved, the following hierarchy results for this information:



The pyramid makes it clear that a safety culture is more than just a declaration of intent to comply with regulations or to act safely. Objectives, resources, training, instructions, procedures, technical measures: the elements of the ISM Code and their implementation influence the safety culture and bring it to life. Additionally, the diagram shows that a safety culture is also based on a clearly formulated corporate culture that is filled with life and applies equally in all areas.

The corporate culture is therefore one of the most important adjusting screws for

- the efficient implementation of the requirements of the ISM Code, and thus
- updating and promoting the safety culture.

3.1 Corporate Culture

The term “corporate culture” describes the handling of daily work processes, cooperation, the organization, its guidelines and standards, the flow of information as well as dealing with customers and third parties outside of one's own organization. It can be planned and shaped, has generally existed for a long time, has developed and formed over time in a company. It expresses the company's values. It may create a feeling of security, a sense of community, and, certainly, also sets limits through rules and thus ensures clear orientation for employees. It can prevent or create transparency internally and externally, is marked by personalities, rituals, even lives on legends, and it can be characterized by moderate or strict process orientation.

Another part of this corporate culture is how individual mistakes are dealt with, how the individual is encouraged, and how much responsibility is demanded of them.

INFO: Corporate Culture

It arises from the general structures within the shipping company where the daily work is carried out, from the values that a company represents and upholds, from the work atmosphere and working conditions of the respective organization, and in turn consists of *common attitudes and shared convictions that have grown practices, competencies, behavioural patterns and communication channels.*

In whatever form it takes shape in a company: A shipping company must continually face change, be it changes in social interaction or of the demands of the market. Tradition meets rapid technical and global developments and challenges as well as constantly growing demands on the service to be provided and its transparency. The long-term success of a company depends on keeping up with this and showing the will for regular reflection and change.

Major changes, such as an abrupt change in culture, create problems. Sudden and radical interventions in a company can lead to internal resistance and thus be counterproductive and problematic in their implementation or they might even overwhelm existing resources and therefore fail. Instead of deep interventions, adjusting what is present is a "gentle" alternative.

4 Adjusting

Promoting and updating a safety culture should neither solely depend on new regulations nor does it have to go hand in hand with a complete and radical culture change. An established safety management system does not always have to be fundamentally discarded. Adapting and adjusting your own corporate culture or parts of it can lead to increased safety in ship operations even with scarce financial or human resources.

INFO: Error Culture & JUST Culture

The basic conviction of modern error research is that deviations in a complex system a) *can never be completely avoided* and b) *can also rarely be reduced to the singular error of an individual, but are caused by the interlinking of several weak points, which together favour a chain of errors (cf. James T. Reason)*. Therefore, it is less important to focus on the individual than to look for the systemic sources of error.

The JUST Culture is based on this basic principle, the approach that not only the person who made the last mistake in the chain is punished (→ No-Blame-Culture), but that the system as a whole is checked for all those weak points that cumulatively led to an undesired deviation.

A transparent error culture should be part of every corporate culture. It ensures the mindfulness and self-reflection of the entire system. But even such a modern error culture cannot be introduced from one moment to the next.

4.1 Recognize the need for change and initiate measures

The factors triggering a change can result from:

- the shipping company's own monitoring of the performance and effectiveness of the safety management system, the assessment of the achievement of objectives and verification of the effectiveness of the measures, as well as
- new guidelines and rules that are brought in from outside.

If corrective measures become recognizable and necessary, the resources must be clarified: are new ones required or can I use existing ones and reorganize them? The answer could be as follows: If a correct procedure is only inadequately lived and carried out, adjusting the corporate culture could be a very efficient and resource-saving corrective measure.

4.2 Change through MOC - Management of Change

When it comes to new requirements, achieving "compliance" is an undisputed goal of shipping companies. It can be created by acting statically or by proactively managing a change. To achieve this, a systematic change management is practiced in some shipping companies: the MOC - Management of Change. The resulting tailor-made measures can be more complex in their creation than static compliance solutions, but they are often superior in terms of efficiency and sustainability and may be of great benefit to the company.

Example of adjusting	
<p><u>Static acting - (Unthinking) Compliance focussed</u></p> <p>Selective introduction of a new top-down procedure and demand for unconditional compliance with new regulations based on the principle of "blind obedience". Action reduced to compliance.</p> <p><u>Negative example of anchor loss:</u> After several anchor losses, the shipping company decides to add a 20-page procedure to the SMS with instructions on how to anchor. Misconduct of the involved ship's command is proven and legal actions taken under the applicable labour law. This increases the pressure to comply with the procedure. The shipping company is thus acting in a corrective and compliant manner. The measure is inexpensive and is limited to changing the SMS. The DPA informs the fleet about the new procedure. The action is presented to the insurance company.</p> <p><i>The focus is on the motivation to avoid penalties.</i></p>	<p><u>Proactive thinking, management - Development through joint thinking</u></p> <p>Introduction of new regulations through tailor-made concepts after joint discussion of a MOC process. Compliance results from the bottom-up through understanding of those involved and the commitment resulting from it.</p> <p><u>Positive example anchor loss:</u> The causes for the anchor losses are available from investigations. The results are shared and discussed by different people in the context of a MOC: Inspectors, QM, active masters and senior officers discuss the sensible and efficient adjustments in the SMS:</p> <ul style="list-style-type: none"> - training measures (initial & recurring) - instruction measures - anchoring checklist <p>The DPA informs the fleet about the incidents, causes and measures.</p> <p><i>The focus is on the motivation to things the right way.</i></p>

5 Safety Awareness

Correct procedures, collecting data and measuring key performance indicators, qualification measures, reviews and certifications: Even the most intensive measures and methods only lead to sustainable effects if it is possible to raise awareness and motivate the crew and the management team on the shore side.

In the maritime industry, human behaviour is sometimes seen as the real secret of success and failure of safely and economically operating ships. The individual mistake of one person can jeopardize the future of an entire company. Serious accidents and environmental damage have the potential to cause serious damage to a company and even lead to bankruptcy. That is why the basic handling of errors in a company is a decisive factor in the safety culture. Error handling shows how present the safety awareness of each individual is.

The level of safety awareness provides information on the extent to which safety-relevant regulations are applied actively and with conviction and weak points are recognized, avoided or counteracted.

The most powerful safety system is almost ineffective if it is incorrectly or only negligently implemented by the users.

In modern human factors research, it is generally recognized that malfunctions and incidents in complex work areas can almost never be reduced to the fault of a single person, but are caused by the interlinking of several system weaknesses. This calls for a safety culture that focuses less on the individual as the last link in the chain of errors, but instead examines the system as a whole and identifies all those disruptive factors and missing barriers which, in their totality, led to the incident or which have the potential to fundamentally endanger a system.

INFO: Safety Awareness

The acceptance and ability of a person within a work system to recognize hazards and to counter them effectively with the means available, with the aim of keeping the risk of damage occurring as low as possible.

The term describes the relationship between a complex safety system and the individual working in it: the human factor is an essential component in creating and maintaining a safe condition.

Safety awareness describes an internal state of employees who are part of a functioning safety system and live it in everyday life.

Two perspectives on a claim

Pointed thinking	Systemic thinking
<p>"That was human error"</p> <p>Our safety management system offers all the necessary measures and procedures to prevent such an accident.</p> <p>We are powerless when individuals make mistakes.</p> <p>His/Her singular error was recognized and being processed as an isolated incident.</p> <p>Changes in the SMS are not necessary because everything that is required is already specified.</p>	<p>"That was system failure"</p> <p>Our safety management system was not able to prevent the incident with the existing measures and procedures.</p> <p>We have to investigate and assess all promoting factors (lack of training, insufficient redundancy, leaks in the safety culture) and adjust our SMS so that the risk of a similar incident is minimized.</p>

To determine how intensively a safety culture and safety awareness are actually developed, the shipping company can set its own objectives and key performance indicators and use these to check whether continuous improvement has been achieved or whether measures are necessary. It can also compare itself with other companies using key performance indicators and studies

When it comes to adjusting and promoting safety culture and awareness, however, it is crucial that these represent constant processes that never end, but which should rather be part of the active shipping company business like all other operational processes.

Another instrument exists in the industry: the Safety Culture Ladder. The level at which a company is located is assessed and certified by external experts. The maritime sector has not yet fully conquered this instrument.

Safety Culture Ladder (SCL)

SCL is an evaluation method for measuring safety awareness and conscious safe action (culture and behaviour) in companies. The focus is on the safety culture.



Source: Jürgen Neff, <https://www.bridge-resource.com/?p=1728>, 2021

5.1 Top management and executives

Top management and executives of the company have perhaps the greatest influence on the safety culture by determining the company policy and the provision of resources. How and with what quality the implementation takes place depends on many influences, in particular on:

- the clear commitment of the top management to safety
- being a positive example and living the commitment
- demanding safe behaviour
- the involvement and participation of all hierarchical levels, especially middle management
- the ability to motivate and inspire employees
- the verifiable / recurring assessment of the safety management system
- the ability and willingness to go beyond simply meeting the minimum standard

As a rule, the top management will not want to change an existing safety management system in a way that overturns existing and established functional structures. The impact on ongoing ship operations would be too sensitive. However, the management has a privilege: It can very quickly influence the adjustment of the corporate culture.

If efforts to promote corporate culture are considered as an investment in success and sustainability at all management levels and are not seen as a burden, it increases acceptance among employees and in the company as a whole. This is of course an on-going process that might not incorporate everyone from the onset. It is therefore crucial that the middle and higher management levels are first won over by the top management to change the corporate culture and are instructed in how to introduce this sensitively and specifically to their departments. One instrument can be safety-relevant objective agreements, which are then measured using appropriate key performance indicators.

5.2 Promote awareness through new methods

Shipping companies are increasingly concerned with new and modern concepts that are intended to ensure that objectives are achieved. Resilience is one of the terms entering the maritime setting. The concept of resilience raises the awareness that a system cannot achieve ultimate safety simply by rigidly adding up redundant safety barriers and "blindly" following available procedures, and that it is necessary to utilize flexibility and alertness to activate additional protective measures in crises.

INFO: Resilience

There are no standardized definitions for the term "resilience" either. Originally, it stems from physics and describes the property of surfaces to withstand pressure and to react elastically to external influences.

Transferred to an organization or shipping company, resilience could be defined as the ability of a system to react successfully to unforeseen situations and to keep track of things. When an unexpected event occurs, resilience requires the right competence of the individual, the group and the interaction of the management systems.

In the shipping industry, the safety management system contributes to resilience by preparing for an emergency. The same goes for an established bridge team management, including the newer concepts of bridge resource management. Here, too, it has to be individually determined whether existing instruments require a new or additional form of organization under the term resilience or whether the existing resources of a shipping company can simply be utilized in a different way to update and improve existing procedures and processes. Again, the right solution will have to be based on the actual circumstances and required needs of the individual company.

6 Prospects

The selective adjustment of the corporate culture is a cautious method that positively influences and supports the measures for the implementation of the ISM Code as well as updates and continuously improves an existing safety culture and thus supports safe ship operations and economic success with simple means. Adjusting means tightening and loosening the existing screws, no matter how big they are. Individual solutions adapted to the actual needs achieve more sustainable success and use the available resources carefully and optimally. The following should apply:

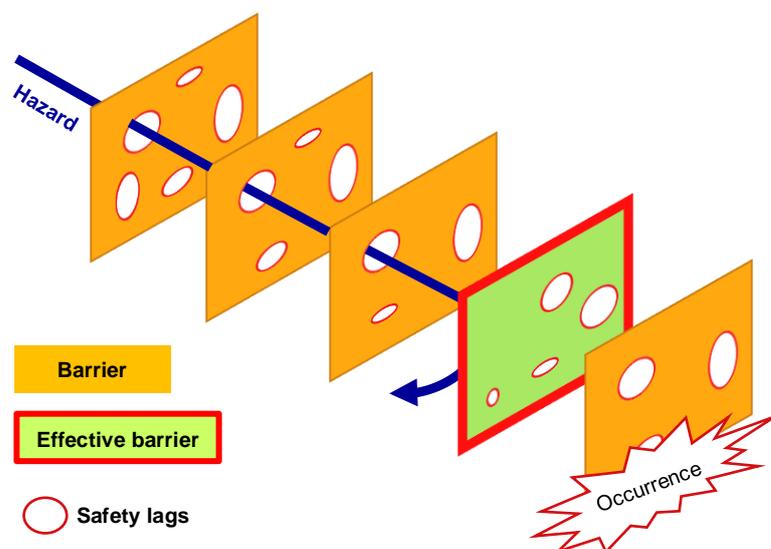
- My company = my system = my solutions and methods
- Do not completely replace competences with procedures. Qualification measures remain an important component in order to be able to act correctly, reflectively and resiliently depending on the situation.
- Errors of individuals or groups must be recognizable and objectively analyzed via the corporate culture and, wherever possible, lead to system changes instead of blame and reprimand.
- Measures such as key performance indicators for the measurability of the system must be directed towards the advancement of the company. Not everything that is measured aids in upgrading the system.
- Procedures and rules are authoritative, but that is not sufficient. They have to be lived and committed to. The decisive factor for this is the corporate culture and constantly updating the procedures and rules as it changes.

6.1 Conclusion

Often the knowledge and competence in managing, operating and directing ships already exists, processes and procedures have been specified, resources are provided, training courses are being carried out, procedures are being lived, key performance indicators and evaluations are available. However, all of these capacities must be linked and brought together in the right way. This merging and thus promoting of safety awareness can be achieved by the corporate culture.

An accident, incident or financial loss usually does not have one single cause. The corporate culture is what should be effective at all levels of the incident development process, because it is this corporate culture which strengthens every single safety barrier effectively and minimizes potential for errors in all areas.

These safety barriers are created from the components and procedures of the SMS, from the competence and experience of the individuals and ultimately also from the active safety awareness of all those involved.



Finding the right screws to adjust the corporate culture can shift barriers in the right way and is both a challenge and an opportunity.