

Can a company really measure its own Safety Culture?

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The concept of 'Safety Culture' is no longer reserved for safety consultants, academics or the higher levels of senior management; it has become a well-known term that is used by a wide variety of people to describe and explore the way organisations manage safety and respond to risk. With more and more organisations becoming familiar with the concept, it is not surprising that companies are looking less to external consultants to help them assess their Safety Culture, and more to themselves to carry out their own internal Safety Culture evaluation. In January 2015 DNV GL embarked on a project to assess its own Safety Culture to understand more about why a series of undesirable events had occurred and to develop interventions that would help put a stop to them. However, in reality, was this a wise idea? Can a company really measure its own Safety Culture? Although leaving external consultancies behind and going it alone would appear an attractive proposition initially, can you really get the results you need to make robust long term safety improvements? This paper explores the issues surrounding a number of biases inherent in self-assessment, including the methodological approach taken to self-assessment in order to help remain objective and impartial during data collection and analysis, the lessons learnt whilst directly tackling sometimes sensitive safety issues during interviews with colleagues and whether the typically 'anonymous' nature of Safety Culture measurement can still be maintained even though people know each other. This paper charts the process of Safety Culture self-assessment. It considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of 'uncomfortable' findings. It also attempts to conclude whether or not self-assessment really is a possibility if an accurate and meaningful assessment is genuinely sought; or whether turning to an external body to assist is actually more effective in the long term.

Keywords: Safety Culture; Safety Culture self-assessment; biases; objective; impartial; anonymous.

Introduction

The term 'Safety Culture' can be traced all the way back to the Chernobyl accident in 1986. Since this time the concept has grown hugely in terms of the importance industries and organisations place on it as a key factor in the execution of good safety management and the prevention of incidents and accidents. With such a high priority placed on Safety Culture it is not surprising that more and more companies seek to assess and strengthen their own Safety Culture in an effort to actively manage safety risks. In January 2015 DNV GL did exactly this; it embarked on a project to assess its Safety Culture to understand more about why a series of undesirable events had occurred and to support the development of interventions that would help put a stop to them. However, rather than choosing to commission a specialist contractor to undertake the assessment on DNV GL's behalf, it made the bold decision to assess its own Safety Culture. This paper describes the process of self-assessment undertaken by DNV GL, the technical issues encountered during the main phases of the assessment work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen its approach to self-assessment. Overall, the paper attempts to address the question: can a company really measure its own Safety Culture?

Approach taken to Safety Culture Self-Assessment

The self-assessment team

DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries. It also provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support functions within a global shared service centre (GSS) and Group centre. Each business area operates largely independently. The team created to conduct the Safety Culture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resources Officer); an 'expert' group (nominated by the steering committee and the Chief Executive Officer's (CEO's) from the six different business areas and including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Oslo, Norway.

The methodology applied

The Safety Culture self-assessment methodology applied consisted of five phases, as follows:

- **Phase 1: Review of the main organisational risks** – the main health and safety risks and challenges in DNV GL were identified, as well as all the relevant stakeholders for the project, to ensure that the results were representative and owned by the most relevant stakeholders in the company.
- **Phase 2: Development of the 'envisioned' state** – a description of how a world class Safety Culture would 'look and feel' was developed with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.

Phase 3: Assessment of where DNV GL currently is with regard to Safety Culture - the level of Safety Culture (measured using the Safety Culture Maturity Index) was assessed through a survey and review of the accident and incident data) and qualitative analyses (one-to-one interviews and a review of management system documentation). Input from all employees across the organisation was a key aspect of this phase.

Phase 4: Analysis of the gap - the project team evaluated each of the seven Safety Culture dimensions in terms of the current state and the envisioned state. This development was undertaken in the current business areas, global shared services, and with local teams at various organisational levels to tailor the approach to meet local needs and evaluation. In January 2015 DNV GL embarked on a project to assess its own Safety Culture to understand more about why a series of undesirable events had occurred and to develop interventions that would help put a stop to them. However, in reality, was this a wise idea? Can a company really measure its own Safety Culture?

Although leaving external consultancies behind and going it alone would appear an attractive proposition initially, can you really get the results you need to make robust long term safety improvements? This paper explores the issues surrounding a number of the commonly used self-assessment methods administered by an independent external survey organisation, and therefore provided reassurance to employees that their survey responses would not be seen by their managers. The survey assessed safety culture responses from 72% of employees, suggesting that employees felt confident to answer the typically 'anonymous' nature of Safety Culture self-assessments. It was carried out by the DNV GL even though people know each other. This paper charts the process of Safety Culture self-assessment. It considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of the data and the findings. It also addresses the findings that make judgement on self-assessment heavily DNV GL's ability to regard to Safety Culture and meaningful self-assessment is generally a complex, low budgeted activity to external body to assist is actually more effective in the long term.

The one-to-one interviews and gap analysis were therefore two key areas that could be perceived as presenting the highest risk of inherent self-assessment biases. Each activity is explored in turn.

Keywords: Safety Culture; Safety Culture self-assessment; biases; objective; impartial; anonymous.

The Process of Interviewing

The term 'Safety Culture' can be traced all the way back to the Chernobyl accident in 1986. Since this time the concept has grown hugely in terms of the importance industries and organisations place on it as a key factor in the execution of good safety management and the prevention of incidents and accidents. With such a high priority placed on Safety Culture it is not surprising that more and more companies have taken to assess and strengthen their own Safety Culture. DNV GL actively manages safety risk. In January 2015 DNV GL did exactly this (initially embarked on) a project to assess its Safety Culture to understand more about why a series of undesirable events had occurred and to support the development of interventions that would help put a stop to them. However, in reality, was this a wise idea? Can a company really measure its own Safety Culture? This paper charts the process of Safety Culture self-assessment. It considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of the data and the findings. It also addresses the findings that make judgement on self-assessment heavily DNV GL's ability to regard to Safety Culture and meaningful self-assessment is generally a complex, low budgeted activity to external body to assist is actually more effective in the long term.

Approach taken to Safety Culture Self Assessment

The interview was approximately one hour. The interview started with an introduction to the interviewer and scribe, as well as a presentation of the project. Interviews were conducted via an in-house visual phone, video conference or in person. Each interviewee was informed that the interview was voluntary, confidential, and could be ended at any time. They were also reminded of the importance of answering honestly. DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries. It also provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support functions within a global shared service centre (GSS) and Group centre. Each business area operates largely independently.

The role of someone you know

Safety Culture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resources Officer); an 'expert' group (nominated by the steering committee and the Chief Executive Officers (CEO's) from the six different business areas and including HSE experts from each business area) and an interviewer (led by a team of consultants). Most notably, the technical project team (made up of parts of the DNV GL business) were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team provided a level of anonymity for those interviewed by the University of Oslo, Norway. Some of the interviewers were full time permanent members of DNV GL staff who may have worked with any one of the interviewees. The interviewers were asked if they ever interviewed anyone they knew, and one

The methodology applied

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- Phase 2: Development of the 'envisioned' state - a description of how a world class Safety Culture would look and feel, was developed with the help of internal and external research, and decisions were made on the key dimensions of a strong Safety Culture.

interview where they feel they know someone too well and this relationship could bias or influence the direction of the **Can a company really measure its own Safety Culture?**

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Although this is the case in any interview situation, it is clearly more of an issue during self-assessment. However, the interviewees generally felt that once people had warmed up they were very open during interviews, with some instances of people sharing too much (and sometimes the concept of Safety Culture is being expressed for Safety Consultants, leaders or other high-level views, but these tended to be short management-ish harp on how people are well known sufficient to provide a wide variety of people and therefore not fully engaging. Explore the way organisations manage safety and respond to risks. With more and more organisations becoming family-like with the concept of reporting issues, but companies are looking for external consultants to help them assess their Safety Culture, and more to themselves to carry out their own internal Safety Culture evaluation. In January 2015 DNV GL embarked on a project to assess its own Safety Culture to understand more about why a series of undesirable events had occurred and to develop interventions that would help put a stop to them. However, the reality was that a wise idea had a company really measure its own Safety Culture? The interviewer explained, "Initially, can you really get the results you need to make robust long term safety improvements? This paper explores the issues surrounding a number of biases inherent in self-assessment including the methodological approach, taken to self-assessment in order to help remain objective and impartial during data collection and analysis, the lessons learnt whilst directly tackling sometimes sensitive safety issues during interviews with colleagues and whether the typically 'anonymous' nature of Safety Culture measurement can still be maintained even though people know each other. This paper charts the process of Safety Culture self-assessment. It considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of uncomfortable findings. It also attempts to conclude whether or not self-assessment really is a possibility if an accurate and meaningful assessment is genuinely sought; or whether turning to an external body to assist is actually more effective in the long term."

Another interviewer also felt that interviewees may actually find it easier to talk to people from the same organisation as they have knowledge about DNV GL and therefore have a deeper understanding of the different issues and could relate to them and provide active feedback, which may encourage more openness from the interviewee when being interviewed about a difficult topic.
Keywords: Safety Culture; Safety Culture self-assessment; biases; objective; impartial; anonymous.

Conducting the Gap Analysis Introduction

The workshop
The term 'Safety Culture' can be traced all the way back to the Chernobyl accident in 1986. Since this time the concept has grown in awareness of the importance of industries and organisations placed on a DV factor to the execution of good safety management and the prevention of incidents and accidents. With such a high priority placed on Safety Culture Safety is not surprising that more and more companies seek to assess and strengthen their own Safety Culture in order to actively manage safety risks. In January 2015 DNV GL did exactly this; it embarked on a project to assess its Safety Culture to understand more about why a series of undesirable events had occurred and to support the development of interventions that would help put a stop to them. However, rather than choosing to commission a specialist contractor to undertake the assessment on DNV GL's behalf, it made the bold decision to assess its own Safety Culture. This paper describes the analysis used evidence from the survey findings and results of a document review (of internal management procedures) and process of self-assessment undertaken by DNV GL, the technical issues encountered during the main phases of the a risk review (using company incident and accident data). The interview findings were also used, although as interviews were only conducted with two business areas, the team was careful not to apply these findings to draw conclusions its approach to self-assessment. Overall, the paper attempts to address the question: 'can a company really measure its own Safety Culture?'

During the workshop, the conclusions from the survey and document review were presented and discussed, before concluding where DNV GL stands in each of the Safety Culture dimensions. The process was repeated for all seven dimensions until unanimity was reached for each dimension from all workshop participants.

The self-assessment team

Inherent biases?
DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries. It also provides DNV certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance and software, as well as a support function within a global shared service centre (GSS) and Group centre. Each business area operates largely independently. The team created to conduct the Safety Culture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resource Officer); an expert group (nominated by the steering committee and the Chief Executive Officer's (CEO's) from the six different business areas and including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Oslo, Norway. When the gap analysis team was asked directly whether they felt that they were influenced in their conclusions there was a slightly mixed response. On one hand team members did not feel they were influenced because they worked for the company.

The methodology applied

The methodology applied in the gap analysis team had each worked on several of the different project work packages (e.g. document review, survey creation etc.) and this created opportunities for triangulation, or confirmation of conclusions from different work package approaches. It was also felt that because the project was so large and encompassing (10,000+ survey results) that the methodology applied consisted of five phases, as follows:
● **Phase 1: Review of the main organisational risks and the main health and safety risks and challenges of the DNV GLs** had been identified as well as identifying the relevant stakeholders for the project. DNV GLs that the results were representative and owned by the most relevant stakeholders in the company.
● **Phase 2: Development of the 'envisioned' state** - a description of how a world class Safety Culture would 'look and feel' was developed with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.

However, there was also an alternative view from the gap analysis team. One consultant commented “of course” the

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of employees of DNV GL and, additionally, had a background in human factors was believed to have sub-consciously influenced both the analysis and outcomes. One consultant commented “we are all susceptible to the same cognitive biases”. However, the same consultant also made the observation that the students (who were not employed by DNV GL but whom had supported the project) drew different conclusions to the rest of the gap analysis team. This was considered to be because they were more remote to the company, however, to mitigate against this the team were always careful to check back with the facts to ensure conclusions were based on hard evidence, rather than subjective interpretations.

The concept of ‘Safety Culture’ is no longer reserved for safety consultants, academics or the higher levels of senior management; it has become a well-known term that is used by a wide variety of people to describe and explore the way organisations manage safety and respond to risk. With more and more organisations becoming familiar with the concept, it is not surprising that companies are looking less to external consultants to help them assess their Safety Culture, and more to themselves to carry out their own internal Safety Culture evaluation.

Dealing with uncomfortable findings

Assessing the Safety Culture of any organisation always has the potential to reveal ‘uncomfortable’ findings. It will always be difficult to hear that people are stressed at work or are in a position where they feel they cannot say no to working in a potentially unsafe situation. Therefore, possibly hearing that colleagues and/or counterparts are in that very situation may be a stop to them. However, in reality, was this a wise idea? Can a company really measure its own Safety Culture?

A more palatable, leaving external consultants behind has gone along with a more open approach to data and these types of findings as they see appropriate. In particular, the reaction of Safety Culture to long-term safety improvements? This paper explores the issues surrounding a number of biases inherent in self-assessment, including the methodological approach taken to self-assessment in order to help remain objective and impartial during data collection and analysis.

This issue was explored with the gap analysis team and it was generally felt that any findings which were either sensitive or difficult could be handled in a typically anonymous manner of Safety Culture assessment. In fact, many findings are not known by other. This paper charts the process of Safety Culture self-assessment. It considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of ‘uncomfortable’ findings. It also attempts to conclude whether or not self-assessment really is a possibility.

“Some of the findings were a little uncomfortable, and some of the business areas had significantly more issues than others, which could have made the assessment less genuinely sought for. The findings turning from external to internal Safety Culture survey and actually more effective in the long term was pointing us in a clear direction of what needed to be improved to help our colleagues. I think I felt more that it was important to highlight this, because we had a responsibility to let management know about the weak areas. I felt we were doing the management a favour rather than feeling uncomfortable in reporting

Introduction.”

Keywords: Safety Culture, Safety Culture self-assessment, biases, objective, impartial, anonymous.

The term ‘Safety Culture’ can be traced far the way back to the Chernobyl accident in 1986. Since this time the concept has grown hugely in terms of the importance industries and organisations place on it as a key factor in the execution of good safety management and the prevention of incidents and accidents. With such a high priority placed on Safety Culture, it is not surprising that more and more companies seek to assess and strengthen their own Safety Culture in an effort to actively manage safety risks.

In January 2015 DNV GL did exactly this: it embarked on a project to assess its Safety Culture to understand more about why a series of undesirable events had occurred and to support the development of interventions that would help put a stop to them. However, rather than choosing to commission a specialist contractor to undertake the assessment on DNV GL’s behalf, it made the bold decision to assess its own Safety Culture. This paper describes the assessment work, the potential benefits and pitfalls of the self-assessment approach and what a company can do to strengthen its Safety Culture.

Overall, the paper attempts to address the question: can a company really measure its own Safety Culture? It provides the project team with better overview of the organisation and helps team members know who to talk to, when to talk to them, what to ask and how.

The Benefits of Self-Assessment

Approach taken to Safety Culture Self-Assessment

The self-assessment team

It helps to provide knowledge of, and access to, relevant information (e.g. accident data, management systems, DNV GL operates in more than 100 countries, with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries. It also provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support functions within a global shared service centre (GSS) and Group centre. Each business area operates largely independently. The team created to conduct the Safety Culture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resources Officer); an ‘expert’ group (nominated by the steering committee and the Chief Executive Officers (CEOs) from the six different business areas and including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Oslo, Norway.

It encourages trust between the project team and participants given that they work at approximately the same level in the company hierarchy.

The methodology applied

It creates commitment for follow-up by team members and participants.

The Safety Culture self-assessment methodology applied consisted of five phases, as follows:

Phase 1: Review of the main organisational risks – the main health and safety risks and challenges in DNV GL were identified, as well as all the relevant stakeholders for the project, to ensure that the results were representative and owned by the most relevant stakeholders in the company.

Phase 2: Development of the ‘envisioned’ state – a description of how a world class Safety Culture would look and feel, was developed with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.

The Potential Pitfalls of Self-Assessment Can a company really measure its own Safety Culture?

Although the benefits are clear, it is important to also consider some of the less optimal aspects of self-assessment; these are

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- It may make it difficult for interviewees to share information openly (especially if the person conducting the interviews is senior to them or if the company is small)
- The concept of 'Safety Culture' is no longer reserved for safety consultants, academics or the higher levels of senior management, it has become a well-known term that is used by a wide variety of people to describe and explore the way organisations manage safety and respond to risk. With more and more organisations becoming familiar with the concept, it is not surprising that companies are looking less to external consultants to help them assess their Safety Culture, and more to themselves to carry out their own internal Safety Culture evaluation. In January 2015 DNV GL embarked on a project to assess its own Safety Culture to understand more about why a series of unfortunate events had occurred and to develop interventions and strengths and weaknesses) that they personally want highlighted or that they have experienced themselves. In relation to this, it may therefore make the project less attractive to external consultants should they be approached. In relation to this, it may therefore make the project less attractive to external consultants should they be approached. In relation to this, it may therefore make the project less attractive to external consultants should they be approached.
- It may lead to participants forming a number of biases inherent in self-assessment, including the methodological approach used to assess them in order to help remain objective and impartial during data collection and analysis, the lessons learnt whilst directly tackling sometimes sensitive safety issues during interviews with colleagues and whether the typically 'anonymous' nature of safety culture measurement can still be maintained results though people know each other. This paper charts the process of Safety Culture self-assessment. It considers ways to mitigate against some of the main pitfalls, such as biases in the interpretation of uncertain findings. It also attempts to conclude whether or not self-assessment really is a possibility if an accurate and meaningful assessment is genuinely sought; or whether turning to an external body to assist is actually more effective in the long term.

Use of an External Contractor

A good test of whether self-assessment has been successful is whether project team members would be willing to repeat the exercise, or if given the option, use an external agency to run the assessment. Opinions on this varied across the project team. However, most of the project team said they would not employ the services of an external contractor as the competence to carry out an assessment could be found within DNV GL. Also, the organisation is of a sufficiently large size that it permits a significant degree of anonymity between the project team and the rest of the 15,000+ employees.

Introduction

The term 'Safety Culture' can be traced all the way back to the Chernobyl accident in 1986. Since this time the concept has become widely used. The importance of safety culture in organisations has been highlighted in the area of good safety management and the prevention of incidents and accidents. With such a high priority placed on Safety Culture it is not surprising that more and more companies seek to assess and strengthen their own Safety Culture in an effort to actively manage safety risks. In January 2015 DNV GL actually embarked on a project to assess its Safety Culture to understand more about why a series of undesirable events had occurred and to support the development of interventions that other members of the project team were more undecided. Some felt that due to the size of the company and the competency within it, it was the right decision to self-assess. However, they also acknowledged that having an external agency involved would largely eradicate any questions around objectivity. Others felt that the combination of using an external agency for the survey and internal resources for the other aspects of the assessment provided the appropriate mix. One consultant commented:

One-on-one interviews I may prefer to use an external contractor; however, there are advantages to having that same external contractor have all of the data and therefore the whole picture, instead of being expected to jump in, in the middle of an assessment.

The self-assessment team

The project team felt they would opt to use an external contractor to conduct the Safety Culture assessment again, primarily to seek a different perspective on the organisation, which could then be appropriately challenged. DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries.

Concluding Thoughts

DNV GL provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support when the wider global shared service company (GSS) and Group Centre. Each business Safety Culture largely independent. The team agreed to conduct the Safety Culture assessment in the span of two project milestones; this announcement was made; The steering committee (headed by the Chief Human Resources Officer), an expert group (nominated by the steering committee and the Chief Executive Officer (CEO) from the six different business areas and including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Oslo, Norway.

If you have a sufficiently competent project team that is also divided across various work packages, then the work can be done as objectively as external consultants would manage. The challenge lies more in defining what is meant by Safety Culture and operationalizing it properly, but that is the same challenge that external consultancies would also encounter. So the key is to have a competent project team that understands the challenges related to Safety Culture analyses and that can triangulate the results to reduce subjectivity and increase the likelihood of robust results.

The methodology applied

The Safety Culture self-assessment methodology applied consisted of five phases as follows: important factor with regard to being able to make an objective assessment or not. For example, if a company had less than 50 people then it would be hard to conduct confidentially, as well as all the relevant stakeholders for the project to ensure that the results were representative and owned by the most relevant stakeholders in the company) then objective self-assessment may still be possible.

Phase 1: Review of the main organisational risks - The main health and safety risks and challenges in DNV GL were identified, as well as all the relevant stakeholders for the project to ensure that the results were representative and owned by the most relevant stakeholders in the company) then objective self-assessment may still be possible.

Phase 2: Development of the 'envisioned' state - A description of how a world class Safety Culture would look and feel was developed, with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.

"To self-assess, I feel that the larger challenge for a company is defining the criteria around what to measure. We used a set of valid indicators for Safety Culture, but it was not always clear how to interpret the results. Safety projects our project team members had managed, and this led to a set of valid indicators we were comfortable using. However, if a company starts from scratch with Safety Culture assessment, I'm afraid they may leave something out, or over-emphasize some areas. But if the criteria/indicators are (in general) already defined, I think a company could use these to objectively understand more about their strong and weaker areas of Safety Culture."

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This paper presents a range of arguments for and against self-assessment as a way of measuring organisational Safety Culture. If the concept of Safety Culture is no longer reserved for safety consultants, academics, or the higher levels of senior management; it has become a well-known term that is used by a wide variety of people to describe and

- explore the way organisations manage safety and respond to risk. With more and more organisations becoming familiar with the concept of Safety Culture, companies are seeking less external consultants to conduct a Safety Culture assessment, seriously considering the help of an external agency. The self-assessment was successful with DNV GL, but this was due to the team having repeatedly conducted safety culture assessments more about why a series of undesirable events had occurred and to develop interventions that would help put a stop to them. However, in reality, was this a wise idea? Can a company really measure its own Safety Culture?
- For a large company, select project team members from different parts of the business to maintain independence and impartiality. For a much smaller company, this may not be possible.
- Although leaving external consultancies behind and going it alone would appear an attractive proposition initially, can you really get the results you need to make robust long term safety improvements? This paper explores the issues surrounding a number of biases inherent in self-assessment, including the methodological approach taken to self-assessment in order to help remain objective and impartial during data collection and analysis, the lessons learnt whilst directly facing sometimes sensitive safety issues during interviews with colleagues and whether the typically 'anonymous' nature of Safety Culture measurement can still be maintained even though people know each other. This paper charts the process of Safety Culture self-assessment. It considers ways of mitigating against some of the main pitfalls, such as biases in the interpretation of 'uncomfortable' findings. It also attempts to conclude whether or not self-assessment really is a possibility if an accurate and meaningful assessment is genuinely sought, or whether turning to an external body to assist is actually more effective in the long term.

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- For the survey itself, if possible, commission an independent survey firm to administer it independently to assure participants of confidentiality and anonymity.

Introduction

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When analysing findings, try not to fill in gaps in the findings with personal experiences. The project team need to keep referring to the facts to make sure the findings are always based on hard evidence. Furthermore, where possible analyse data as part of a team. Certainly final conclusions should always be made by consensus.

Approach taken to Safety Culture Self-Assessment

Following these points will help ensure that self-assessment can be an objective, insightful and pragmatic way to conduct an organisational Safety Culture assessment.

The self-assessment team

DNV GL operates in more than 100 countries with a workforce of around 15,000 professionals. It provides classification and technical assurance along with software and independent expert advisory services primarily to the maritime, oil & gas and energy industries. It also provides certification services to customers across a wide range of industries. The business is divided into five main business areas: oil & gas, energy, maritime, business assurance, and software, as well as support functions within a global shared service centre (GSS) and Group centre. Each business area operates largely independently. The team created to conduct the Safety Culture assessment consisted of two project managers; a communications specialist; a steering committee (led by the Chief Human Resources Officer); an 'expert' group (nominated by the steering committee and the Chief Executive Officer's (CEO's) from the six different business areas and including HSE experts from each business area) and a technical project team of consultants. Most notably, the technical project team came from different parts of the DNV GL business and were selected on the basis of their technical knowledge and competence in the field of Safety Culture assessment and improvement. Additionally, the technical team included four MSc Psychology students from the University of Oslo, Norway.

The methodology applied

The Safety Culture self-assessment methodology applied consisted of five phases, as follows:

- **Phase 1: Review of the main organisational risks** – the main health and safety risks and challenges in DNV GL were identified, as well as all the relevant stakeholders for the project, to ensure that the results were representative and owned by the most relevant stakeholders in the company.
- **Phase 2: Development of the 'envisioned' state** – a description of how a world class Safety Culture would 'look and feel' was developed with the help of internal and external research and decisions were made on the key dimensions of a strong Safety Culture.