Promoting safe behaviour: a critique of common practice

Purpose of this document

A key challenge faced by those organisations aspiring to achieve a high and sustained level of safety performance is how they can exert influence over how people behave. This has led to a variety of programmes and tools. Unfortunately, the hoped-for impact has not always been achieved. The result is that organisations continue to search for *the answer*.

In this document we offer a number of observations in the context of how organisations set out to achieve influence over how people behave. These observations should be of use to those who have an interest in safety management development. These observations are intended to be challenging – many organisations are struggling to achieve further improvements in safety and our view is that some of the existing assumptions and practices ought therefore to be challenged. Just doing more of the same is likely to lead to more of the same!

Observations

Lack of theory

Our observation here is that organisations are understandably action oriented which leads to a tendency to identify and implement solutions. The problem is that such solutions are not always based upon an in-depth understanding of the issues and reference to established theory. The result can be a lack of impact and linked with this a sense of weariness in those exposed to yet another new initiative.

Lack of knowledge in area of human factors

This is linked to the above. Solutions devised typically are based on what appear to be "common-sense" understanding of the issues or incomplete ideas borrowed from elsewhere. The result is often an incomplete analysis. What is required is the application of established human factors knowledge when dealing with behaviour management issues.

Lack of strategy

The tendency is to establish a response – get something done. This can lead to a somewhat piecemeal approach to the problem and the introduction of a number of different initiatives. The problem being tackled however is not unique but a universal – and the requirement is to build a more strategic, more considered and co-ordinated response. The need is for an integrated and coherent set of actions, separate pieces of a bigger jigsaw.

Focus on numbers rather than quality

Responses typically involve people doing more of something and the measure is often one of *how many* rather than the quality of the intervention. This is often exaggerated

through the setting of targets. The effect is people increase their activity to achieve the target but at the expense of quality intervention.

Reliability of small numbers / low variance

Incident / accident rate features highly as a metric even where there is an emphasis on input measures. Although the numbers typically are small, and the variance between each data period relatively small and insignificant, much is made of any variation either up or down. This can lead to spurious conclusions and inappropriate responses. The data is insufficient to reliably do the job expected of it. Despite this, such metrics continue to be held to be the most important indicators of performance.

Input / leading / proactive metrics

Organisations have rightly looked to introduce measures that reflect activity that reduces risk rather than rely just on output measures as indicators of safety performance. The problem here is that these measures are often activity measures and associated with these is a supposed relationship between the level of activity achieved and risk reduction. This may not always be an accurate assumption. The challenge is to introduce measures that more directly reflect variance in risk levels.

Over-reductionist approach to understanding the data

In the continued search for the answer, incident investigation can become over reductionist leading to a mass of data that may not always be as meaningful as supposed. The proliferation of more and more statistical analyses is an indicator of this. Superficially the data looks good but often it is difficult to detect meaningful trends. In this context, the same behaviour can lead to a different injury and different injuries can result from the same behaviour. A further concern lies in the propensity to identify root cause when the reality is the event was the result of a complex interaction of many events or behaviours.

Emphasis on incident data

Whilst it is important to promote a sharp focus on safety, the emotion often attached to incident occurrence can at times lead to the wrong behaviours. This is particularly evident in the behavioural impact the reaction of senior managers can have – often because those above them exert pressure to achieve zero incident performance. Examples of this can be seen in discussions relating to whether an event should be recorded as an LTI / DAFWC or otherwise – this is a statistical issue but one which can attract a lot of emotion and manoeuvring and in turn send out negative messages regarding the values associated with managing people's safety.

Contractor management

In the oil and gas industry in particular a key interface is that between the operating company and the supporting contractor organisation(s). The operating company typically includes contractor incidents in its own statistics (rightly so). In turn, the contractor company is held accountable for its contribution to overall safety performance and poor performance can lead to contractual threats. This may seem reasonable in that the contractor is not delivering. However, the effect can be for the contractor organisation to pass the pressure down onto its operational people and this can in turn affect their response to safety in a detrimental way. In this context, the problem is often one of a lack of a positive alternative to encourage and recognise behaviours that will produce good performance.

Audit rather than evaluation

Audit is an activity that occurs regular in relation to health and safety activity. This sometimes is confused with the process of evaluation. Audit is concerned with measuring adherence to some specification where evaluation is more concerned with determining value-added. There is an assumption that activities that have strong face validity in turn add value when in fact a careful evaluation might reveal otherwise.

Control measures and safety performance

Practice suggests that there is an assumed positive relationship between the level of control exerted and safety performance. When performance dips the reaction typically is to introduce more controls so reinforcing the supposed relationship. The relationship may, however, not be as straightforward as would seem. Human beings generally have negative feelings about control even though they purpose is that of organising our complex world. These negative feelings rise in significance once there is a feeling that the controls have reached a point of "overload". At such a point the response can be negative both in cognitive terms (people stop thinking) and emotionally (reduced motivation due to lack of own input).

Formal and informal influence

Critical issues such as safety tend to promote formal measures and we see this in the form of the procedures associated with most safety management systems. The emphasis is upon control and the logic is based on exerting influence through formal means. However, it is also recognised that good safety depends on the right state of mind. Whilst this can partly develop out of education and training, many work environments tend to have a lowering impact on people's risk perception. This can lead people to lessen their safety effort and level of vigilance.

This is often where the concept of safety culture becomes important – and the development of a strong safety culture is very much dependent upon "informal influence". For example, the behaviour of senior management sends out powerful signals to others and can serve to both strengthen and weaken the safety message received. Some of this can be unintentional but nevertheless carries a potent message. Once an organisation has achieved a certain level of sophistication in terms of formal influence (systems and training) then it is the more informal influence that becomes most important.

Antecedents and consequences

The concern is with how people behave. Behavioural theory tells us that much of our behaviour is influenced through our anticipation of the consequences we expect to follow as a result of that behaviour. In contrast, the emphasis we place on giving information about how people should behave (antecedents) has relatively little impact unless such information predicts that a meaningful consequence will follow.

In the context of safety we place considerable emphasis on managing behaviour through antecedents and are then surprised when these have either short term or little impact. Even when approaches purport to be based on behavioural theory (ABC analysis or Reinforcement Theory) the actuality often is that the emphasis in such approaches is mainly on antecedents. For example, informing people what the consequences will be if they behave unsafely is still an antecedent strategy. This can mean that a technique involving safety conversations may not be as successful as it might seem. Recent statistical analysis conducted by a major oil and gas company has shown that the use of an intervention based on such conversations has little correlation with safety performance.

Unsystematic approach to motivation

The need to encourage people to act more safely has created a focus on enhancing motivation through the use of goal setting, recognition, rewards, bonuses and incentives. In this respect the basic principle is sound but practise often suggests a poor understanding of the theory. For example, rewards / bonuses are linked with safety results even though these may not always be within the performers control. The outcome can be little or no effect and in some cases practise can actually produce a counter-productive effect – for example creating a few winners but in turn a lot of perceived "losers". There is considerable evidence that a more systematic approach to goal setting and the use of reinforcers can produce significant gains. One recent study

showed an average improvement of over 15% in performance when effective goal setting was introduced.

Size of "performance units"

The team as a unit can be a very significant factor in promoting performance. It is generally accepted that teams tend to work much better than the sum of the parts within it. Part of the effect is to do with synergies, part to do with motivation. However, there is an optimum team size (ideally 5-8 but no more than 15) if we are to maximise the effect. In relation to safety, incident results aggregated across a large operational unit are significant at one level (senior management) but much less significant for those lower down in the organisation who lose a sense of contribution and responsibility when part of something much bigger. In effect, in larger teams people feel less able to influence performance and so in turn feel less motivated to make the effort. This leads to behaviour that has become called *social loafing*. The challenge is to create more of a sense of local accountability and focus. In this context we are developing an increasing interest in what it takes to create *high performing safety teams* as an important element of the strategy to improve the focus on safety.

Lack of systematic monitoring

Many incidents, even large organisational events, reveal problems of a relatively simple nature in the form of unidentified errors and violations to procedures and best practise. The problem here often relates to an absence of systematic monitoring the aim of which is to eradicate such errors and violations by creating safe habits. The issue is not just the absence of monitoring programmes but how these are used. In one recent assessment of an offshore installation we experienced the situation where the completion of a regular monitoring programme was used as a key performance measure but little emphasis was placed on what the monitoring activity actually revealed beyond treating each non-conformance as a discrete event.

Contractor workforce

In many operations the behaviour of the contractor community represents the greatest risk. It is their efforts that can often make the biggest difference to the safety performance record. In this context, their motivation to focus on best practise and performance improvement is critical to success. Unfortunately, the contractor workforce can often feel like second class citizens when working with their operator organisation colleagues both through their different terms and conditions and the reactions often experienced when things go wrong. In one large site we have visited, term contractors were prevented from using the much superior welfare facilities provided for the operators. No wonder, we concluded, that they were less well aligned with the safety aspirations of the business.

Training and re-training rather than coaching

Ensuring that the workforce has the skills and competence required is critical. However, the emphasis placed on training courses and workshops does not always produce the expected outcomes. There are a number of problems here. The first concerns the number of repetitions required to move from a level of basic understanding to one of high-level competence. This is much more than practise observed takes into account. The effect can be that the training effort creates less than the required impact. The solution lies in a greater emphasis on training evaluation, transfer of training (to the worksite) and coaching. The fact that we see repetitive attempts to instil manual handling best practise suggests that not enough focus is on developing the correct safe habits in the workplace.

Just Culture and discipline

The move away from the idea of a "blame free culture" is a positive step but the replacement with an emphasis on Just Culture is often seen to be simply a return to the use of discipline when incident investigation reveals incompetence or violation

behaviour. The result can be to make people more wary and less open with respect to safety. This is a complex issue that needs very careful consideration. Our experience is that the roll-out of a just-culture model is based on an incomplete understanding of what is required. The preoccupation in safety needs to be with preventing reoccurrence of unsafe acts and events and the development of a positive learning culture that achieves this.

Improvement plans

The emphasis on relative short-term improvement plans that have local significance is a positive development. When such plans are based on a data based needs analysis undertaken by local people then an impactful plan is the result based on a sense of fit and on ownership and involvement. Our observation is however that such plans are based more from the development of generated wish-lists than they are on careful needs analysis. The emphasis on building in ownership (through for example consulting with safety reps.) has often been at the expense of what really is needed to improve.

Over-complicated focus

Understandably, in the search for safety improvement organisations have searched wider and as a result have introduced new initiative after new initiative. This has a tendency to over-complicate and also run the risk of people becoming initiative weary. On the basis that 20% of the behaviours probably produces something like 80% of the performance, or thereabouts, the emphasis should be more on doing the simple things well. This ties in with the regular conclusions from incident investigations where it is found that the primary cause can be that the simple things were not done well.

Individual behaviour rather than systems thinking

Linked with a number of the themes above is the tendency to focus on single or discrete causes in explaining events. This probably has been responsible for the focus on schemes to improve behaviour (reflected in improving compliance with behaviours such as holding handrails), which have a point in terms of risk reduction but can also have an adverse impact in that people detect a disconnect between an absence of focus on the more important with what appears the relatively trivial. People's behaviour is the product of a variety of sources of influence and it is often system variables rather than individual tendency that explain the variance. Increasingly we need to view behaviour as a systems phenomenon if we are to make progress.

Impact of higher-order behaviours

Linked with the above is a too-narrow focus on front-line behaviours and an inadequate focus on other behaviours elsewhere in the organisation. An obvious example is how we design safety into an organisation rather than deal with the problems that arise afterwards. A less obvious example is the impact the introduction of campaigns such as "Safety First" can have when the perception of the workforce is some significant disconnects which in turn provokes in them adverse feelings towards how safety is being managed.

Upward as well as downward feedback

Pressure to improve safety performance typically is exerted from senior managers down through the organisation. This pressure often increases following incidents and perceptions that safety focus is decreasing. This pressure can have an adverse impact down through the organisation and can produce defensive and dysfunctional behaviour. Because of the emotion attached to the issue people lower down in the organisation feel unable to feedback perceptions upwards to senior managers. This

can also lead to knee-jerk reactions and the rapid introduction of ideas that have not been adequately thought through or evaluated.

Honesty, openness, learning and challenge

What transpires is an organisation that resists challenge and deep down review and in turn an organisation that suppresses true learning. In the words of Chris Argyris from Harvard, certain issues become "undiscussable", and in turn people feel unable even "to discuss the undiscussability of the undiscussable". The result is the acceptance of a number of *holy cows*, which become essential parts of the strategy but which may not be adding value. What appears to be a sense of openness and honesty in fact turns out to be no more than a thin veneer. Of all the points raised, this is perhaps the most significant. The challenge in the context of improving safety is how to create a truly learning organisation at all levels of an operation.

Summary

In this document we have set out a number of issues and challenges. These are based on our observations of working in a number of situations, principally in high-hazard industries. As such, our observations are based on our direct experience. The issues we have raised may not be a comprehensive list of all those that are important. There may be others. However, these issues are common and it is our deeply held conviction that if further gains are to be made in safety assurance then simply doing more of the same will not be enough.

What is required is a fundamental challenge and even some new paradigm thinking. For some this challenge will be uncomfortable in that it might mean rethinking some basic and deeply held assumptions. For others struggling to understand why incidents continue to occur, and in particular the context provided by some high profile and worrying events, these observations might provide some practical starting points to promote a new dialogue about how safety can be improved. What is clearly apparent to us is that for those seeking greater assurance and performance improvement just doing more of the same will not be sufficient.

For those interested in discussing the points raised and the associated challenges, you may wish to contact us as follows:

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