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Capturing Hearts and Minds: Preparing an organisation for behaviour based safety

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Abstract

Many companies fail to successfully implement behaviour based safety (BBS) programmes within their organisation. Often failures are linked to the implementation strategy rather than the programmes themselves. BBS can be introduced without a clear rationale and can create fear of change and lack of trust, leading to low employee buy-in. ESB is Ireland's premier electricity utility and one of Europe's leading engineering and consultancy companies. This paper outlines the structure of a BBS framework at ESB which seeks to (i) facilitate employee involvement and (ii) build trust through leadership alignment. Combining best practice research from behavioural science and crew resource management, ESB's approach seeks to capture the hearts and minds for safety. Details of this approach are provided so as to enable leaders in high reliability industries to introduce BBS in a way that produces employee involvement and develops trust and leadership commitment.

Introduction

Behaviour based safety (BBS) is “a proactive approach to improving safety within organizations that utilizes behavior analysis principles” (Alvero & Austin, 2006, p. 61). Principally BBS focuses on safe behaviours that, when exhibited, proactively prevent injuries, rather than more traditional reactive strategies to safety. Behavioural issues are important to address, because behaviour turns systems and procedures into reality. It is not enough for an organisation to have good safety management systems, because safety performance is determined by how organisations actually ‘live’ or ‘act out’ their systems (Reason, 1997). Research evidence and practical experience show that significant improvements in safety performance can be achieved by implementing appropriate behaviour based safety programmes (Fleming & Lardner, 2000). For example, BBS interventions have resulted in improved safety behaviours such as personal protective equipment use (Streff et al., 1993), driving speed (Van Houten & Nau, 1983) and
have successfully reduced recordable incidents in high reliability industries, (Hermann et al., 2010; Myers et al., 2010).

While substantial improvements can be achieved through BBS programmes, it is important to note that, at the implementation stage, there can often be mixed feedback; some companies report success whilst other companies using similar programmes have experienced more disappointing results. Often a major barrier to the effectiveness of BBS programmes is linked to the implementation strategy itself. Without having a clear view for the rationale and objectives of BBS, issues can arise such as a lack of employee “buy in” and participation, a lack of management commitment and a view that it is an approach designed to “blame” the front line worker for incidents that occur (Agnew & Ashworth, 2012). In plain terms, it is not enough to introduce a BBS intervention and expect successful outcomes for safe behaviour without giving due attention to the challenge of commitment, acceptance and buy in. If BBS interventions are resisted or are grudgingly accepted, then the positive effects of improving safety culture and increasing safe behaviour will either not occur or will be mitigated. Consequently, to effectively employ BBS techniques, safety professionals must prepare the organisation.

This paper describes a BBS framework which incorporates a number of tools and approaches relevant for behavioural safety that seek to capture hearts and minds, create buy in, participation and build trust and commitment to behavioural changes for safety. To achieve these goals, this framework focused on three key objectives: (1) build interpersonal trust and support, (2) create leadership alignment and (3) facilitate employee involvement (DePasquale & Geller 1999; Geller, 2008).

Building interpersonal trust
According to Geller, (1998), “interpersonal trust is what's missing in a culture deemed unready for behaviour-based safety” (p.14). Assertions that a lack of interpersonal trust can cause resistance to BBS interventions is supported in research by DePasquale and Geller (1999) who found that trust in management’s abilities significantly predicted employees’ involvement and participation with BBS programmes. If employees perceive a BBS programme to be a method for management to “blame” the front line worker for safety incidents or to monitor their behaviour, participation in BBS processes will be minimal (DePasquale & Geller, 1999).

Creating leadership alignment
In building trust, leadership alignment with regard to the central messages of a behaviour based safety programme as well as their visible commitment to the process is vital. The day-to-day activities and behaviours of leaders, is crucial to an organisation’s success with behaviour based safety programmes (Geller, 2008). Managers at all levels of the organisation need to exemplify a shared vision of safety excellence and demonstrate safety leadership styles and practices that will drive behaviour based safety programmes, including fostering a sense of employee ownership of safety (Geller, 2008).

Facilitating employee involvement
Employee involvement and engagement is a critical success factor for BBS. According to research by Fleming (2000) on behaviour modification programmes in the oil and gas industry, no BBS interventions should be introduced without employee involvement. To encourage employee involvement with BBS, it is important that the BBS approach has a structure that allows for employees to be actively engaged (Geller et al., 2004).
Case study: Preparing Ireland’s premier utility company for behaviour based safety

Setting
ESB is Ireland’s premier utility company and employs over 5,000 people across power generation, distribution and customer supply. Their behaviour based safety programme is initially targeting the generation and wholesale market division of 2000 people. This division operates a portfolio of power stations across Ireland and the UK. Safe working is an integral part of how ESB plan and organise their business. During the past 15 years, large improvements in safety have been achieved through improved hardware and design, and through improved safety management systems and procedures. However, ESB’s safety performance has levelled out with little significant change being achieved during the past two to three years. A different approach focused on behaviour change is required to encourage further improvement.

Background Measures
Safety culture assessments were conducted with 400 staff members in generation and wholesale markets over a 12 month period, assessing areas relevant to safety such as workforce involvement, trust, and leadership commitment. Facilitators knowledgeable in the areas of human factors and behaviour based safety also conducted participatory workforce and leadership workshops with 290 members of staff and management, in groups of 12-15 people, over a 15 month period. The information from the safety culture assessments and the participatory workshops were fed back through numerous communication forums within the business at both the local and organisational level with a view to ascertaining readiness for BBS, maturity of trust between management and staff and levels of commitment to action and behaviour change for safety.

Intervention
In preparing ESB for a behaviour based safety approach, this project initially focused on three pilot locations of approximately 120 staff members and the organisation’s executive safety leadership team. The programme was then rolled out across a wider audience of 170 people within the Generation and Wholesale Market division. The approach included the following steps:

- Leadership Alignment
- Safety Culture Assessment
- Delivery of Non Technical Skills Programmes for employees and safety leaders

The aims of this particular approach were to:

- Create leadership alignment around the central messages of the BBS approach that best promoted employee buy in and participation;
- Capture employees’ hearts and minds for safety;
- Assess and build levels of trust and leadership commitment;
- Lay the foundation in preparing ESB for participation in a BBS programme;
- Facilitate employee engagement with and ownership of BBS approaches, ideas and techniques.

Leadership Alignment
To ensure commonality in the messages that were communicated from leaders in the business about BBS, there were numerous leadership alignment workshops held at various levels in the organisation so as to create a common vision for the BBS project (O’Reilly et al., 2010).
Safety Culture Assessment
To ascertain readiness for BBS, as well as benchmark the maturity levels of trust, workforce involvement and leadership commitment, 400 staff members’ (including supervisors and senior management) perceptions about safety culture were assessed on a location by location basis, using the psychometrically robust HSL survey tool (Sugden et al., 2009). The themes assessed in the assessment included: organisational commitment; peer group attitude; health and safety behaviours; engagement with health and safety.

Non-Technical Skills Workforce and Leadership Programmes
Non technical skills programmes were developed for staff and leadership groups with a view to facilitating workforce involvement in engaging with a BBS approach, to build interpersonal trust between management and staff and to instill leadership commitment for BBS. These programmes also aimed to impart skills for safety relevant to the thinking (e.g. attention), social (e.g. communication) and personal resource skills (e.g. fatigue management) that are needed to keep staff safe in high reliability settings, as well as to raise awareness and create change relating to health and safety leadership behaviour. The programmes were developed with input from employees, supervisors and managers as well as leading research in the field of human factors (Flin, O’Connor & Crichton, 2008), crew resource management (Flin, O’Connor, Gordon et al., 2000) and insights gained from industry programmes such as Shell’s Hearts and Minds (Hudson, 2007).

Results
To date, there is mostly qualitative data to support the objectives of ESB’s approach to BBS and measures of success have been achieved anecdotally by speaking to employees and leaders about the effects it has had for them for safety.

Creating Leadership Alignment and Assessing and Building Trust
The leadership alignment workshops were successful in ensuring that senior leaders, supervisors and managers were clear in delivering a consistent message about the purpose and rationale of BBS. Employees and leaders reported that these central messages for BBS successfully captured their hearts and minds for safety, in that they appealed to the personal and humanistic elements of safety. Leaders also stated that these workshops helped give them the confidence to “sell” the message for BBS at the local level, with other leadership groups in the business and in discussions at safety committees. The safety culture assessments were useful in ascertaining the maturity level of a location and its readiness for BBS as well as helping to identify areas that would require improvement (e.g., trust and greater leadership commitment) prior to introducing a BBS approach and pinpointing health and safety concerns (e.g., the tone of communications for safety; attitude to certain risk behaviours).

Capturing Employee’s Hearts and Minds for Safety
The non-technical skills workforce programmes were very effective in terms of creating engagement and involvement from employees with BBS and in their objective to capture “hearts and minds”. Example comments from the programmes included: “The workforce programme is a new way of looking at safety….I believe it promotes a better understanding of behaviour and attitudes towards safety for the benefit of all.” Employees were enabled to give their views on safety and have their opinions and suggestions taken on board by management. Example comments from staff included: “it provided a space for me to have my say for safety”.
**Building Leadership Commitment to BBS**
Leadership commitment to BBS and trust with employees was also created as a result of these workshops. Employees and managers were given a space to listen and talk with each other about safety concerns. Trust and commitment was also forged by leaders and managers acknowledging and implementing the feedback and suggestions from staff for safety in the workforce programmes. By tackling “quick wins” on site for safety, for example housekeeping and management of meetings, managers were able to create momentum with the BBS programmes, demonstrate commitment and create employee buy in to the process.

**Laying the Foundation in preparing for BBS interventions**
These workforce non-technical skills programme also helped to lay the foundation for participation in BBS programmes, providing a greater understanding of what a feedback and observation process involved and the rationale for such an approach. Most employees stated during the programmes that they would like to be involved with a BBS approach to safety. However, others did raise a concern about the manner in how it would be implemented on site and expressed apprehension about having confidence to deliver feedback, both positive and constructive. The leadership non-technical skills programmes were also effective in helping to lay the foundation for BBS. Example comments from the programme included: “Participation on the safety leadership programme has helped to give me a greater understanding of how I should behave to be a more effective safety leader.”

**Facilitating employee engagement with and ownership of BBS approaches ideas and techniques**
Skills and behaviours that were learned through the non-technical skills programme were displayed post-training (e.g., increasing feedback), and management and staff reported positive changes to safety related behaviours. These programmes raised awareness about strength and development areas for supervisors and managers in relation to health and safety leadership behaviour. For example, management speaking personally with staff about safety and being more visible on the shop floor. They also resulted in behaviours and activities (e.g., challenging unsafe acts; recognising safe behaviours) being incorporated into staff’s every day activities and work patterns, thus promoting ownership in putting BBS ideas and techniques into practice.

**Conclusion**
This paper outlined the importance of introducing a behaviour based safety approach that gives credence to assessing and creating interpersonal trust between management and staff, that ascertains and instills leadership commitment and alignment with a BBS approach and which ensures employee involvement and engagement throughout the process. It is within the plan of ESB over the next year, to re-administer the safety culture assessment post BBS intervention to ascertain improvements for safety in relation to areas such as: health and safety behaviours, organisational commitment and trust, communications for safety and employee engagement. At present, however it is difficult to assess this approach other than anecdotally. Yet what can be stated with much confidence is that this particular approach to BBS has been effective in helping to secure trust, involvement and commitment to the BBS process from all levels within ESB. The structure and strategy of this approach sets the scene for other high reliability industries to capture the hearts and minds for safety, to create employee buy in and to maximise the success factors critical to the implementation of a BBS approach.
Lessons Learned

There are lessons to be learned in terms of this approach. It is important from the outset to be explicit in managing expectations of both employees and management. BBS is a culture change approach, and culture change for safety takes time. With this approach there could often be expectations formed that behaviours and attitudes for safety would be changed “overnight.” Expectations for what can be achieved and in what timeframe should be stated at the outset. It is also critical to ensure transparent and frequent communication with different stakeholders and to have time dedicated to communication within your plan for BBS. BBS can often be perceived as an approach designed to “change people” and when the term “behaviour” is used, it can cause people to be suspicious about its objectives. A big challenge with this approach was in pitching the message for BBS at the right level and in a way that would secure employee buy in, trust and leadership commitment.

While the leadership alignment workshops and other communication forums used within our approach have been effective, there are still challenges within our approach in fully ensuring that the right people involved in the process have a clear and transparent message for BBS and are confident in communicating the message. If employees know the rationale behind a BBS approach, if the message communicated for BBS evokes trust and is a message that leaders feel confident in expressing and demonstrating and if employees are involved in the process - then all of this helps to lay the foundation in preparing an organisation for implementing a BBS approach which will result in an improvement in safe behaviour in the workplace.

References


Fleming, M. 2000, Investigating behaviour modification programmes in the offshore oil and gas industry, OTO 2000-048, HSE Strategy Unit, Sheffield.


