

Moving the needle on Safety Culture: Facilitating transformation

Dr. Ann Bicknell, C.Psychol.¹ & Dr. Mandana Kazem, IET²

¹Arup Operations Consulting - People and Change, ²Arup Operations Consulting – Human Factors

ABSTRACT

Safety culture remains one of the most challenging and complex areas of culture change practice which is the approach behind this session. Our argument is that organisational culture with respect to safety most obviously exemplifies tensions between Safety as the ‘first priority’ and the many tasks that organisations must complete to achieve continuity and reasonable prosperity. Arup have learned that not only does working on Safety Culture require an appreciation of the butterfly effect in working with complexity, it requires genuine stamina on the part of change agents and programmes, most likely because our experience is that it exposes so many organisational challenges and reluctant stones that need turning over - for this reason we position Safety Culture as a ‘litmus test’ of organisational agility and integrity. But which stones and where? This case study shares some observations and provocative opinions illustrated by examples of client data from our global client base together with our responses: including the launch of a Dynamic Systems Model and a set of Five Transformation Levers borne out of extensive and detailed client data and from projects with large infrastructure, construction, healthcare and aviation contexts. We also share our experiences of undertaking this journey in-house: some rather humility promoting moments, as well as intra-organisational reflections and our experiences of involvement in ‘best practice’ research seeking to move the needle on safety culture. Whilst the ISO, HSE, IOSH etc principles are reflected in our People and Change approach, the model involves discrete levers and an approach that can be shared to promote transformation. In a universe of potential safety foci, we propose a Dynamic Safety Systems Model to de-construct challenges and to create a defensible programme of work. We would like to use this session for peer review and developing our practice.

KEYWORDS

Safety Culture, Safety Climate, Complex System

Introduction

Improving Safety Culture is more than a gap analysis and progress against a set of KPIs. It is indeed a moral, legal and financial imperative (IOSH, 2018). Safety does not behave as just another KPI – it is both a moderator and mediating influence (Baron & Kenny, 1986). That is: context is everything. Both the conditions under which an effect will or will not occur (moderator) and the mechanism by which an effect is produced (mediator) conspire in ways that may not be predictable.

For example, improving network incident responses are important for customer service performance and yet performance complexities for balancing speed and safety have been acknowledged across industry, (Hollnagel, 2007).

None of this is ‘new’ territory but despite best efforts, where is the learning? (HSE, 2014). This does not promote ‘adaptive safety’ where the organisation is recognised as a living, adaptive system, evolving as an organism and so the system learns with and from the humans inside it as part of an open process dialogue and towards resilience by design (Hollnagel, 2007; 2012).

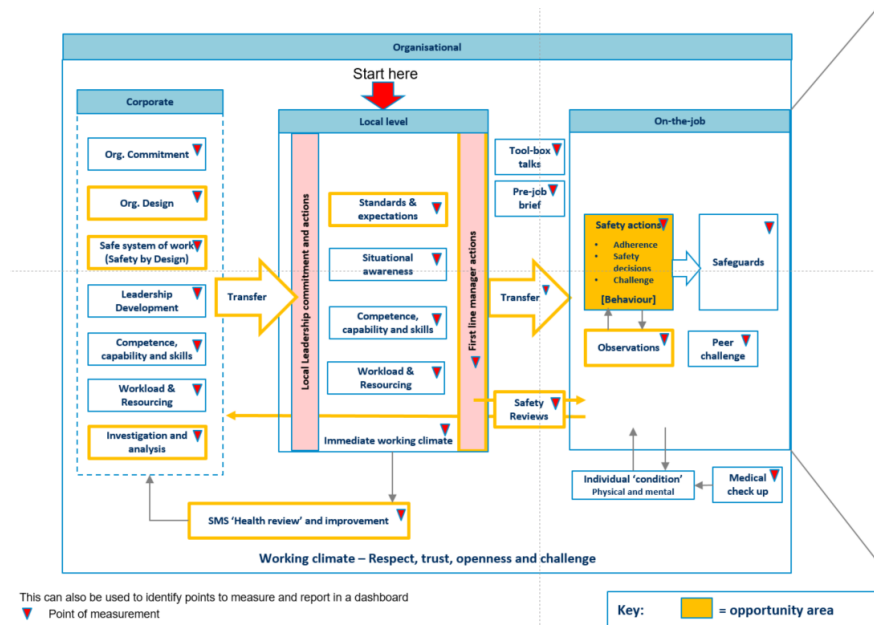


Figure 1: Arup Operations Consulting Safety System Model

Arup have tried to articulate this in their *Dynamic Systems Model* (Fig 1) to promote clearer understanding of the multiple and iterative processes involved in organisational learning e.g. from merely recording near misses to processing analysis and closing-out learning with both development and new practices to turn measures which are monitored into measures which provide intelligence. Arup have supported this model with a ‘wrap around’ and human approach to leading people and change. By this we mean that which recognises how individual agency and decision making ultimately enable or constrain the risk mitigation behaviours which can result from simply ‘knowing’ what to do (Figure 2).

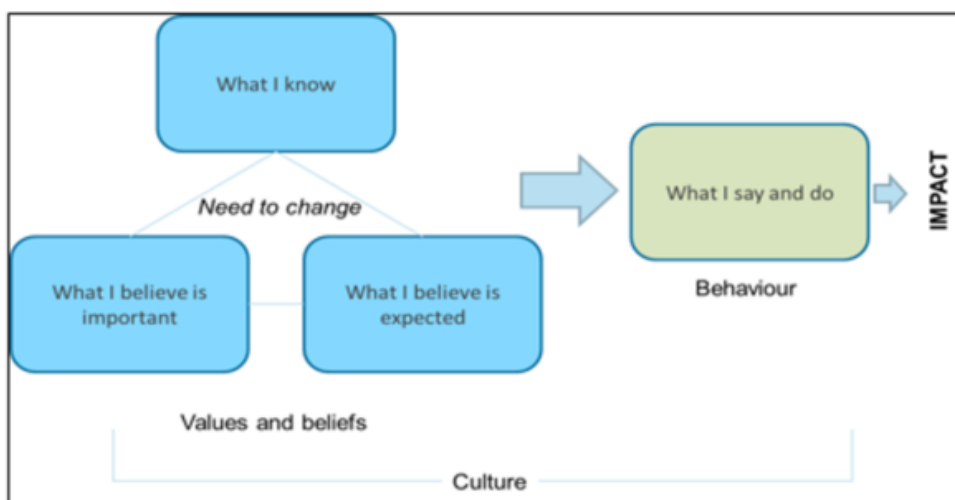


Figure 2 Arup People and Change – Human Judgment and Decision-Making at Work

The Challenges

Our own observations from working with clients and working on ourselves are as follows:

Assertion 1: The notion that Safety Culture can be scoped and managed as just another programme of work is under-estimating the appraisal of dynamic system complexity. This fails to reflect emergent characteristics of the system-in-context, which then risk being addressed with a ‘straightjacket rather than scaffold’ project management approach e.g. in focusing on ‘a’ safety culture or a single numerical indicator of safety maturity for an organisation. *How can we create more intelligent dashboards?*

Assertion 2: Change agents make unfair assumptions about how up to date the Key Sponsors tasked with improving Safety Culture can be in their grasp of the evidence-base or current thinking and it is up to change agents to facilitate how to learn this inside dynamic live environments (Barends & Rousseau, 2018) and to ask Key Sponsors to provide the influential ‘weight’ to open pathways for change agents and subject matter experts to act. *How can we better prepare Key Sponsors?*

Assertion 3: Both Safety Leaders and Consultants conflate Safety Climate and Safety Culture – unhelpfully in terms of knowing what to do with their results (Heese, 2012). *How can this conflation of culture and climate be de-mystified or reconciled in a pragmatic way?*

Assertion 4: The complexity of Safety Culture-in-context is not matched by sufficient ‘requisite variety’ (Ashby, 1956) in the *quality* of intervention planning (as distinct from the amount) for transformation to occur. *How can we match our Client’s responses to invest resource robustly?*

Assertion 5: Those who take on a role for Safety Culture Leadership should go out of their way to a) engage in active development of current thinking b) visibly demonstrate this learning in a compelling way and c) insist that those they lead present candid and complex feedback upwards, being alert for those with a tendency to ‘perfume the pig’ to prevent organisational un-learning (Gino & Staats, 2015). *Could we do more to prepare Safety Leaders?*

Investigation & analysis

This session will feature results and questions arising from large infrastructure clients including over 1600 climate survey responses, over 150 supply chain ‘safety card’ feedback and in addition to examples of accident and incident data analysis and findings. We will share this *anonymously* in the session and in the spirit of promoting professional peer review and collective reflection to develop our practice.

More broadly the session will also draw from:

1. *Client work*: We have worked with large clients to generate robust and valid ‘where we are now’ start points in terms of safety culture. This has been through a combination of established methods alongside bespoke quantitative and qualitative surveys, high level due diligence reviews, focus groups and interviews with clients in addition to large scale survey data – some of which will be presented in this session, along with our observations of the limitations of these approaches in developing maturity cultures. We will discuss some next steps towards ‘maturity in measurement’.
2. *In-house learning*: Arup have undertaken to improve our own safety maturity. Observations of organisational ‘appetite’ and the role of ‘the burning platform’ will be shared with a view to understanding what else can be done to engage with more than a ‘compliance mind set’ when approaching cultural transformation. Representations of cultural maturity imply a linearity in

progress or that the journey evolves one-way when in fact it is cyclical and never loses the need for a ‘observational policing function’. The journey more closely approximates the diffusion of innovations rather than linear change.

Fundamentally our contention is that many Safety Culture programmes rest on the *Unhelpful Triad*:

1. Multiple and disparate ‘initiative overload’ without a clear idea as to which intervention delivers what level of impact.
2. A *plateauing* of safety perception at an approximate mid-point of maturity models caused by a pareto-effect in having focused on lagging indicators e.g. Accident Frequency Rates (AFR).
3. The assumption that doing ‘more of the same but louder’ will move the organisation above a mid-point in maturity and in a linear fashion, rather than collective effort towards a positive and substantive culture change approach – from compliance to culture.

Arup’s approach to safety culture change is driven by a request to step back from ‘macro-indicators’ e.g. a single maturity ‘score’ to more discrete and incremental contributors which collectively indicate the ‘overall health’ of their Safety System as part of a pro-active Health, Safety and Well-Being dashboard. This is focused on Safety II – where people are part of creating adaptive solutions and so are focused more towards leading indicators such as near miss reporting, incident close-outs and leadership visibility e.g. Leader walking tours. Arup propose that how people ‘feel’ is a valid indicator of climate (Safety perceptions) but not a measure of culture (the actual value attributed to safety, health and/or well-being through the structures in the organisation). In this way, Safety Culture is a product of more identifiable organisational elements including power structures, symbols and artefacts, control processes and management routines and these should be the focus of attention and measurement efforts over lagging indicators such as AFR.

We have captured these elements inside a comprehensive system model (Figure 2) which documents and directs attention not only to the elements themselves, but to the dialogical flow between them and therefore to shine a light on determining what ‘quality’ looks like at each point. It is not surprising that when Health and Safety is owned and managed by a discrete part of a business (e.g. a central function) rather than by everyone as the-way-we-do-things, that we see an ‘administration mindset’ of box ticking with regards to audits and compliance instead of a ‘performance mind-set’ related to commercial or business outcomes. Employees understanding of Fair and Just Culture is often limited to a focus on blame rather than clarity interpreting the tests around ‘guilty knowledge’ in the organisation or ‘substitution’ both of which reveal system vulnerability and in our view, pave the way for developing an adaptive level of ‘chronic unease’ (Edmonson, 2014), from which organisational learning can happen.

Resolution of the problem

The session will revolve around sharing how we have begun to address each of the contentions above through implementing: *The 5 Change Levers* inside our complex *Safety System Model*. We will share how this concept of operation has added value by demonstrating the capability to both encompass and respond to every identified ‘need’ in a detailed organisational analysis phase and with multiple stakeholders.

We will show where this schematic organisational representation of the safety system has received positive engagement across operational elements of a current transformation programme that is underway and for which we will present data; we will share feedback on how it has enabled

participants to prioritise what to focus on and how? And how it has called into question whether measuring perceptions of safety climate are always appropriate?

The indications that threshold learning moments are taking place, through changes in the kinds of conversations we are having now as compared to six months ago – from purely compliance driven – to quality driven. In terms of shifting mind-sets, which Shell acknowledged as the only way to move beyond the mid-point (Shell, 2006), this presents an innovative and pragmatic approach to dealing with complexity.

Impact & implications

An ironic alternative title for this paper could have been: Safety Maturity – when will it grow up? It is still the case that we see ‘muscular slide decks and benefits maps’ (ahead of robust needs analysis) demonstrating how engaging in a set of planned activities will result in specified outcomes on Health & Safety KPI’s. Often these change agents are not around long enough to see whether the unrealistic KPIs they advanced (Briner, 2018) rather than challenged, have demonstrated any significant movement and in what direction? This expends effort and budget without seeing any visible impact in terms of perceptions or ownership. Transparency is needed to facilitate transformation. The implications are that ‘experts’ need to support authentic expectations management through educating the client to be able to collect and use objective evidence for themselves to ensure changes are a) coherent and b) sustainable and without creating dependency on consultants. We will also share examples of where this concept of operations has halted proposed streams of work that were either ill-thought out or overly-simplistic.

Our Safety, Health & Well-being are too important for all of this ‘smoke and mirrors’ activity. We would like to hear suggestions from the floor as to how we can make this complexity pill easier to swallow? Further implications from our lessons learned are around how we will change our ‘offer’ in light of the moral, legal and financial challenges we have observed on different projects and we expect to show how efforts against a Complex Safety System has returned operational impact.

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