Sharing knowledge will sharpen risk management

THE HEARTS & MINDS OF SAFETY LEADERSHIP



BRIEFING

In complex safety-critical environments like airports, good data needs to be used well to drive safety performance. The skill of turning data into actionable information allows organisations to go beyond reactive safety measures and adopt a proactive approach to risk management.

Succeeding at this involves more than just collecting data—it requires a systematic collection and analysis of good quality data in order to generate genuine insights that inform decision-making.

Lead indicator data are like gold. They do exist but sometimes take some creativity and lateral thinking to find and capture. The obvious ones are things like hazards, near-misses, behavioural safety observations, and proactive risk assessments. But the more creative ones can be things like worker turnover rates, events by organisation at other locations, manpower levels assigned for key tasks (eg aircraft loading). Even the grooming and presentation of workgroups and their GSE can be a lead indicator to the level of care and responsibility being exercised. By capturing and analysing good sample sizes of lead indicator data, airports can anticipate risks and take preventive measures at a root cause level to mitigate them.

Lead indicators can also be vital in managing psychosocial safety. This can be a combination of hard data or even personal observation where we asses stress levels through absenteeism, working after hours or non-involvement in work-related social activities. By monitoring these factors, leaders can proactively reach out to people and provide support and care. They can also address the root causes of poor mental health at a strategic level such as high workloads, lack of support, or poor work-life balance, thereby improving both psychosocial safety and overall workforce health.

Shared knowledge is also a critical aspect of risk management. Effective safety management relies on the active participation of every stakeholder, including employees, contractors, and third-party service providers. A collaborative approach by all organisations ensures that information flows freely, enabling swift identification of risks and implementation of safety controls.

TURNING YOUR DATA INTO INFORMATION & INFORMATION INTO ACTION

Find your lead indicators

These are like gold nuggets. Be determined and creative to find them and tap into them to help identify safety issues early and have them addressed before they become and issue.

Integrating data into ecosystems

Safety data should not be isolated. By using shared platforms, insightful dashboards, and ensuring your SMS software is not just a place for safety reports but includes other input such as Risk and Change Management.

Safety as a team sport

Everyone in the airport community has a role in maintaining safety. Shared knowledge, open communication, and wilfully coaching new players are critical for building a safety culture.

Psychosocial Safety

Mental and emotional well-being are crucial for safe operations. Leaders must monitor for signs of stress, fatigue, and other psychosocial risks, ensuring employees are supported and causes are dealt with. A focus on psychosocial safety also builds a Just Culture, where employees feel empowered to speak up about risks.

STORYTELLING GLOBAL EXAMPLES OF MENTAL HEALTH PERFORMANCE

Toyota's use of data to drive safety and mental health performance



Toyota has long been a leader in both safety and operational efficiency, primarily due to its innovative use of data through the Toyota Production System (TPS). By embedding data analytics into its production processes, Toyota ensures that safety remains a top priority while maintaining operational excellence. Their approach goes beyond monitoring equipment or physical risks to encompass a broader range of safety factors, including mental health and employee well-being.

At the heart of Toyota's safety initiatives is the Kaizen philosophy, which promotes continuous improvement. Data from across the manufacturing floor—such as near-misses, ergonomic assessments, and worker fatigue—are collected and analysed in real time. This lead indicator data allows Toyota to anticipate potential risks before they escalate into accidents. For example, the company tracks the wear and tear of equipment and the fatigue levels of employees to prevent errors caused by exhaustion or mechanical failures. This early intervention approach has resulted in a significant reduction in both workplace injuries and production line incidents.

In addition to physical safety, Toyota has increasingly focused on psychosocial risks such as mental health and stress. Recognising that worker mental health directly impacts safety and performance, Toyota has implemented several data-driven initiatives to monitor and support employees' mental well-being. For instance, the company uses surveys and real-time feedback mechanisms to assess employee stress levels, workplace satisfaction, and overall mental health. Based on these insights, Toyota adjusts work schedules, provides stress management training, and offers support resources for mental health, aiming to ensure that employees are mentally fit to perform their roles safely.

Toyota's data-driven safety culture has not only improved physical safety outcomes but also contributed to a healthier, more engaged workforce. This proactive approach ensures that both operational risks and mental health concerns are addressed in tandem, leading to sustained improvements in safety performance.

You can read more about Toyota's safety approach here: https://www.toyota-global.com/sustainability/social contribution/safety and health/

CALL TO ACTION

Talk about lead indicators

In your team meetings, just talk about lead indicators and challenge the team to find them and develop mitigation strategies. It won't happen overnight, but it will happen.

Integrate safety data across departments

Ensure that safety information is not disproportionally held or used within one team but is freely shared across teams. Use dashboards or software to share critical safety data across airport departments and generously with other stakeholders.

Foster teamwork in safety

Reinforce that safety is a collective responsibility and we look after our mates. Using sporting metaphors to help people think about safety brings energy and purpose. For example, the opposition is never another team but it is unsafe outcomes.

Consider psychosocial safety

Train managers to be aware of the mental and emotional well-being of their teams. Address psychosocial risks early to ensure that employees are operating safely, both mentally and physically.

https://bloomfire.com/blog/knowledge-management-safety-culture/ https://fastercapital.com/content/Lessons-from-the-Past-Knowledge-Management-in-Risk-Mitigation.html https://cpdonline.co.uk/knowledge-base/health-and-safety/training-employees-risk-awareness-mitigation/



Questions for Team Discussion

- 1. How can we better track and utilise lead indicators to improve safety in our airport operations?
- 2. What steps can we take to integrate safety data across all airport departments and contractors?
- 3. How do we ensure that psychosocial safety is deeply embedded in our safety strategy and in our actions as leaders?