

RISK CULTURE – A NEW DIMENSION OF SAFETY CULTURE?

How do you know that the risks tolerated by your frontline operators and line managers are also acceptable to senior management in your organisation? How confident are you that your organisation is risk sensible but not risk ignorant, risk averse or risk cavalier?

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TYOLOGY OF ORGANISATIONAL RISK BEHAVIOUR

Based on the concept of “Four States of Man” coined by Sir Charles Haddon-Cave

HIGH RISK PROTECTION

Effective Risk Controls Leading to Low Risk Exposure

RISK
AVERSE

RISK
SENSIBLE

POOR
UNDERSTANDING
OF RISK

GOOD
UNDERSTANDING
OF RISK

RISK
IGNORANT

RISK
CAVALIER

LOW RISK PROTECTION

Ineffective Risk Controls Leading to High Risk Exposure

Proposed Risk Culture Framework for Commercial Air Transport Organisations

Sir Charles Haddon-Cave's 'Four State of Man' →		Risk Ignorant	Risk Cavalier	Risk Averse	Risk Sensible	
Understanding Risk vs Risk Exposure →→		Understanding of risk is LOW Risk Exposure is also HIGH	Understanding of risk is HIGH Risk Exposure is HIGH	Understanding of risk is LOW Risk Exposure is LOW but Excessive which is costly	Understanding of risk is HIGH Risk Exposure is LOW and ALARP	
RISK MANAGEMENT PROCESSES (Based on ICAO SMM & ISO 31000)	Risk Identification (ISO 31000 - Recording & Reporting and Risk Communication bottom up)	Identification of Risk is based on reactive processes such as accidents / serious incident investigations.	Identification of Risk is based on reactive processes such as accident/occurrence investigation and there may be some other means of reporting hazards and risks	Risk/Hazard Identification is based on both reactive (accident/incident investigations) and proactive methods (voluntary hazard/risk reporting)	Risk/Hazard Identification is based on both reactive (accident/incident investigations) and proactive methods (voluntary hazard/risk reporting) The organisation also continually uses external data sources to identify risks and takes part in collaborative efforts in the industry.	
	Risk Analysis (ISO 31000 - Scope, Context, Criteria)	There is no risk analysis process to consider the context, worst credible scenario etc.	Superficial level of risk analysis is carried out without fully understanding the context and taking that into account.	Very limited analysis of risks take place and results in poor understanding of risks the organisation faces.	Risks are analysed in depth and articulated based on contextual information. The analysis enables the organisation to understand all the credible outcomes and their probability for occurrence.	
	Risk Assessment (ISO 31000 - Consultation)	Risks are assessed based on a risk matrix adopted from a source without any consultation with all stakeholders including front line operators. Risk assessment activity is seen as a 'tick in the box' exercise rather than key decision making process to allocate resources efficiently and effectively.	Risks are assessed based on a risk matrix adopted from a source without any consultation with all stakeholders including front line operators.	Risk assessments consider worst case scenarios that are not credible and the probabilities are overestimated due to lack of consultation with all stakeholders including frontline operators.	Risk are assessed based on the analysis carried out with the involvement of all stakeholders including frontline operators.	
	Risk Control (Elimination or Mitigation) (ISO 31000 - Treatment & Communication)	Risk controls are only put in place to react to accidents and serious incidents. They are not well thought mitigation actions and they do not reduce the exposure to risks. The decisions to stop / not conduct operations are never considered.	Risk controls are not well thought mitigation actions and reduce safety margins. The decisions to stop / not conduct operations are very rarely considered.	Risk Controls are developed to cover extremely improbable scenarios or the worst case scenarios are not credible. Risk mitigation measures cost the organisation unnecessary financial burden without reducing exposure to risk.	Risk Controls are well thought mitigation actions to achieve ALARP but risks are eliminated - when necessary - by stopping / not conducting operations.	
	Risk Monitoring & Review	Risk controls are not monitored during audits and inspections and not reviewed by the management on a regular basis.	Risk controls are monitored during audits and inspections but the effectiveness of mitigation actions are not carefully evaluated even though the regular reviews by the management take place.	The risk controls are monitored and regularly reviewed but the analysis and assessment decisions are not challenged to find a balanced approach. For example, cost benefit analysis is not considered as safety is seen as number one priority.	The risk controls are monitored and regularly reviewed to continually reanalyse and reassess risks based on the changing environments the organisation operates. When necessary, cost benefit analysis is carried out.	
IRM Risk Culture Aspects Model	Tone at the top	risk leadership - clarity of direction	There is no clarity from the top management about risk tolerability e.g. risk appetite, acceptable vs unacceptable risks	There is no clarity from the top management about risk tolerability e.g. risk appetite, acceptable vs unacceptable risks. Leadership communicates their position only when events happen	Top management's position on risk tolerability is very clear but also very cautious. There is no appetite for any risk taking regardless of the cost implications.	Top management's position on risk tolerability is very clear and enables the organisation to make balanced decisions based on . There is no appetite for any risk taking regardless of the cost implications.
		how the organisation responds to bad news	The organisation responds to bad news very poorly and starts blaming individuals for not managing risks effectively. There is no learning opportunity to improve risk management processes	The organisation accepts the bad outcomes as unpredictable events and does not seek to understand the context or causal factors in depth. As a result, there is no learning opportunity to improve processes impacting on risk decision making and/or changing behaviours.	The organisation responds to bad news immediately by taking extreme measures to react towards an even more risk averse position.	Bad outcomes are immediately evaluated and any reactive measures are carefully considered but not put in place unless they are absolutely necessary.
	Governance	the clarity of accountability for managing risk (Risk Ownership)	Risk ownership is not defined at all despite there are clear responsibilities defined in terms of safety etc.	There is some level of clarity in terms of risk ownership but in practice the accountabilities for managing risks are not well understood and agreed.	The accountabilities for managing risks are well defined including when risk decisions should be escalated to top management so that frontline operators and line managers cannot take any risks	The accountabilities for managing risks in various operational areas are well defined and understood by all frontline operators and managers. While certain operational risk decisions are made by frontline operators and their line managers, they also understand when certain risk decisions need to be escalated to top management level.
		the transparency and timeliness of risk information (Risk Communication - top down)	There may or may not be a risk register but it is only updated based on accidents and serious incidents. This is not always reviewed by the top management and it is not communicated to all stakeholders including the frontline operators.	There is a risk register and it updated based on bot reactive and proactive information sources however such risk information is not regularly reviewed by the top management as it is seen as the Safety Department's responsibility.	The risk register is kept up to date based on all the available information and any newly identified risks. The risk information is communicated across the whole organisation to prevent any individual making risk tolerant decisions.	Risk information (including risk register, risk analysis and assessment results and the key risk decisions) are completely available to all employees unless they are commercially sensitive or security restricted. Organisation uses all information sources to identify new risks and react to the assessment in a timely manner.
	Competency	the status, resources and empowerment of the risk function	Risk Management is not visible in organisation's daily activities. Sufficient resources are not provided for intolerable risk mitigations in a timely manner. Who makes key risk decisions in the organisation is not defined and frontline operators are not allowed to make any risk decisions.	Although risk management is visible in organisation's daily activities, it is not valued or seen as crucial for making key decisions. Sufficient resources are not provided for intolerable risk mitigations in a timely manner. Who makes key risk decisions in the organisation is not defined and frontline operators are not allowed to make any risk decisions.	Risk management is visible in organisation's daily activities, it is used for making key risk decisions but always over protecting the organisation and individuals. Sufficient resources are provided for intolerable risk mitigations immediately or the operations stop. Key risk decisions in the organisation are always made with top management's involvement and not involve frontline operators. Or sometimes the frontline operators make very risk averse decisions regardless of the flexibility they are given e.g.. to be able to use discretion.	Risk Management is seen as an integral part of the business decision making process. It is valued at all levels in the organisation. Resources are provided for risk mitigation measures on the basis of well thought risk analysis and assessment involving all stakeholders. Well trained and competent frontline operators and their line managers are empowered to make certain risk decisions collaboratively however when they believe it is necessary, certain key risk decisions are escalated in the management chain (up to the SRB / AM level)
		risk skills - the embedding of risk management skills across the organisation	SMS Training may or may not cover some elements of risk management and risk based decision making but that is usually limited to management staff.	Although frontline supervisors and their line managers are or may be trained about the basic concepts of risk management and risk based decision making, their attitude is always leaning towards a more risk tolerant position due to internal and sometimes external factors.	Although frontline supervisors and their line managers are trained about the basic concepts of risk management and risk based decision making, their attitude is always leaning towards a more risk averse position due to internal and sometimes external factors	All staff from Accountable Manager to frontline supervisors and their line managers are well trained based their accountabilities as well as their authorities. Each employee fully understands the basic concepts of risk management and risk based decision making and most importantly when to escalate certain key risk decisions.
	Decision making	well informed risk decisions	Risk decisions are made by either gut feelings or based on ill-informed processes	Risk decisions are not always based on sound risk analysis despite the fact that reasonably good risk information is available. As a result risk decisions are made and create unnecessary exposure.	Risk decisions are not based on sound risk analysis despite the fact that reasonably good risk information is available. As a result, very costly risk decisions are made due to lack of understanding the risk.	All risk decisions are made collaboratively involving all stakeholders and they are based on sound risk analysis and assessment.
		appropriate risk taking rewarded and performance management linked to risk taking.	The organisations has no clear policy, procedure and any training for employees and managers about risk taking behaviour.	Risk taking is seen as part of operational decision making and sometimes unnecessary risk taking is also tolerated by the management as long as the outcome is positive for the organisation	Risk taking is not tolerated at all. It is clearly communicated from the top management as a punishable behaviour.	Risk taking (Tolerating certain risks) based on well thought and sound risk analysis and assessment is tolerated even though it is not encouraged. This is seen as part of organisation's overall risk management strategy.

NOTE: Please note that various terms used above such as risk taking, risk tolerance etc. do not necessarily mean that the organisation or individuals choose to NOT COMPLY with the regulations or not. In operational environment, everyday, many frontline operators and their line managers have to make judgements based on the information available to them at the time. This also means they sometimes have to make operational decisions tolerating a certain level of risk without being non-compliant with the safety regulations or company procedures. Same also applies to senior and top management as well. So the risk culture terminology should not always be interpreted as risk taking means non-compliance.

PROPOSED RISK CULTURE ASSESSMENT FRAMEWORK

Ten questions a board should ask itself

(Source: "Risk Culture Under the Microscope - Guidance for Boards", Institute of Risk Management, 2012)

Proposed Risk Culture Assessment Framework for Commercial Air Transport Organisations

Ten questions a board should ask itself (Source: "Risk Culture Under the Microscope - Guidance for Boards", Institute of Risk Management, 2012)	Proposed Risk Culture Assessment Framework for Commercial Air Transport Organisations		Surveys /	Questionnaires	Observations (Ethnography)	Interviews (1:1 & Focus Group)	Documentation / Records Review
			X		X	X	
<p>1. What tone do we set from the top? Are we providing consistent, coherent, sustained and visible leadership in terms of how we expect our people to behave and respond when dealing with risk?</p> <p>2. How do we establish sufficiently clear accountabilities for those managing risks and hold them to their accountabilities?</p> <p>3. What risks does our current corporate culture create for the organisation, and what risk culture is needed to ensure achievement of our corporate goals? Can people talk openly without fear of consequences or being ignored?</p> <p>4. How do we acknowledge and live our stated corporate values when addressing and resolving risk dilemmas? Do we regularly discuss issues in these terms and has it influenced our decisions?</p> <p>5. How do the organisation's structure, processes and reward systems support or detract from the development of our desired risk culture?</p> <p>6. How do we actively seek out information on risk events and near misses – both ours and those of others - and ensure key lessons are learnt? Do we have sufficient organisational humility to look at ourselves from the perspective of stakeholders and not just assume we are getting it right?</p> <p>7. How do we respond to whistle-blowers and others raising genuine concerns? When was the last time this happened?</p> <p>8. How do we reward and encourage appropriate risk taking behaviours and challenge unbalanced risk behaviours (either overly risk averse or risk seeking)?</p> <p>9. How do we satisfy ourselves that new joiners will quickly absorb our desired cultural values and that established staff continue to demonstrate attitudes and behaviours consistent with our expectations?</p> <p>10. How do we support learning and development associated with raising awareness and competence in managing risk at all levels? What training have we as a board had in risk?</p>	IRM Risk Culture Aspects Model	Tone at the top	risk leadership - clarity of direction	X		X	X
		how the organisation responds to bad news	X		X	X	
		Governance	the clarity of accountability for managing risk (Risk Ownership)	X		X	X
			the transparency and timeliness of risk information (Risk Communication - top down)	X	X	X	X
		Competency	the status, resources and empowerment of the risk function	X	X	X	X
			risk skills - the embedding of risk management skills across the organisation	X	X	X	X
		Decision making	well informed risk decisions	X	X	X	X
			appropriate risk taking rewarded and performance management linked to risk taking.	X	X	X	X
		RISK MANAGEMENT PROCESSES (Based on ICAO SMM & ISO 31000)	Risk Identification (ISO 31000 - Recording & Reporting and Risk Communication bottom up)	X		X	X
			Risk Analysis (ISO 31000 - Scope, Context, Criteria)	X		X	X
Risk Assessment (ISO 31000 - Consultation)	X		X	X	X		
Risk Control (Elimination or Mitigation) (ISO 31000 - Treatment & Communication)	X		X	X	X		
Risk Monitoring & Review	X		X	X	X		

RISK CULTURE ASSESSMENT – PROPOSED PROJECT PLAN

	ACTIVITIES	Objectives	Duration	Required Commitment from the Partner Organisation (The figures are estimated & can be discussed further)
Pre-Assessment Activities	Initial Discussions (Presentation of the Risk Culture Concept and the aim of the study)	Achieving common understanding of the aim and gaining full commitment of the senior management (including Accountable Manager)	2 hours	1 hour - Safety Review Board Members
	Developing a Communication Plan	Agreeing on the type and format of comm requirements to raise awareness about the study in order to achieve buy-in from line managers and frontline operators	2 hours	0.5 day - Project Manager (PM could be Quality/Safety Director or potentially a nominated manager from an operational department)
	Questionnaire Design & Launch	Customise the 'Risk Culture Survey' and agree on the method (Consideration of previous culture surveys and organisation's other needs)	2 Days	0.5 day - Project Manager
	Document Reviews	The review of certain policies, manuals, meeting minutes, investigations, audit reports to identify high risk areas in the organisation. This will also enable the planning of the on-site activities.	2 Days	0.5 day - Project Manager
On-Site Activities	Observations	Observing frontline operators in their own environment to capture how risk decisions are made (The details of these observations will be agreed to focus on areas/processes/departments which are more likely for individuals to make risk decisions.)	2 days	0.5 day - Project Manager (to make the necessary arrangements) These observations will not be conducted like an audit; therefore they will not require any commitment from technicians/supervisors.
	Focus Group Interviews	These will also enable frontline operators to express their views and discuss how they are involved in various risk management processes.	0.5 - 1 day	0.5 day - Project Manager (to make the necessary arrangements) These interviews can potentially be conducted during the on-going continuation training. The sessions should be no longer than 60 minutes per group.
	1-2-1 Interviews	These interviews will aim to capture the views of line managers but potentially the frontline operators and supervisors (chosen by the organisation) can also be interviewed if the organisations agree.	2 days	0.5 day - Project Manager (to make the necessary arrangements) These interviews should be no longer than 60 minutes per individual.
Post Assessment Activities	Analysis of data and report writing	All the data from surveys, observations and interviews will be analysed and a report will be produced for the organisation to review.	2 days	NIL
	Presentation of the report and recommendations	The outcome of the study will be presented at the Safety Review Board for the organisation to review and potentially take any necessary actions.	2 hours	2 hours - Safety Review Board Members
	Potential Workshops	If the outcome of the study reveals certain findings that enable the organisation to identify areas for improvement, potentially workshops targeting risk decision makers in the organisation can be conducted. These will be a separate project, which will require further discussions.		

More information about the concept and the results of two industry-wide surveys are available @ www.riskculture.org If you wish to collaborate and/or provide feedback about the concept and the methodology, please send an email to email@riskculture.org