
Do you understand what factors influence risk in your organisation?

How to understand, assess and change the mindsets and behaviours that influence risk so that you can improve performance, reduce risk and gain from regulatory compliance

Summary

- Some organisations are failing to manage risk effectively, and this is leading to a wide range of undesirable incidents such as the patient deaths at the Mid-Staffordshire Foundation Trust hospital, the environmental disaster in the Gulf of Mexico, the banking collapse in 2008 and 40+ fatalities in the British construction industry each year
- Most organisations are complex, and while a range of systems and equipment may be in place, organisations' susceptibility to risk is largely determined by the mindsets and behaviours of their staff. Those mindsets and behaviours are difficult to identify and assess, leaving organisations susceptible to failures, spending money on the wrong issues or to missing out on opportunities
- This raises the question of: **How can we identify and assess the mindsets and behaviours that influence risk in our organisations?**
- This document provides an answer to that question and, in doing so, covers:
 - Why it is so important to manage risk
 - The complexities of assessing mindsets and behaviours and what we can do about it
 - Characteristics of organisations where things have gone wrong
 - Characteristics of best practice organisations
 - Five-step approach to assessing the factors influencing risk and prioritising improvement initiatives
 - Advice for implementing those initiatives
 - How we can help

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Document History

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Not only is risk management important, but good risk management will help your organisation to be more resilient and effective

Why is risk management so important?

- All organisations have a responsibility for managing risk
- This may stem, for example, from:
 - A company having direct control of an activity or operation that involves risk, or
 - A regulator's responsibility for setting and influencing industry standards
- In either case, the aim will be to establish systems that ensure that:
 - Appropriate equipment is provided, and that
 - People adopt patterns of behaviour that enable risks to be managed effectively
- It is a key component of effective governance
- Effective risk management therefore requires a clear understanding of the various **technical, human and organisational factors** that affect risk, and of the influence that each of these factors exerts

What you gain from a positive approach to risk management

- Good risk management does not slow the organisation down – it helps you make better decisions faster by:
 - Making it more likely to hit business objectives
 - Encouraging proactive management
 - Improving the identification of opportunities and threats
 - Improving operational effectiveness and efficiency
- By embedding risk in the culture, organisations can become more agile and anticipate potential events
 - They are able to respond quickly, and
 - Can minimise the impact of adverse events or seize opportunities for gain
- The organisation becomes more attractive, with:
 - Improved stakeholder confidence and trust
 - Compliance with relevant regulatory requirements
 - Improved loss prevention and incident management
 - Improved governance
 - Improved organisational resilience

Risk manifests itself in a wide range of scenarios and sectors ...

Typical categories of risk

- **Commercial** – market viability, customer base
- **Contractual** – delivering contract, non-performance
- **Customer relationships** – establishing, maintaining
- **Equipment** – use, maintenance, failure, safety
- **Financial** – cash flow, tax, debts
- **Health and safety** – employees, non-employees
- **Legal & regulatory compliance** – legislation, contractual
- **Operational** – daily activities, people
- **Organisational** – culture, human resources

Typical categories of risk

- **Patient safety** – clinical, non-clinical, H&S
- **Project** – internal, external
- **Reputation** – business, employees, partners
- **Security** – premises, information, people
- **Service delivery** – quality, timeliness, satisfaction
- **Stakeholder relationships** – establishing, maintaining
- **Strategic** – planning, growth, external
- **Structural** – defects, deterioration, collapse
- **Technology** – implementation, management

The common link between these risks is the people and their organisations

In most cases, incidents are caused by a complex combination of events, but are often blamed on human error ...

The causes of incidents are complex ...

- Most major incidents are caused by a **complex combination of events**
- They do not happen in isolation ...
- ... but are part of a **wider system of causal factors**

... But, it has been traditional to blame human error ...

- **Historically, human error** has been cited as the **primary cause of major incidents**
- However, to focus on the failures of individuals on the frontline within the organisation can provide a smokescreen for the latent* conditions that contribute towards incidents

... Instead, we need to change to organisational failure

- Latent* conditions can arise from:
 - Poor organisational practices
 - Regulatory policies
 - Societal influencing factors
- These occur throughout the organisation, and have a significant part to play in creating the corporate culture
- In this context, 'unsafe' acts within the workplace are seen as **consequences of organisational failures** rather than the causes of incidents

To understand what went wrong and what can go wrong, we need to focus attention on organisational failures rather than human errors – this will improve future risk management

* By latent, we mean present but not yet visible or apparent – they are, essentially, hidden.

... As such, we need techniques that allow us to identify and target the underlying causes if risk is to be managed successfully over time ...

The underlying causes of incidents are important ...

- Whilst the immediate causes of an incident are important in understanding the circumstances surrounding that incident, **it is the underlying causes that can be the most significant contributors** to those incidents
- Although they may not have a readily identifiable effect, underlying causes are present and can be significant when combined with other underlying causes
- Therefore, **it is the underlying causes that need to be targeted if risk is to be managed over time**

... But they are difficult to assess using traditional techniques ...

- The complexities of the human, organisational and environmental contributions to incidents are often **not amenable to analysis using traditional risk assessment techniques**
- This is because the critical factors that influence incidents may be:
 - Latent and remote from the operational situation
 - At the level of the organisation responsible for planning, controlling and monitoring operations
 - Or within the wider legal, social, economic or political environment

... So, we need a different approach

- A systems approach will help to understand the causes of incidents by accounting for the dynamic interactions between factors
- Whilst particular factors may be found to have a significant effect, **it is the combination of the factors that leads to incidents**
- The system is therefore more than the sum of the factors that are within it, and thus **change in one factor may have an impact on the others**

We need to consider organisations as a collection of factors that can all influence the risk of incidents happening, and those influences can be positive or negative

... Thinking of an organisation as a range of underlying influences that interact with one another is complex, but we can model it relatively simply

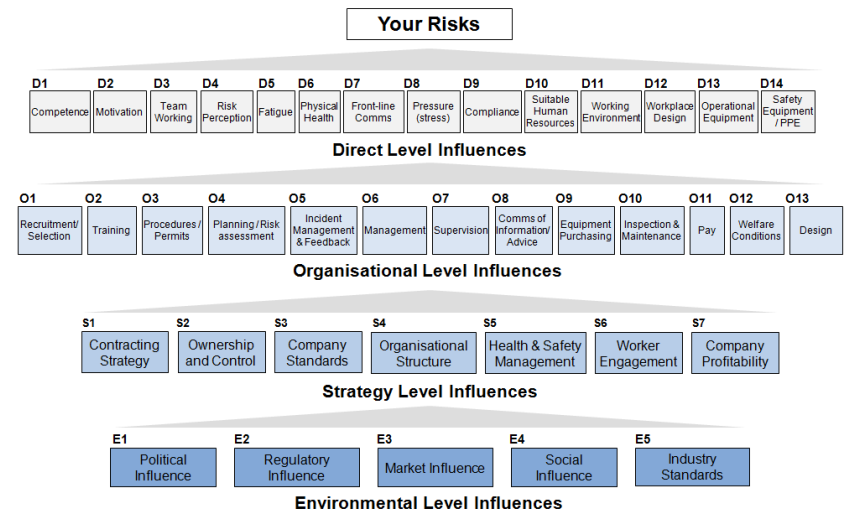
The complexity of organisational risk ...

- The basis of a systems approach to understanding and managing risk is that:
 - Most major incidents are caused by a complex combination of events
 - They do not happen in isolation, but are part of a wider system of causal factors / influence
 - No one event can be viewed in isolation from its surrounding context
- This is shown as a set of nested systems that influence the performance of organisations



... Can be addressed by the Influence Network

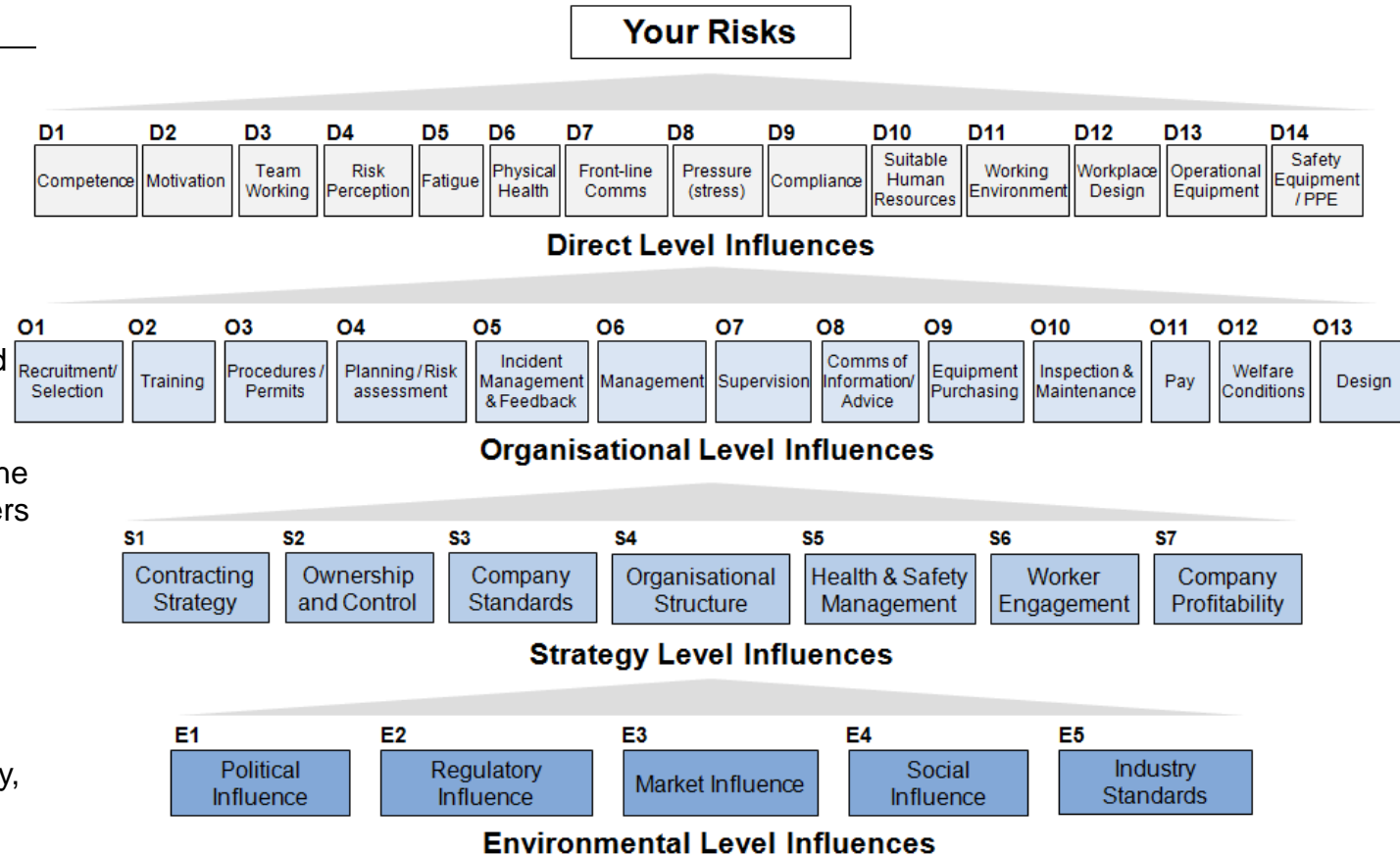
- The Influence Network recognises that a range of factors influence risk in an organisation
- It uses typical factors that influence risk based on research and industrial experience
- To model these influences, the technique contains these four levels of influencing factors:
 - Direct performance influences
 - Organisational influences
 - Strategy level influences
 - Environmental level influences



The Influence Network provides a means of modelling the complex ways that people and organisations work and how a range of factors influence risk

The Influence Network groups the factors in four levels ...

- **Direct performance factors** – these directly influence the likelihood of an incident being caused
- **Organisational factors** – these influence the direct factors and reflect the culture, procedures and behaviour within the organisation
- **Strategy factors** – these reflect the expectations of the decision makers in the organisation and the organisations they interface with (e.g. clients, suppliers, subcontractors)
- **Environmental factors** – these cover the wider political, regulatory, market, industry and social influences which impact the strategy factors

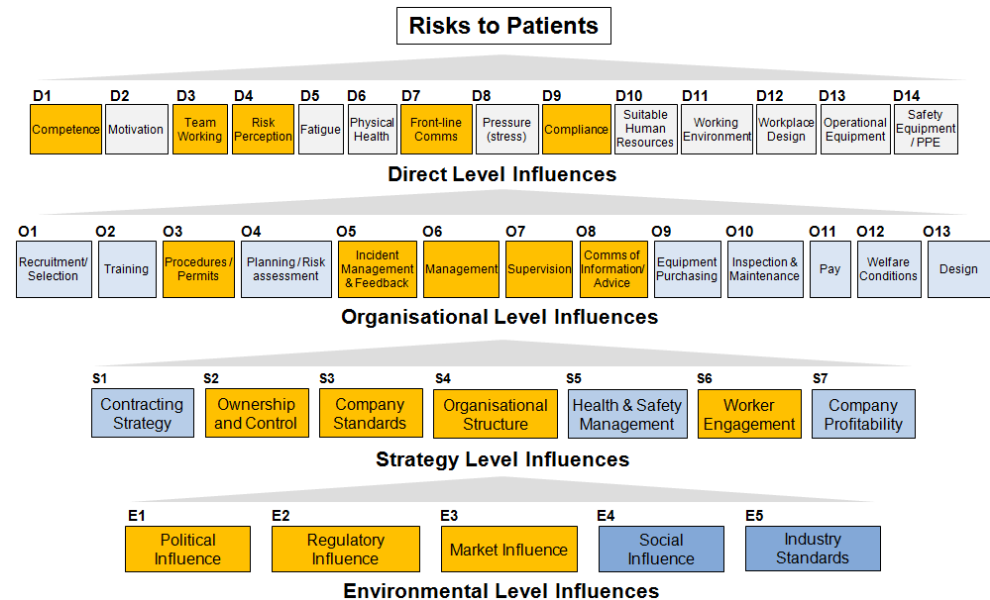


The characteristics of organisations where things have gone wrong – Mid-Staffordshire Hospital Foundation Trust

Causes of the problems in the Mid Staffordshire NHS Foundation Trust Hospital

- A **culture** focused on doing the organisation's business, not that of the patients
- An **institutional culture** which ascribed more weight to positive information about the service than to information capable of implying cause for concern
- **Standards and methods of measuring compliance** which did not focus on the effect of a service on patients
- Too great a degree of **tolerance of poor standards and of risk to patients**
- **A failure of communication** between the many agencies to share their knowledge of concerns
- Assumptions that monitoring, performance management or intervention **were the responsibility of someone else**
- **A failure to tackle challenges to the building up of a positive culture** in nursing in particular, but also within the medical profession
- **A failure to appreciate** until recently the **risk of disruptive loss of corporate memory and focus** resulting from **repeated, multi-level reorganisation**

These causes can be mapped onto an Influence Network (key factors shown in orange)

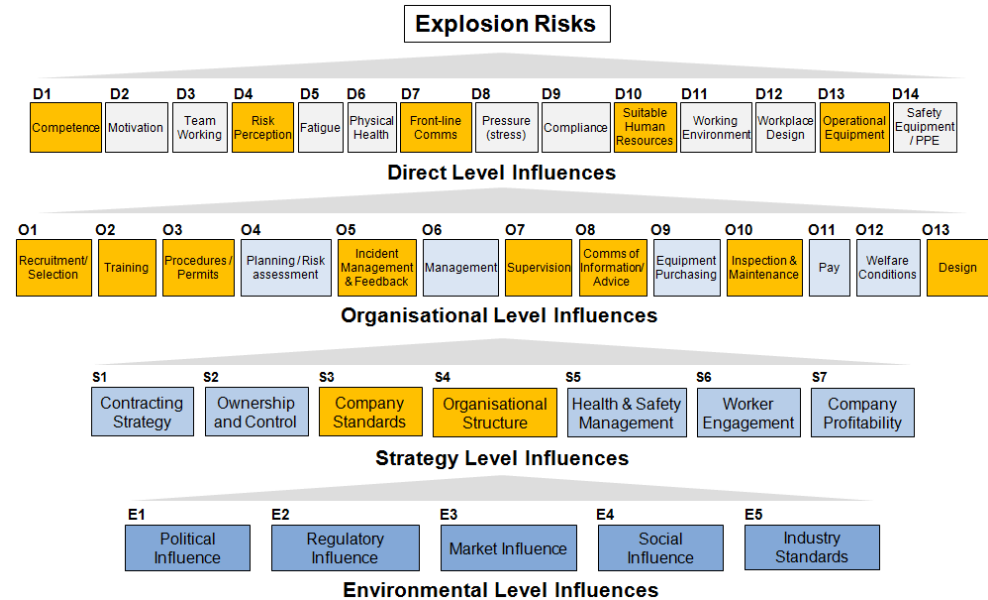


The characteristics of organisations where things have gone wrong – Explosion at a blast furnace

The explosion at a blast furnace in Port Talbot

- The failures of the pumping system on were part of a **continuing and deteriorating pattern of failures**
- The two pumps that failed on were set to **operate unduly close to their tripping criteria**
- The latent shortcomings of one pump were **not detected and remedied**
- The total **lack of written procedures** for reliability-sensitive maintenance work
- **Training and supervision** of key energy personnel were **inadequate**
- **Communication arrangements within** Energy Department, and **between** Energy Department and furnace staff were **not sufficiently robust**
- **Assessments of the durability** of the water cooling systems was **not carried out**
- The water cooling system was **not seen as safety critical** – a fundamental contributory factor
- **No** safety professional, reliability, or risk assessment **experts were involved**
- **No effective maintenance** of the column head/lintel bolts

These causes can be mapped onto an Influence Network (key factors shown in orange)



Five characteristics of organisations achieving best practice in risk management

1

Integrated risk management is the preferred approach

- Integrated risk management is the preferred way of working, as risks are interlinked and need to be balanced
- As such, risk management is seen as a part of 'business as usual' and avoids 'unforeseen' problems caused by risks being addressed in isolation (or not at all)

2

There is a culture of challenge to all significant decisions

- Organisations are constantly asking questions such as 'Is this the best way to do it?' and 'Can we do it a better way?'
- This was found to be an effective form of risk management

3

Planning starts early and is on-going

- Key team members are appointed early and significant planning is done before implementation
- This is followed by on-going planning and risk management throughout the implementation process

4

Ideas and lessons learned are shared internally and externally

- Senior management engage with the workforce – this helps to get the message across and demonstrates how seriously risk management is taken
- Organisations share ideas on how to solve key risks in their industry sectors via formal and informal routes

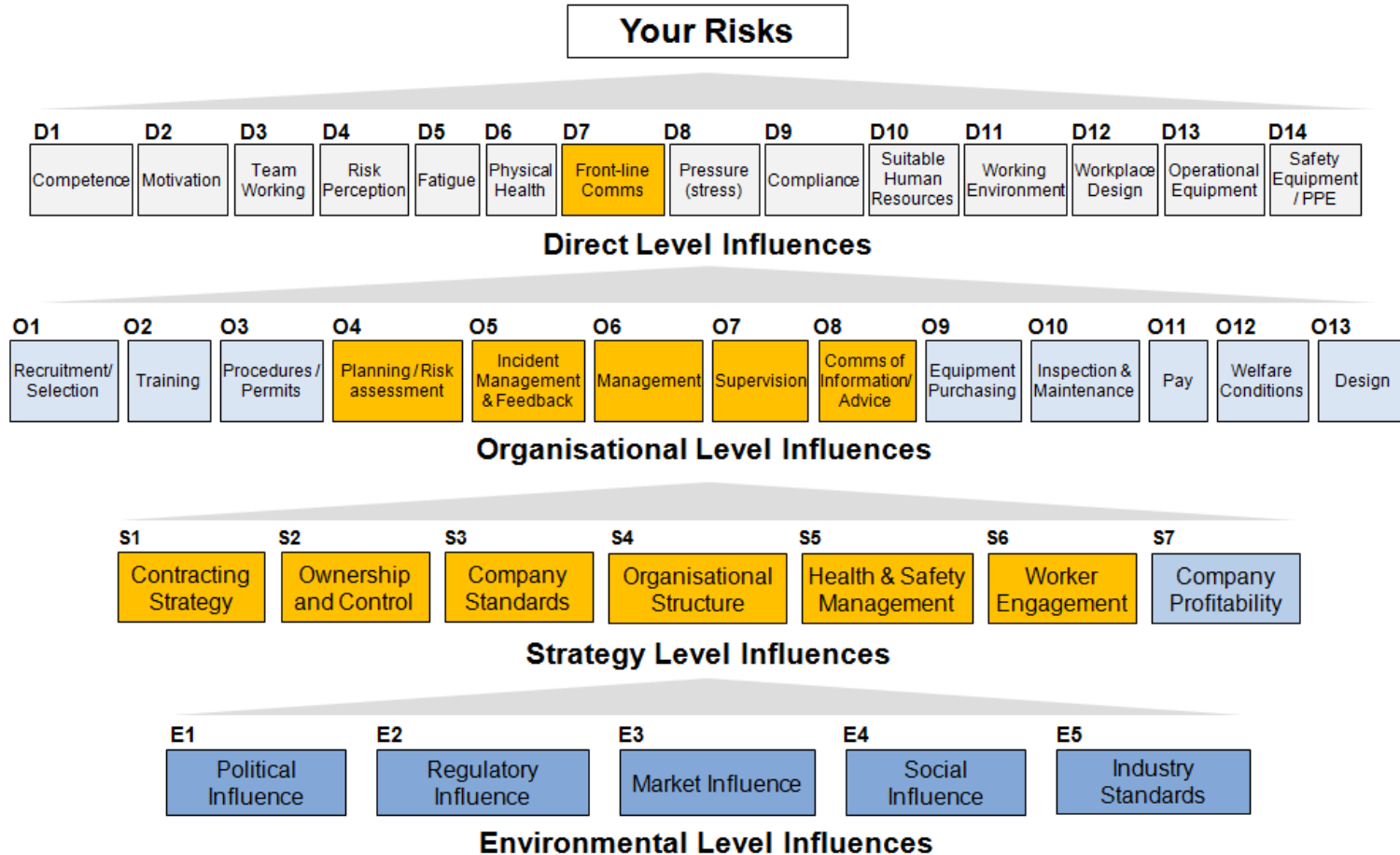
5

Leaders set the priorities and reinforce them regularly

- Leaders set the tone for risk management from the start, and then reinforce this on a daily basis
- When leaders' actions tie in with their words, it gives credibility to the risk management messages

A culture of open communication underpins these characteristics

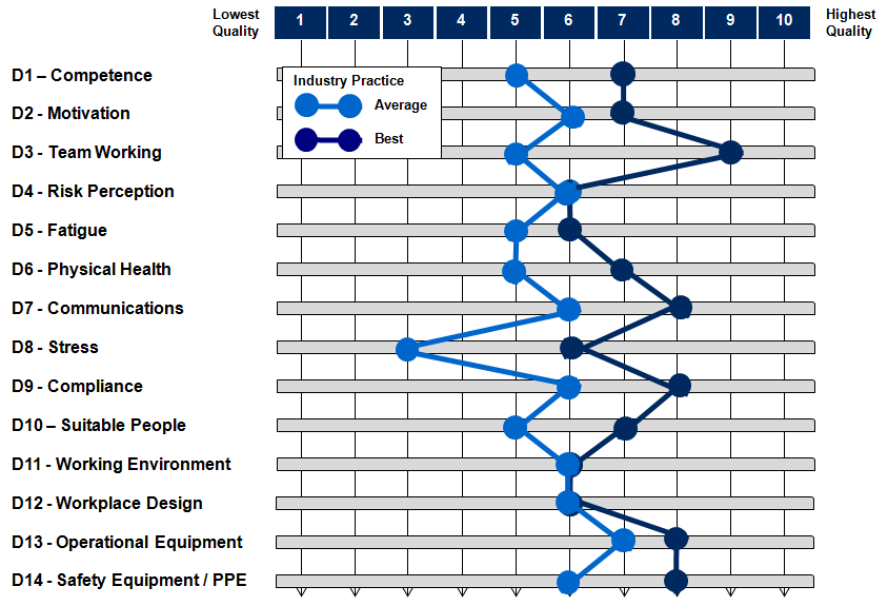
The characteristics of best practice organisations demonstrate the importance of the Strategy level influence factors in managing risk



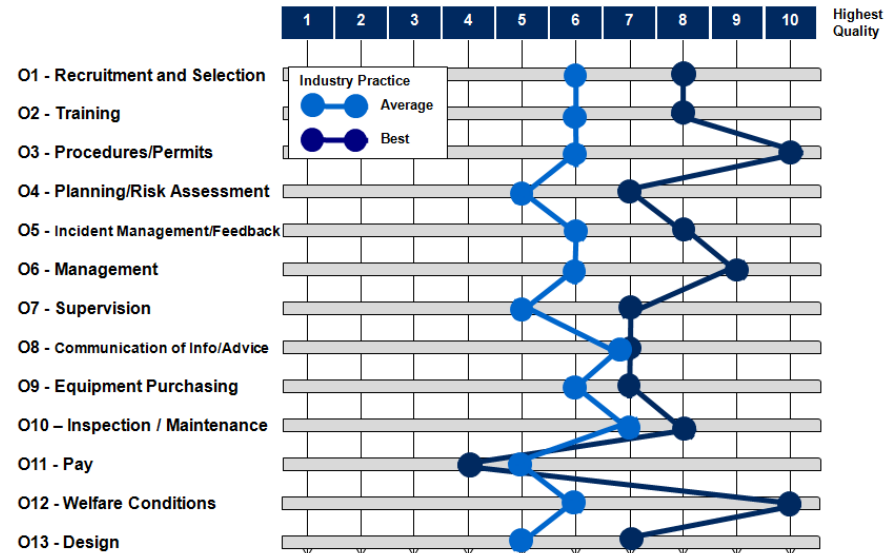
Best practice in risk management is heavily influenced by the standards that organisations set in the Strategy level factors and implement in the Organisational level factors

We can benchmark the differences in the quality of the factors influencing risk in best practice and industry-average organisations

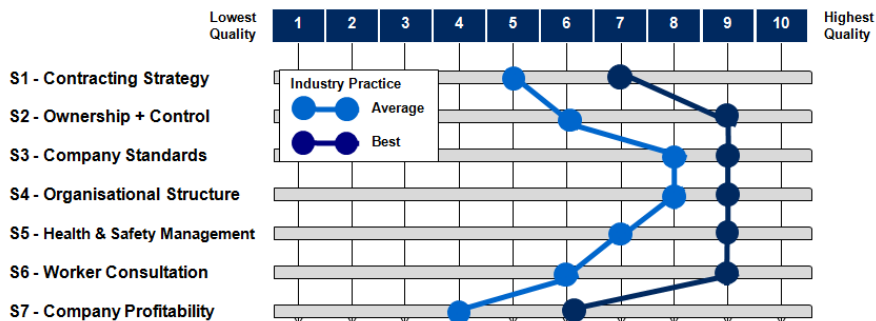
Direct level influencing factors



Organisational level influencing factors



Strategy level influencing factors



- The biggest differences between 'best practice' and 'average' organisations is in the Strategy level influence factors
 - These are the factors where the key decisions are taken
- 'Best practice' organisations also have higher quality management and supervision

Footnote: 'Best practice': organisations constructing London 2012, 'Average': overall GB construction industry

Source: HSE Research Reports 841 ('Best' practice) and 920 ('Average' practice)

Five key steps are required to assess what factors influence risk in your organisation and identify improvement initiatives

Steps

1

Agree the priorities in your organisation

- Engage your leadership team(s) in deciding together what the priority areas are where better risk management can drive improvements
- Decide what outcomes you want to change, by how much and by when so that you can focus changes and measure progress

2

Identify the risks that are most critical to your organisation

- Having identified what outcomes you want to change, identify the key risks associated with those outcomes
- This will enable you to focus the diagnostic and subsequent changes on the most critical areas

3

Run a risk diagnostic workshop

- Use an Influence Network workshop to assess the quality and importance of a range of factors in your organisation
- Discover the changes in mindsets required to achieve the desired changes in working practices and behaviours

4

Run the risk diagnostic analyses

- See the variation in the quality of each factor and benchmark your current 'state of play' against best practice
- Identify how important an influence on risk each factors is
- Identify those factors that offer the greatest potential for improvement

5

Identify and model potential changes

- Identify a set of initiatives (existing and new) that will deliver the required changes in mindsets and behaviours
- Group, prioritise and sequence those change initiatives

Step 1 – Agree the priorities in your organisation to decide what you want to improve and what success will look like

Why do this?

- You probably realise that in the current state things aren't working as well as they could be
- Signs that things aren't working well include:
 - More lost-time incidents
 - More accidents
 - More regulatory sanctions
 - Less positive risk-taking
 - Organisational inertia
- You need to know where you are and what you want to achieve
 - So that you can **identify the changes in working practices** needed to achieve the desired state, and
 - Discover the **changes in mindsets and behaviours required** to achieve sustainable changes in those working practices

Questions to ask

- In moving from the current state to the desired state, you need to decide:
 - What outcomes do you want to change?
 - What do you want to change those outcomes to?
 - When you want to change it by?
- Is risk really involved in decision-making today or just providing data for reports?
- Are each of your senior managers and staff clear about what the impact of their actions are on the organisational risk profile?

The key to success is to genuinely engage your leadership team(s) in deciding together what the priorities area are for improvements in risk management to drive improvements elsewhere

Step 2 – Identify and prioritise the key risks to your organisation so you can focus the risk diagnostic process on the key risks and identify the right people to attend the risk diagnostic workshop

1

Build a structured list of risks

How to do it

- A workshop with subject matter experts gives the best insight into what risks matter
- Use people with insight into what has happened elsewhere and what could happen in the future
- Record the findings in a spreadsheet template – this provides a useful baseline to monitor against
- Use a PESTLE analysis to identify external drivers of risk resulting from changes

What to avoid

- Don't spend too much time looking backwards
- Don't ignore what happened in 'related' organisations e.g. the adverse events in large complex chemical organisations have implications for large complex organisations in other industries such as oil refineries
- Don't ignore adverse events that could occur but haven't been detected yet – look at what future changes are coming and estimate their affects

2

Estimate severity and likelihood of these risks

- If data are available, they can be used
- If not, use the judgement of the workshop participants

- Avoid incompatible scales when rating the risks – e.g. make sure that a severe safety risk 'feels' similar to a severe financial risk

3

Prioritise those risks

- Use the severity and likelihood to categorise each risk in terms of 'expected loss'
- Plot on a matrix to identify key priorities

- Don't take this matrix as definitive – try some sensitivity analyses to see if some risks become critical with little change

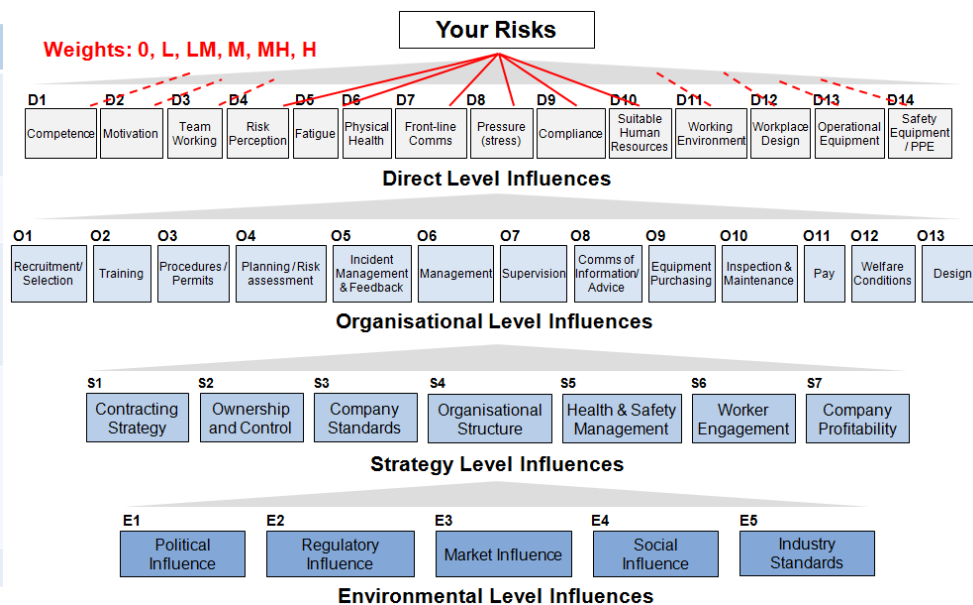
Step 3 – Run a risk diagnostic workshop to get the views of a range of people from across the organisation on the current ‘state of play’

The Influence Network **can be customised** to the particular organisation and risks under consideration. A workshop is held with 6 to 12 people with a range of roles to gain insight from their different perspectives. The workshop participants are provided with briefing notes that define all of the relevant factors, and contain quality scales. The workshop has two main components:

Assess the Quality of the Direct, Organisational, Strategy and Environmental level factors

D1 - Competence	
The skills, knowledge and abilities required to perform particular tasks/tasks with due attention to health and safety	
Poor (0)	<ul style="list-style-type: none"> Workers cannot perform tasks/tasks without direct instruction and supervision They have little or no knowledge of the health or safety aspects of their task, including hazards, safe practices, safe use of equipment etc. They have little or no knowledge of their roles and responsibilities in terms of contributing to the health and safety of a task
Moderate (5)	<ul style="list-style-type: none"> Workers have a reasonable understanding of how to perform routine tasks/tasks with due attention to health and safety, but may not be familiar with the health and safety implications of complicated or novel situations They have a basic understanding of their health and safety roles and responsibilities
Excellent (10)	<ul style="list-style-type: none"> Workers can perform complicated tasks/tasks with speed and efficiency whilst at the same time carrying out the task to a high standard of health and safety They are considered experts in their trade/profession and have good knowledge of the safe practices which go with a range of tasks They are completely familiar with their roles and responsibilities for health and safety as well as those of others
Workshop discussion	<ul style="list-style-type: none"> There are always differences – new people on site will have lower competence levels due to unfamiliarity Supervisors have to understand the levels of competence of all workers and manage it appropriately While workers may be competent in their everyday role, they may not be competent with situations that are outwith the norm The standard to get onto the Olympic site in the first place is high Induction makes workers more aware of the health and safety requirements Supervision has to ensure that workers do not adopt short-cuts When workers are asked to perform tasks that are outwith their competence levels, it becomes a management issue
Ratings	Lowest – Mean – Highest: 5 – 7 – 9

Assess the influence of the factors at each level on the factors in the level above

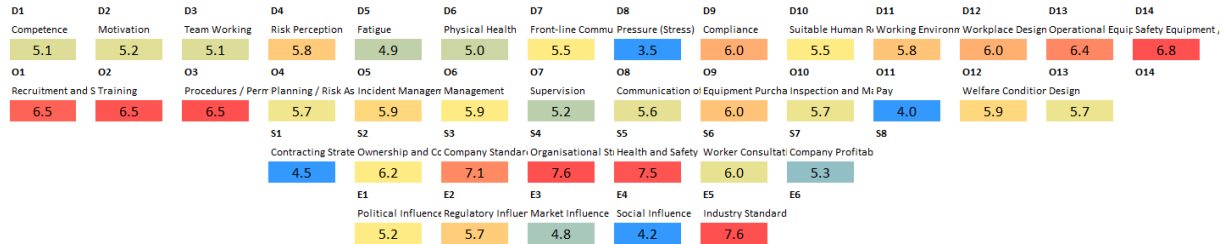


The workshop enables people to identify the relevant factors, assess their quality and the importance of their influence – this will give a good understanding of what is currently influencing risk

Step 4 – Run the risk management diagnostic analysis to identify the factors that have the greatest influence and those most in need of improvement

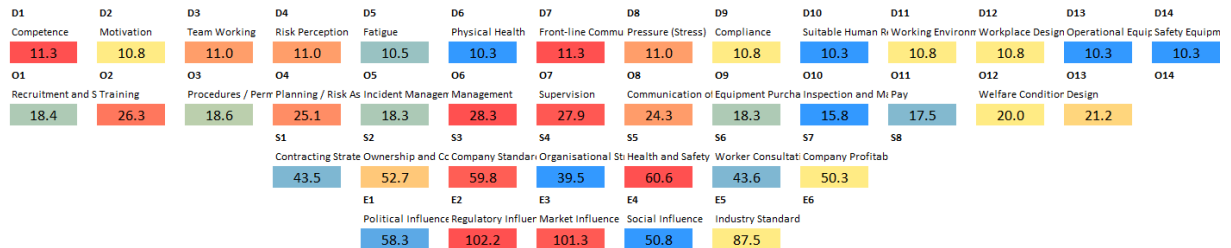
Quality

- The factors with the highest quality at each level are shown at the red end of the ‘thermometer’ scale



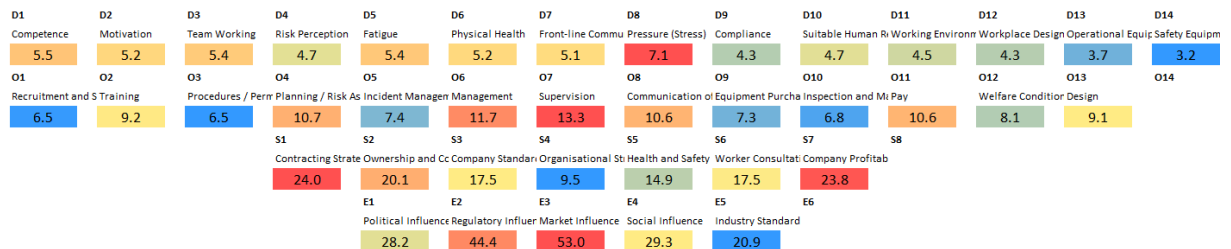
Importance of their influence

- The factors with the most influence at each level are shown at the red end of the ‘thermometer’ scale



Potential for improvement

- The factors with the most influence and the lowest quality at each level are shown at the red end of the ‘thermometer’ scale



The analyses will highlight those factors where improvement initiatives should be focussed – that is those factors that have the most influence on risk, but have relatively low or variable quality

Step 5 – Run a second workshop to identify and model potential change initiatives to prioritise those initiatives offering best value for money

1
Identify a range of initiatives

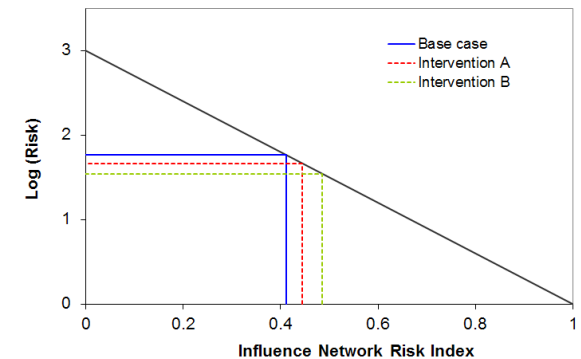
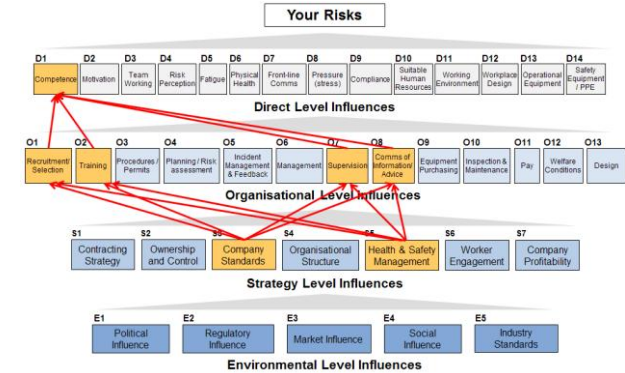
- Identify a range of initiatives to address the key factors and map them onto the Influence Network
- The initiatives may include training, leadership development, culture change, management systems, etc.

2
Estimate how much you could improve factor ratings

- For each factor in an initiative, use your experience to estimate what the rating might be if you could improve the quality of the factor
- Re-run the analysis to see how the overall risk index changes to get a feel for potential reductions in risk

3
Appraise the initiatives to identify the most cost-effective

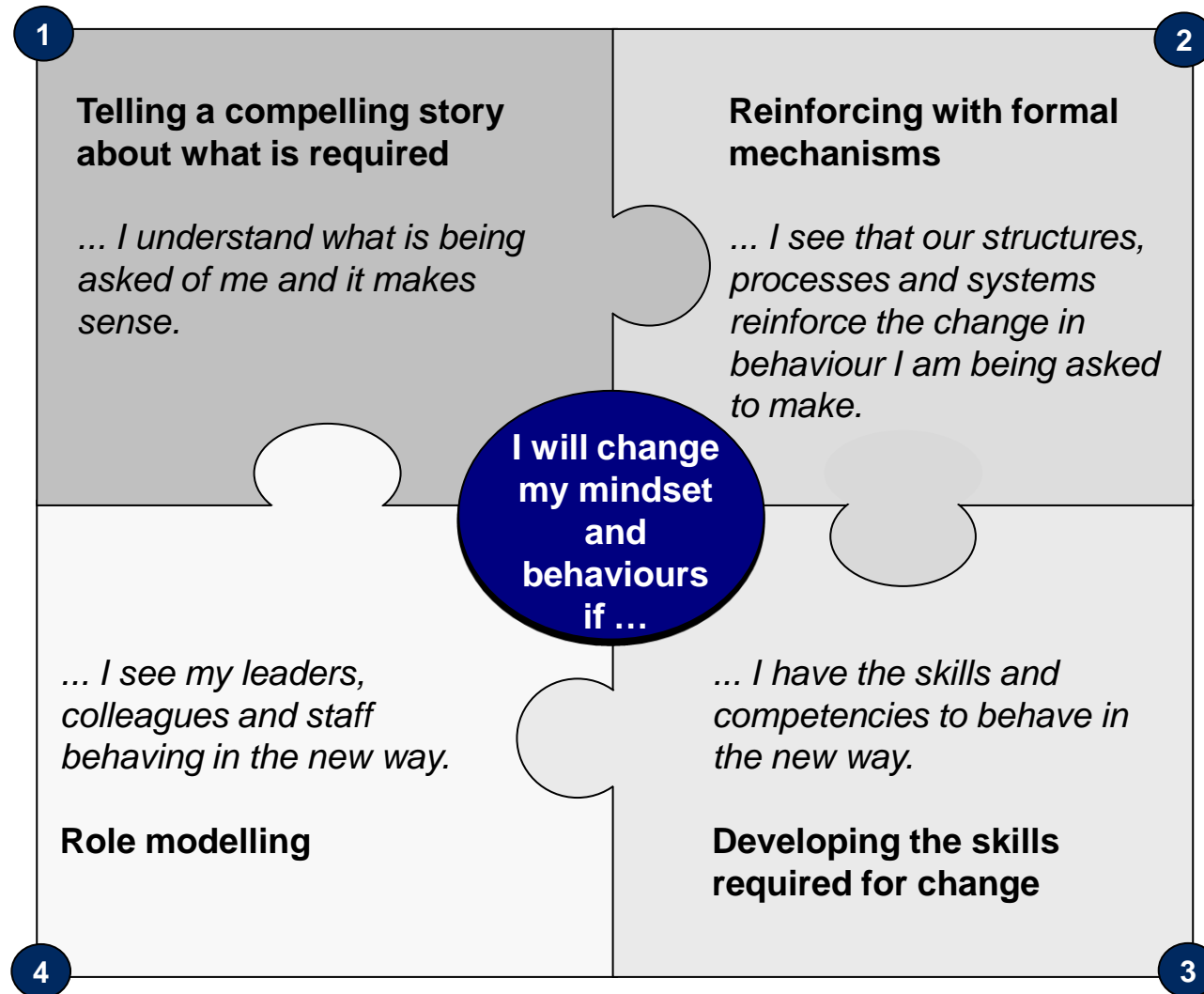
- For each of the initiatives, appraise them on basis of:
 - Ease of implementation
 - Impact of the initiative (reduction in risk)
- The ones in the green box offer the most cost-effective solutions



		Impact of Interventions			
		L	ML	HM	H
Ease of implementing Interventions	H				
	HM				
	ML				
	L				

The second workshop can be used to identify and appraise a range of initiatives that will change mindsets and behaviours, improve performance and reduce risk

If you want to make those change initiatives work, you need to influence mindsets to get behaviour change – these four drivers can really help ...



... And you are more likely to get behaviour change if you follow these principles ...

1702-Risk01 - MPW R&R - Do You Understand what factors influence risk in your organisation v1.0

Plan for change on several levels

What you need to do

- Apply the four drivers to the systems, organisational and team levels

Why you need to so it

- Activities to drive change need to be relevant and sensitive to the context

Build on what is already planned

- Ensure that your initiatives are designed to use some currently planned activities

- Familiar activities done in a different way reinforce the desired way of working

Help people to change

- Help people understand why the change is needed

- Organisational change is accelerated and sustained when individuals change themselves and emerge with new insights and skills

Measure the impact of those changes

- Monitor and measure the outcomes that you are trying to change in the areas that you are trying to change them

- You need to be sure the mindset changes shifts you are tackling are having an effect and those effects are on the right issues

How we can help

We offer these services to help organisations improve their risk performance

- **Identifying and assessing the key risks** – to help you understand and prioritise the key risks facing your organisation
- **Running organisational risk diagnostics** – to help you understand what factors influence risk, compare your organisation against key indicators and best practice, and identify the areas where improvement will give you the greatest returns
- **Identifying and prioritising improvement initiatives** – to help change mindsets and behaviours cost effectively
- **Developing roadmap change plans** – to help you lead and manage the changes required
- **Designing and delivering training and tools** – to transfer knowledge by helping you develop the key skills and use our tools in-house

Download a free copy of our organisational risk diagnostic tool

- This tool allows you to quickly assess your current 'state of play' using tried and tested criteria to:
 - Benchmark your current 'state of play' against key indicators and best practice
 - See where the key gaps are
- You can download the tool from:
<http://mpwrandr.co.uk/organisational-risk-download/>
- The full tool that we use as part of our risk diagnostic services also allows you to identify:
 - How important an influence each factors is
 - Which factors offer the greatest potential for improvement
 - The changes to overall risk level risk resulting from an initiative
 - Which initiatives offer the best return on investment

What to do next

- **Would you like to know more about this report** – I would be happy to share the details, stories and experience behind this report with you
- **Would you like to know more about our Organisational Risk Diagnostic** – I would be happy to explain the benefits of an organisational risk diagnostic and how this works in practice
- **Would you like a sounding board to share your concerns about the factors influencing risk in your organisation** – I would be happy to listen and offer suggestions based on our experience

Please drop me a line by e-mail (mike.webster@mpwrandr.co.uk) or call me (+44 (0) 7969 957471) if you would like to discuss these or any other risk and regulatory topics. I would be happy to schedule a discussion with you, without any obligation.

I genuinely enjoy discussing risk with senior risk and governance professionals. The chances are we will both learn something from each other by sharing your issues with our experience of what's working (or not) elsewhere.

Please do get in touch if you're interested in knowing more about the best ways to transform mindsets, behaviour and risk management in your organisation to add more value.

About the Author



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Profile

- Mike is a risk specialist and chartered engineer with over 30 years' experience
- The first part of Mike's career focused on engineering risk / forensic engineering
- The second part focused on human and organisational factors and their impact on risk
- This gives him a better understanding of 'why things can go wrong' and what can be done to prevent them happening
- Mike has led risk and regulatory projects in the UK, Europe, Far East and US, and has acted as an expert witness in the UK
- Much of Mike's experience has been in the Construction industry, but he has also helped organisations in a range of high risk industries including: Agriculture, Healthcare, Offshore oil and gas, Policing, Rail, Shipping, Waste and Workplace transport
- He set up **MPW R&R** to provide risk and regulatory solutions for regulators, businesses and litigants
- Prior to this, Mike was a Director at BOMEL Consultants, then at Frontline consultants

Selected Risk Experience

- Developed tools and techniques for assessing what factors influence risk in organisations
- Led the development and evaluation of approaches for improving health and safety and changing culture in a range of industries
- Led a multi-partner study with international duty holders and regulators to integrate human and organisational factors into risk management in major hazard industries
- Completed a review of how health and safety risks were managed in the construction of London 2012
- Developed new methodologies for the analysis and management of 'global' risks
- One of the primary authors of the Hong Kong Building Safety Inspection Scheme
- Acted as an expert witness on criminal prosecutions of fatal and major injury accidents resulting from construction activity
- Author of >50 published reports and papers on a range of risk topics – details are available on <http://mpwrandr.co.uk/publications/>

About MPW R&R

What we do

- MPW R&R solves complex risk and regulatory problems for organisations in construction and other high risk sectors who want to manage risk and be more cost-effective

We help

- **Regulators** focus their resources
- **Businesses** identify, prioritise and tackle key risks
- **Legal teams** obtain independent and objective advice by acting as an expert witness

How we help

- MPW R&R provides expert advice, consultancy and training
- We have the specialist tools, techniques and knowledge to help organisations understand what can go wrong and do something about it

If you have any feedback on this report, please drop us a line via mike.webster@mpwrandr.co.uk or +44 7969 957471 – we would like to hear what you think

About this publication

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