

ERM Global Safety Survey

2018

Safety:

a source of
increasing risk
and opportunity
for business



Foreword



I am very excited to share the findings from ERM's first Global Safety Survey.

Our team held in-depth conversations with 144 senior safety functional leaders from a wide range of organisations around the world. Those conversations confirmed a number of observations we have been making in our strategic and frontline safety consulting assignments with our global clients over the last few years. It also revealed some surprises for us!

Overall, it is clear that safety continues to be a major concern for organisations and their stakeholders. We found that organisations are planning to increase their investment in safety for the foreseeable future, but the data from the study indicates that there is not a clear link between the scale of organisations' investment in safety and safety performance.

The survey calls upon organisations to better understand the total extent of their ongoing investment in safety and to more rigorously measure the value derived from these investments. It presents a compelling case for making better use of established processes and programmes to address ongoing performance challenges, especially with regard to more serious injuries and fatalities. The survey results put the spotlight on human capital and on leaders, who have tremendous influence on safety culture and performance.

As a global sustainability consultancy, this work has given us some powerful insights that will help us to improve our own safety culture and performance. I hope it will be useful for you too, as you reflect on your next steps on your safety journey.

I would like to thank each of the senior leaders who participated in the study (most valued clients of ERM), the data analytics team from the Institute of Environmental Analytics (IEA) at Reading University in the UK, and my many colleagues in ERM who gave their time, knowledge and expert input to this important work.

Yours faithfully,

A handwritten signature in black ink that reads "Keryn James". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Keryn James
ERM Group Chief Executive

Background

We have seen a marked increase in focus on safety in our engagements with our clients around the world. We have also seen a change in emphasis with a greater focus on safety leadership and culture.

Our clients have been reporting an uplift in stakeholder expectations on safety and increasing commercial and legal penalties for poor safety performance. This, in turn, appears to have caused a spike in senior leadership interest in safety. We have also observed that companies are investing substantial resources in safety processes and programmes, but significant performance challenges remain, especially with regards to continuing occurrence of serious injuries and fatalities. There appears to be a growing sense that traditional approaches to safety may actually be impeding progress.

The study was designed to explore these themes, to assess if there is a deeper shift in perceptions on safety, and to bring fresh insight into the implications of these developments for organisational leaders and their safety functions.

Methodology

ERM consultants with extensive experience in research studies of this type conducted one-hour structured telephone interviews. We used a combination of quantitative measures using a five point Likert scale (strongly agree to strongly disagree) and qualitative inputs from the interviewees. A team of 10 ERM Partners and Principal Consultants from our global safety consulting team analysed the responses. The data analytics team at the Institute of Environmental Analytics (IEA) at Reading University in the UK provided substantial input on statistical analysis of the findings and BB&A provided support on the development and layout of this report.

We undertook a major research study

We designed the study to provide insight into five areas that we believe are key challenges for organisations today:

1. Preventing serious injuries and fatalities;
2. Safety and the growing dependence on contractors;
3. Safety culture and leadership, and the role of leaders in driving improvement in safety performance;
4. The value derived from investments in established safety processes and programmes; and
5. Building safety competence.

Between January and July 2018, we interviewed **144 senior safety functional leaders**. All were key decision makers, and most brought a global perspective from their roles and their organisations.

Most of the organisations we spoke to were multinationals with substantial employee and contractor bases located across multiple countries.

72% Global Directors/ VPs

120 different organisations

Employing **6.8** million people

Combined annual revenues of **US\$ 4,253** billion

From multiple different sectors...

2% Transport

5% Power

7% Pharma

8% Technology, Media and Telecoms (TMT)

8% Food, Beverage & Agri-business

11% Mining & Metals

17% Chemical

20% O&G

22% Manufacturing

**It's not about doing
more on safety: it's
about getting more
from what you
do already!**

That is our conclusion from in-depth interviews with 144 senior safety functional leaders from 120 corporations around the world.

What we learned

The survey confirmed our initial observations but also provided some insights which were surprising. Overall nine key findings emerged.

1 Stakeholder expectations are rising.

2 Companies are increasing their investment.

3 Significant cultural and performance challenges remain.

4 Risk continues to shift to contractors, who are harder to manage.

5 Most companies do not understand how much they are investing in safety.

6 Lagging performance indicators remain dominant.

7 Established safety processes and programmes are not delivering sufficient impact on performance.

8 Harnessing data and technology to improve safety is becoming a major focus.

9 Leadership engagement is key, but leaders need to step up and gain new skills.

1 Stakeholder expectations are rising.

Interviewees expressed a near-unanimous view that stakeholder expectations for improved safety performance will increase in all sectors and in all continents over the next 3 years.

88%

of respondents agreed or strongly agreed that the safety performance expectations placed on them by stakeholders (employees, customers, supply-chain partners, wider society, and regulators) are increasing. Only two respondents disagreed with the statement.

62%

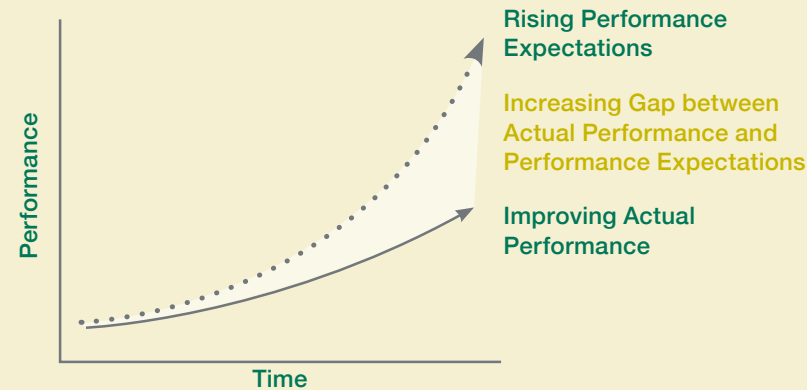
agreed/strongly agreed that regulators are taking an increasingly tougher stance in relation to safety performance. Only 8% disagreed with this statement.

We observed:

Stakeholders are becoming more concerned about safety. Leaders who are aware of these trends are engaging more on safety and driving action to improve safety culture and performance, especially focused on fatalities and serious injuries.

We believe:

Increased stakeholder interest in safety also implies rising expectations in terms of performance. The challenge for companies is not just to ensure that their safety performance is improving but that it improves at a pace that is consistent with changes in expectations: double the challenge!



Increased stakeholder interest in safety also translates into growing penalties for leaders and their organisations who fail to sustain robust safety cultures and performance. That means greater impacts on an organisation's licence to operate and on its bottom line, for example through lost revenue from the growing number of customers who expect outstanding safety performance from their vendors.

Safety is a source of increasing risk, but it is also a growing source of opportunity for business. Many see their efforts to drive safety performance improvement as integral to their efforts to improve operational excellence and core to their efforts to developing a culture of care: an increasing source of competitive advantage in the battle for talent in an environment where people expect more from their employers than a paycheck!

Consider:

How are you monitoring stakeholder expectations?
How are you ensuring that performance improvement is keeping pace with changes in expectations?

“We are already performing 30 times better than others in our industry, but our stakeholders expect the bar to be raised year after year.”

“We are progressing to a point where our stakeholders view any fatalities and serious injuries as completely unacceptable.”

2 Companies are increasing their investment.

Predictably, given the increased pressure and scrutiny from stakeholders, we found that respondents have ratcheted up their efforts to enhance their safety culture and performance in recent years. The vast majority of organisations we spoke to are also planning to increase their investment over the next three years.

78% increased their level of effort on safety over the last three years.

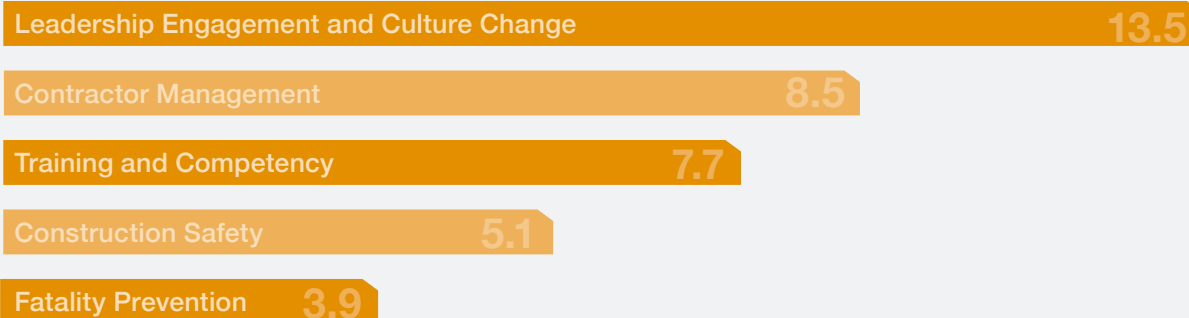
83% are planning to increase their investment in safety over the next three years, with **26%** of respondents planning increases of **15%** or more¹.

85% of the respondents are planning **increased investments in leadership and culture in the next 3 years.**

40% will **increase investments in leadership and culture by 15% or more.**

Respondents shared that their highest priority for investment was developing the capabilities of their people, followed by investment in improving management systems. Next highest priority was improving safety infrastructure/PPE and finally investment in software and technology. (More on investments in software and technology in Section 8.)

We developed a comparative index² to determine the relative scale of investment in the five focus areas of the study. Leadership Engagement and Culture Change stands out – by far – as the highest priority.



We observed:

Safety has been, and will continue to be, a focus of increasing investment. Capabilities, leadership development and culture change are the top priorities. Investment in these aspects is outpacing other areas by a significant margin.

We believe:

Increasing stakeholder pressure and focus on safety is providing safety functional leaders with a strong business case for investment in safety. The level of investment planned over the next three years is a great opportunity for organisations and safety functional leaders to deliver a step-change in safety performance. However, opportunity does not imply achievement: organisational leaders will need to think hard about how they will ensure that this increased effort will translate into measurable benefits to their organisations and their people, especially in light of the findings of this study – more in Section 7.

Consider:

What are your investment priorities?
How do you know that these are the right priorities to deliver performance improvement?
How are you engaging your leadership on these priorities?

3 Significant cultural and performance challenges remain.

Despite organisations increasing their level of effort on safety and most organisations reporting improved performance, the majority are dissatisfied with both their safety culture and performance.

59% of respondents felt their safety performance was unacceptable.

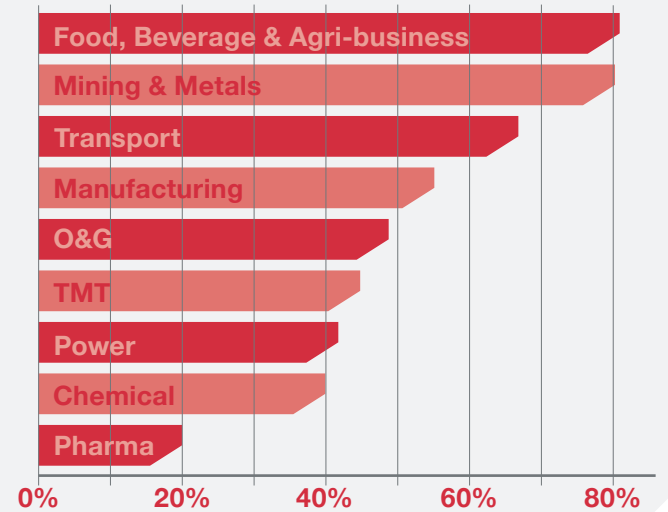
53% of respondents reported having a serious injury or fatality (SIF) occur within their operations in the 12 to 18 months prior to their interview, with significant variation in the percentage of respondents reporting SIFs in different sectors (see chart).

33% believed they had the safety culture they want.

32% of respondents agreed/strongly agreed they have a strong culture of peer-on-peer engagement on the frontline: a defining characteristic of mature safety cultures (described elsewhere as an interdependent safety culture).

Respondents reported that they were especially challenged by (a) variability in culture and performance across operational entities and geographies and (b) a continuing perception that production takes precedence over safety.

% of respondents reporting one or more SIFs in the 12-18 months prior to their interviews

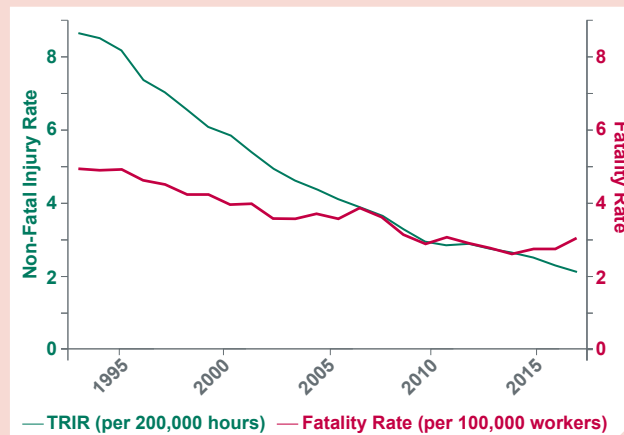


We observed:

Whilst disconcerting, such a high proportion of interviewees reporting SIFs was not a surprise, given the profile of the organisations included in the study. We were however surprised by the number reporting SIFs in what is a relatively short time frame; 18 months to June 2018. The vast majority of the reported SIFs were, in fact, fatalities, and a number of respondents reported multiple fatalities in this period.

The data suggests the occurrence of very serious injuries remains a crucial and persistent challenge for organisations, which is supported by data from the US Bureau of Labour Statistics⁴. Their data points to a steady downward trend in TRIR but much

less improvement in the statistics on fatalities and an uptick in the rate in recent years.



We believe:

The persistence of SIFs, and other performance challenges, raises important questions about the extent to which established safety processes and programmes and increased investment in safety can deliver the required outcomes.

Consider:

Are you seeing the same pattern on TRI and serious injuries as reported by the US Bureau of Labour Statistics? If so, what do you attribute this to?

Are you seeing variability in your culture/performance across your operations and challenges with production over safety? Why?

4 Risk continues to shift to contractors, who are harder to manage.

Organisations are relying more and more on contractors, who often perform more hazardous activities and are more challenging to manage.

72% of respondents reported increasing use of contractors.

55% reported their contractors are undertaking more hazardous activities than the company's own employees.

69% regard managing contractor safety as more challenging than addressing safety for their own employees.

83% provide training to their contractors above and beyond site inductions.

94% of respondents saw opportunities to make better use of elements of the contractor management lifecycle.

52% of respondents strongly agreed /agreed that frontline leaders engaged with contractors in a way that produces positive safety outcomes.

The IEA found a positive correlation between respondents who reported a culture of frontline engagement with contractors and positive perceptions on safety culture in the survey⁶.

We observed:

The use of contractors across industry globally has increased in recent years and our study indicates that this trend will continue, implying further concentration of risk in the contractor workforce, a trend that is amplified by the fact that just over half of the respondents (55%) believe their contractors are performing more hazardous activities. There is a strong case for considering enhanced approaches to contractor safety, especially given the majority of the respondents (69%) regard contractor safety as more challenging than managing the safety of their own employees and an almost unanimous view that there are opportunities to make better use of almost every aspect of the contractor engagement lifecycle.

Respondents shared a number of specific concerns on contractor management including cultural differences (contractor vs host company), challenges in the procurement process (too little meaningful focus on safety and too much focus on cost) and a perceived need to maintain a hands-off approach with contractors (a focus on managing potential liability over risk). In some cases, companies erroneously believe that by training contractors they will diminish the liability attaching to contractors in the event of an accident.

We believe:

Organisations can improve contractor safety by better integrating safety considerations into every element of the contractor engagement lifecycle, especially in the early stages. This effort will require higher levels of engagement from procurement personnel and contract managers who will require upskilling. Procurement personnel and contract managers' focus on safety can have powerful impacts on performance over the whole of the lifecycle.

Consider:

How can you make your engagement with contractors more rigorous over the whole of the lifecycle?

How do you assess and ensure the safety and competency of contractors once they are on your site?

“It is very difficult to convince top leaders of the contractors' organisations that safety is important.”

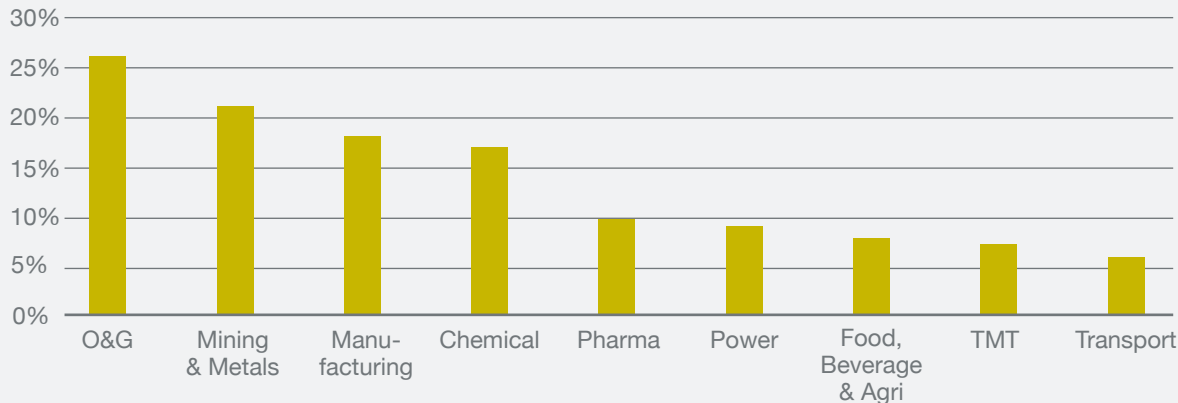
5 Most companies do not understand how much they are investing in safety.

We set out to understand the scale of companies' total economic investment in safety and the value derived in terms of impact on behaviours on the frontline and safety performance. We share findings on investment in this section, and discuss the survey findings on value derived in Section 7.

We asked interviewees to quantify the resources expended on all safety processes and programmes and to express this as a percentage of labour costs. We asked them to consider time spent by all personnel engaged in their permit to work process, toolbox talks, risk assessments, safety training, audits and inspections, incident investigations, management field visits and all other safety processes and programmes.

Estimates of the direct and indirect costs of safety varied by sector ranging from **6% to 26%** of labour costs (an overall **average of 17%**) with higher levels reported for higher hazard industries.

Average Estimated Investment in Safety as a % of Labour Costs by Sector



We also explored how much time companies spent on safety training. Those interviewees, who were able to provide estimates, deliver an average of 26 hours' safety training annually per employee, with significant sectoral variation (38 hours' on average in the chemical sector and 17 hours in the manufacturing and power sectors). Respondents also indicated a wide variation in number of hours of training provided to high vs low skilled frontline personnel with more training provided to higher skilled personnel.

We observed:

Few respondents had actually considered the scale of their total economic investment in safety and some were uncomfortable with this line of questioning:

"I find it very difficult to think of safety as an investment; it is our first priority and we do what we need when we need to do it."

Safety training alone represents 1.5%⁷ of labour costs on average and this accounts for a very small proportion of companies' total economic investment in safety. It is clear from these data, and respondents' estimates of the amount they spend, that organisations are spending vast resources on safety.

We believe:

Companies would benefit from understanding the true scale of their current economic investment in safety, especially in light of planned increases in the next three years.

A better understanding of current and future costs associated with the development, implementation and execution of safety processes and programmes is fundamental to ensuring organisations obtain optimal value from their investment in safety. More on this in Sections 7 and 9.

Consider:

How are you determining the true economic cost of implementing safety processes and programmes?

To what extent are you using these data to ensure you are making informed decisions on future investments?

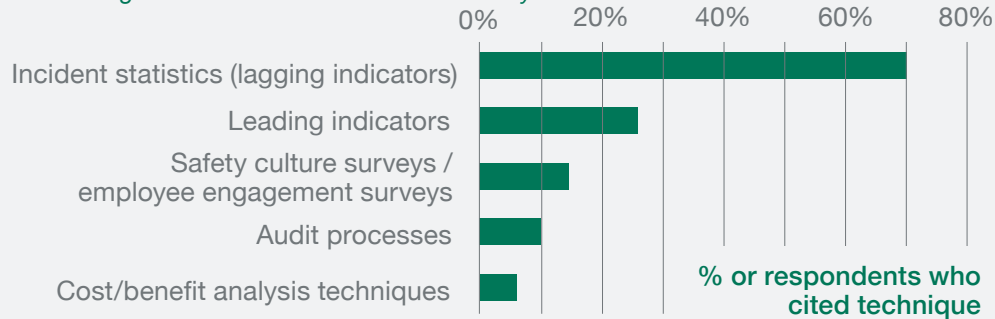
6 Lagging performance indicators remain dominant.

We wanted to understand how organisations are monitoring the efficacy of their established safety processes and programmes.

70% of respondents referenced use of incident statistics (lagging indicators).

Only 26% of respondents use any form of leading indicators (15% use safety culture surveys or elements of their employee engagement surveys, 10% of respondents use audit processes for this purpose and 6% reported using cost/benefit analysis techniques).

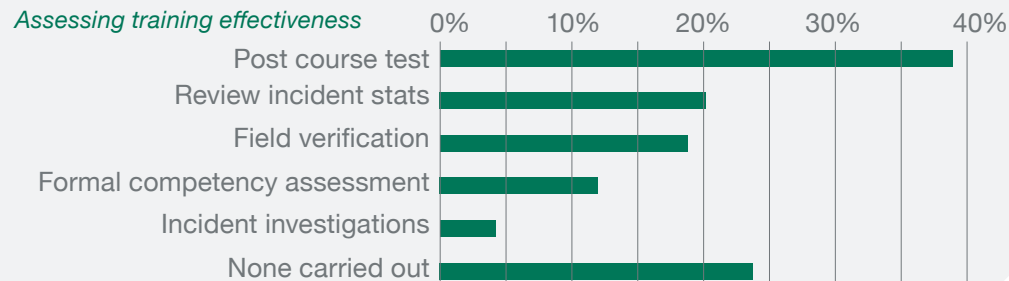
Assessing effectiveness of investment in safety



25% of organisations **do not** measure the effectiveness of their safety training.

The most popular method used by organisations who do measure training effectiveness is the use of end-of-course evaluations. We found that only 20% of organisations are measuring the short or longer-term impact of training on culture, behaviours and safety outcomes.

Assessing training effectiveness



We observed:

The data indicate that few companies are using meaningful leading indicators to evaluate the efficacy of their safety processes and programmes. This is surprising given the scale of companies' investments.

That 25% of organisations are not assessing the effectiveness of their training at all is also a surprise, with organisations spending the equivalent of 1.5% of labour costs on average on this element alone. The reliance on end-of-course evaluations, which provide little meaningful insight into whether the training has any real impact on behaviours or performance, is a concern.

We believe:

There is a clear need for organisations to develop a more robust suite of indicators that will provide them with deeper insight into the extent to which their established safety processes and programmes are delivering the intended outcomes.

Indicators should provide accurate readings on the extent to which the processes are yielding the right culture, leadership and frontline behaviours and performance outcomes on the frontline.

Consider:

To what extent do the performance indicators you are using give you a true picture of the extent to which your processes and programmes are impacting performance?

What indicators can you adopt to better measure impacts on safety culture, behaviours and performance?

“ We’ve transitioned away from numbers and toward engagement and culture. Are we pleased with our progress? Yes. Are we satisfied? No. ”

7 Established safety processes and programmes are not delivering sufficient impact on performance.

We wanted to shed light on the extent to which established investments in safety are delivering value to companies. To this end, we analysed data from the respondents on their investments in safety, performance improvement, occurrence of fatalities, Fatality Prevention Programmes (FPPs) and Life Saving Rules (LSRs). We also asked respondents to consider their economic investment in safety processes and programmes and to estimate what percentage of this total effort is impacting culture and behaviours.

Changes in investment in safety vs performance improvement

We found that changes in investments in safety over the past 3 years had no bearing on performance improvement.

68% 68% of those who **increased** their investment in safety reported improved performance.

67% 67% of those whose investment in safety was **static or reduced** reported improved performance.

Life Saving Rules

111 respondents had established LSRs in their organisations. **70%** of these agreed that their people understand how to apply LSRs in practice – perhaps on the low side. Surprisingly, only **61%** of respondents agree that LSRs were a positive aspect of their safety programmes.

“The Life Saving Rules are too vague for people to comply with and the expectation of accountability leads to a blame and shame culture.”

The data suggest that implementing Life Saving Rules has little bearing on the likelihood of occurrence of SIFs.

79% 79% of organisations which had **zero recent SIFs**¹⁰ had implemented LSRs.

77% 77% of organisations which had **one or more recent SIFs**¹¹ had implemented LSRs.

Fatality Prevention Programmes

Surprisingly, the proportion of respondents who reported having one or more recent SIFs¹¹ was significantly higher for those who had implemented an FPP versus those who had NOT.

59% 59% of respondents who had implemented an FPP reported **one or more recent SIFs**¹¹.

45% 49% of respondents who had **NOT** implemented a Fatality Prevention Programme reported **one or more recent SIFs**¹¹.

The IEA found NO statistical evidence in the data that implementing an FPP had any bearing on the number of years since the last SIF¹².

Value Derived from Investment in Safety

The IEA found NO statistical evidence in the data of a correlation between the level of spend on safety (measured as a % of labour costs) and perceived value derived¹³.

“On one level I could say we derive great value, but I see that day-to-day it seems that we put so much effort into things that return only incremental change.”

Respondents estimated that only 42% of their total investment in safety – on average – is yielding benefit measured in terms of impact on behaviours on the frontline. There was significant variation in the responses by sector with respondents **from the Pharmaceutical and Healthcare Sector** advising 52% of the total investment in safety impacts performance, and a low of **30% in the Transport and Power Sectors**.

7 Established safety processes and programmes are not delivering sufficient impact on performance.

Training hours vs perceptions of culture

We found that there is a positive correlation between hours of training provided and perceptions of safety culture⁸. Investing in training seems to have a positive impact on culture. However, the IEA found statistical evidence in the data that the **quality** of training provided is a better predictor of perceived performance than the **number of hours** of training provided.

We were surprised that **40%** of respondents believed their safety training does **not** change how their people think: NO impact on how people think implies NO impact on performance!

We believe:

There is enormous trapped value in established safety processes and programmes.

There is, however, an inherent conflict between the underlying purpose of safety processes and human performance. The underlying purpose of all safety processes such as permit to work, toolbox talks and safety inductions is to ensure people are alert on the job, conscious of the hazards and using appropriate mitigations to address them. However, repetition inherent in the processes induces people to engage with them unconsciously – in tick box mode – as described by Eliezer Sternberg in NeuroLogic¹⁴.

We are not advocating that organisations abandon their safety management systems. However, seeking to moderate behaviours without considering the context that influences them will not be effective. Sustainable change requires that we consider what people are asked to do, the feasibility of the task and the usability of the processes, equipment and systems that they are expected to rely upon.

Approaches to the development, deployment and execution of safety process and programmes need to take much better account of the dilemma set out by Sternberg, and human factors more generally, if they are to deliver benefit that is commensurate with the investment in them. We believe there is an imperative for using smarter user-friendly approaches to the communication of essential requirements, especially those related to critical controls which have been designed to address potential serious injuries and fatalities.

We also believe the frontline should be more engaged in the design of safe working procedures and safety programmes: recognising their operational expertise and harnessing their ingenuity is essential to sustainable safety improvement. We believe leaders, at all levels, have an absolutely crucial role to play in breathing life into their processes and programmes so they deliver the desired impact on behaviours and outcomes on the frontline. More on this in Section 9.

We observed:

The data present a clear and convincing body of evidence that the benefits derived from investments in established safety processes and programmes are not consistent with the scale of the investment in them. Established safety processes and programmes are not delivering sufficient impacts on leadership and frontline behaviours or performance.

Consider:

How can you transform the value derived from your established safety processes and programmes, so these yield much greater impact on behaviours and performance outcomes?

Are your leaders equipped to breathe life into your process and programmes?

How can you ensure that human factors are addressed within safety processes and programmes and the consequences of human error are minimised?

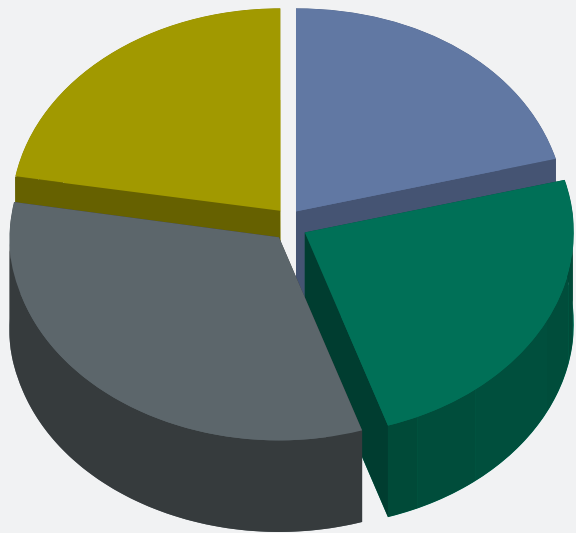
“ I think that our investment in safety always generates value; the question is: Are we investing in the right areas? ”

8 Harnessing data and technology to improve safety is becoming a major focus.

We wanted to understand how organisations are harnessing data and technology to support safety. The vast majority of those we spoke to regard harnessing data and technology as vital to improving safety performance and three quarters had a strategic priority to make better use of data and technology. These findings were consistent across all sectors.

92% regard harnessing technology and data as vital to improving safety performance and **75%** have a formal one to two year strategic priority to increase use of technology/data to improve performance.

Respondents were evenly spread in terms of the maturity in their use of information to support decision-making.



21% Disparate/disconnected management information systems, with a number of manual and/or duplicative processes.

24% Management information systems, but these are not well used across the organisation (partially deployed).

33% Management information systems, but these tend to be used only for specific purposes (e.g. regulatory reporting) but are not integrated into a single source.

22% Integrated approach to technology and data, which is used continuously to make data-driven decisions across the organisation.

Larger organisations (>US\$75 billion revenues) reported greater maturity and there was little variation between sectors.

We observed:

Organisations recognise the benefits that data and technology can bring in the drive to improve safety performance and it has been identified as a strategic priority but it has not yet translated into an investment priority.

We believe:

There is a great deal of excitement about the potential for better use of data and technology – including wearables – to transform safety performance. Organisations are at different stages of maturity, with many organisations still evaluating the role that data and emerging technologies can play. We expect investment in data and technology to become a higher investment priority over the next few years as organisations progress from the Evaluate to Implement stage in the investment cycle.

Consider:

What plans do you have in place to harness data and technology to support improved safety performance in your organisation?
How will you help your people adapt to the changes data and technology will bring?

“Digitisation is a lot more than migrating from paper onto the computer. We need to use virtual reality, artificial intelligence, and clever robotics, but only so that we can better protect each other.”

9 Leadership engagement is key, but leaders need to step up and gain new skills.

Given their profile and the depth of their experience, we thought there would be much value in understanding the interviewees' collective view on what they saw as the key to driving safety performance improvement on the frontline. We also wanted to understand if the respondents believed senior, mid-level and frontline leaders in their organisations are sufficiently engaged in driving improvements in safety, and whether they had the necessary skills to positively impact their culture, behaviours and safety performance.

The Key to Safety Performance Improvement

We asked all 144 respondents to share their perspectives on 'the most effective approaches to delivering behavioural change on the frontline'. Ten ERM Partners and Senior Consultants, who work in the field, performed an independent evaluation of the responses to this question. They found the respondents overwhelmingly identified leaders' presence in the field as the most effective means of delivering behavioural change on the frontline, followed by communication/knowledge sharing and training and competence.

75% of respondents identified **leader visibility on the frontline** as the most effective means of changing behaviours (and consequently delivering performance improvement) on the frontline.

These findings were corroborated by the IEA's analysis of the data that found positive correlations between respondents' perceptions of their safety culture and all aspects of leadership engagement tested in the survey^{15,16,17}. The IEA's analysis also found positive correlations between perceptions of safety culture and performance and all aspects of frontline leadership engagement tested in the survey^{15,16,17}.

Leadership Engagement:

The respondents believe there is a greater challenge of engagement with frontline leaders than with senior leaders. Top level commitment is not always making its way to the frontline!

70% of respondents believe their senior leaders are engaged in driving safety,

60% of respondents believe their mid-level managers are, and

48% believe their frontline leaders are.

9 Leadership engagement is key, but leaders need to step up and gain new skills.

The survey data indicate that there is potential to make much better use of this powerful resource. Senior, mid-level and frontline leaders aren't spending sufficient time in the field and they aren't equipped with the skills they need to allow them to be effective when they are there.

30% of respondents agree their senior leaders are spending sufficient time in the field.

36% of respondents agree their mid-level leaders are spending sufficient time on the frontline.

52% of respondents agree their frontline leaders are spending sufficient time on the frontline. Surprisingly low!

Only 29% felt leaders at all levels were effective at hazard recognition/engaging effectively as coaches on the frontline.

We observed:

The respondents broadly recognised leadership engagement on the frontline as the key to improving safety culture and performance; however, leaders are not sufficiently present in the field and they aren't as effective as they could be when they are there.

We believe:

Senior, mid-level and frontline leadership engagement is key to improved safety culture and performance.

The challenge is how companies can effectively engage leaders, whose immediate priorities are often focused elsewhere and who may not understand the direct and often long-term impact the decisions and actions they take have on safety culture, behaviours and performance. We believe leaders have much greater impact on safety culture and performance than they realise.

The study calls for actions to better engage leaders at every level of the organisation on safety, to help them understand the role they do play in setting the culture and influencing the behaviours of their people in the office and on the frontline. It also suggests that leaders at all levels require upskilling to ensure that their engagements are delivering much greater impact on their culture and performance.

Consider:

How are you currently influencing your leadership colleagues to engage on safety?

What actions can you take to ensure your leaders are engaging on safety generally, and with the frontline specifically?

What actions can you take to ensure your leaders' engagements are delivering meaningful, positive impact on behaviours, culture and performance?

“At the executive level there is, I think, more alignment and clearer purpose around safety leadership and the culture we are trying to create. Unfortunately as we go further down the organisation we see a lot more diversity of opinion.”

“I think the senior leaders want to do the right thing but they don't know what the right thing is and they are afraid to say they don't know.”

In conclusion

Our engagements with 144 safety functional leaders with operations spanning the globe and across a wide range of industry sectors has provided us with a wealth of insight.

These deeply informed individuals were virtually unanimous in their belief that stakeholders will continue to drive increased pressure on safety in the coming years. Increased pressure will raise the bar on performance expectations. The penalties for organisations and their leaders who fail to meet these expectations will continue to rise.

Most organisations continue to be challenged by variability in culture and performance across their operational footprints and a continued (inferred) emphasis on production over safety. Further migration of risk into the contractor base is a growing concern as most regard contractor safety as more challenging to address than the safety of their own employees.

It's clear from the study that organisations have not got a good grasp on the extent of their total economic investment in safety.

The respondents' estimates and other data suggest the scale of the effort is huge (17% of labour costs on average for the respondents) and growing, with most organisations planning increased investment in the next three years, especially focused on capability development, leadership and culture. This is an entirely rational response to rising expectations on safety performance, the very real cultural and performance challenges that remain and especially in light of the fact that three quarters of the respondents

identified leadership engagement as the key to driving performance improvement on the frontline.

But the study data strongly suggest that 'more of the same' is unlikely to deliver the desired outcomes – many established safety processes and programmes are failing to deliver the intended outcomes. It is time to pause and reflect.

Leaders can use the insights presented here to challenge their own organisations to:

- Better understand the **total scale of their economic investment in safety.**
- **Routinely evaluate** if all their key safety processes and programmes are impacting culture and behaviours, asking *“Could our effort be better deployed in a way that would create greater impact?”*.
- Direct future investments to **enhancing the value derived** from established safety processes and programmes, so these don't become a tick-box activity. That means ensuring that processes are fit-for-purpose and using smarter user-friendly tools (less words more pictures) to **ensure critical requirements are better understood by the users on the sharp end**, at the point of use. It also requires leaders to **take action to breathe life into their safety processes and programmes.**
- **Make people the primary focus:** people on the frontline including contractors, design engineers, procurement staff, and other key office-based personnel whose actions directly impact occupational and process safety outcomes.

- Accelerate their plans to **harness data for enhanced decision-making and new technology to de-risk their operations.**
- Better **recognise that all leaders, from the CEO to frontline leaders, play an absolutely crucial role in defining the safety culture and performance of their organisations** through their behaviours and the decisions they make every working day. 75% of the survey respondents identified leadership engagement as the key to driving improvement in safety performance and it emerged as the number one focus for investment in the next 3 years. This is a great opportunity to **coach leaders so their engagements in the office and on the frontline are more impactful** (a need identified by 71% of the respondents). It is also an opportunity to equip leaders with the skills to breathe life into their processes and programmes so these deliver much greater impact on safety culture, behaviours and performance on the frontline: for good.

The survey tells us, and we believe, that safety is an increasing source of risk to business and business leaders, but it is also an opportunity. Organisations that respond to the challenge will see real operational advantages in customer engagement, maintaining their licence to operate, recruitment and retention of talent in a world that cares more and more about safety at work.

Contact us

Please contact us if you would like to learn more about the survey or ERM's broad-based work on safety performance improvement, including expertise in fatality prevention, contractor safety, process safety, human factors, cultural change/ safety leadership and high impact training.

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**It's not about doing
more on safety: it's
about getting more
from what you
do already!**

Endnotes

1

Safety Investment – 3 year forecast versus 2017 baseline	% of respondents
Increase 15% +	26%
Increase 10 -15%	35%
Increase 5 - 10%	21%
No Significant Change -5% to +5%	17%
Decrease -5 - 10%	1%
	100%

2

The index has been calculated by multiplying the number of respondents increasing their investment in a given focus area by 5%-10% x 0.075, plus the number of respondents increasing their investment in focus area by 10%-15% x 0.125; plus the number of respondents planning to increase investment by >15% x 0.175.

3

($r_s = 0.33$, $r_s^2 = 0.11$, p -value = 6.29E-05).

4

Bureau of Labour Statistics, 1993 – 2016 (Census of Fatal Occupational Injuries Summary, 2017), available at - <https://www.bls.gov/iif/oshcfoi1.htm>.

5

Frontline leaders from my organisation typically engage with contractors in a way that produces positive safety outcomes										
Level of Agreement	Chemical	Food, Beverage & Agri-business	Manufacturing	Mining & Metals	Oil and Gas	Pharma & Healthcare	Power	TMT	Transport	Grand Total
Strongly Agree	8%	0%	3%	13%	17%	20%	14%	0%	0%	9%
Agree	56%	58%	35%	31%	41%	30%	57%	40%	67%	43%
Positive Agreement (Strongly Agree / Agree)	64%	58%	38%	44%	58%	50%	71%	40%	67%	52%

6

($r_s = 0.49$, $r_s^2 = 0.24$ and p -value = 1.00E-09).

7

26 hours of safety training accounts for 1.5% of the average hours worked annually per employee (1759 hours) in OECD countries in 2017 (<https://data.oecd.org/emp/hours-worked.htm>).

8

($r_s = 0.26$, $r_s^2 = 0.07$ and p -value = 8.35E-03).

9 – Table 1

Correlation data between hours of safety training per employee per annum versus various measures of 'Leadership Engagement', 'Safety Leadership Skills', 'Time in the Field' and 'Peer-on-Peer Engagement'.

Statement		Leadership Level		
		Frontline	Mid-Level	Senior
Leaders are deeply engaged in driving improvement in our safety culture and performance	r_s	0.14	0.24	0.28
	r_s^2	0.02	0.06	0.08
	p -value	0.22	0.01	4.89E-03
Our leaders have the necessary skills to allow them to be effective safety leaders	r_s	0.11	0.08	0.27
	r_s^2	0.01	0.01	0.07
	p -value	0.28	0.43	0.01
Leaders spending sufficient time in the field	r_s	-0.01	-0.09	0.13
	r_s^2	2.04E-04	0.01	0.02
	p -value	0.89	0.39	0.21
Our leaders are effective at hazard recognition and engage effectively as coaches with their people	r_s	0.22	0.29	0.26
	r_s^2	0.05	0.08	0.07
	p -value	0.03	3.88E-03	0.09
There is a strong culture of peer-on-peer engagement on safety (brother's keeper)	r_s	0.25	N/A	N/A
	r_s^2	0.06	N/A	N/A
	p -value	0.01	N/A	N/A

9 – Table 2

Correlation data between perceptions of effectiveness of training ("Our safety training really impacts people's thinking on the frontline and hence their behaviours and actions") versus various measures of 'Leadership Engagement', 'Safety Leadership Skills', 'Time in the Field' and 'Peer-on-Peer Engagement'.

Statement		Leadership Level		
		Frontline	Mid-Level	Senior
Leaders are deeply engaged in driving improvement in our safety culture and performance	r_s	0.30	0.29	0.21
	r_s^2	0.09	0.08	0.05
	p -value	4.23E-04	6.41E-04	0.01
Our leaders have the necessary skills to allow them to be effective safety leaders	r_s	0.19	0.28	0.26
	r_s^2	0.06	0.08	0.07
	p -value	0.03	8.90E-04	2.28E-03
Leaders spending sufficient time in the field	r_s	0.12	0.22	0.29
	r_s^2	0.01	0.05	0.08
	p -value	0.16	0.01	6.13E-04
Our leaders are effective at hazard recognition and engage effectively as coaches with their people	r_s	0.28	0.27	0.24
	r_s^2	0.08	0.07	0.06
	p -value	1.10E-03	1.66E-03	6.43E-03
There is a strong culture of peer-on-peer engagement on safety (brother's keeper)	r_s	0.24	N/A	N/A
	r_s^2	0.06	N/A	N/A
	p -value	4.69E-03	N/A	N/A

Endnotes

10

Zero SIFs in the 12-18 months prior to the respondent's interview.

11

One or more SIFs in the 12-18 months prior to the respondent's interview.

12

($r_s = 0.10$, $r_s^2 = 0.01$, p -value = 0.23).

13

($r_s = 0.14$, $r_s^2 = 0.02$, p -value = 0.14).

14

(Sternberg, 2016) NeuroLogic: The Brain's Hidden Rationale Behind Our Irrational Behavior

"There are two parallel systems in the brain that control behaviour. When we practice a behavior enough, we can automate it, allowing the habit system to take over. This frees up the conscious, non-habit system to focus on something else. For example, the complex activity of driving a car requires vision, touch and exquisite motor control. But it can become mostly unconscious when the driver takes the same route day after day".

15

Correlation data between perceptions of safety culture (Statement 1) versus various measures of frontline leadership characteristics (Statement 2) – 'Leadership Engagement', 'Safety Leadership Skills', 'Time in the Field' and 'Peer-on-Peer Engagement'.

Statement 1	Statement 2	r_s	r_s^2	p -value
Our organisation has the safety culture that we want	Our frontline leaders are deeply engaged in driving improvement in our safety culture and performance	0.40	0.16	8.16E-07
	Our frontline leaders have the necessary skills to allow them to be effective safety leaders	0.40	0.16	9.55E-07
	Our frontline leaders spend sufficient time in the field	0.35	0.12	2.63E-05
	Our frontline leaders are effective at hazard recognition and engage effectively as coaches with their people	0.40	0.16	9.96E-07

16

Correlation data between perceptions of safety culture (Statement 1) versus various measures of mid-level leadership characteristics (Statement 2) – 'Leadership Engagement', 'Safety Leadership Skills', 'Time in the Field' and 'Peer-on-Peer Engagement'.

Statement 1	Statement 2	r_s	r_s^2	p -value
Our organisation has the safety culture that we want	Our mid-level leaders are deeply engaged in driving improvement in our safety culture and performance	0.45	0.21	1.27E-08
	Our mid-level leaders have the necessary skills to allow them to be effective safety leaders	0.41	0.17	3.40E-07
	Our mid-level leaders spend sufficient time in the field	0.27	0.07	9.86E-04
	Our mid-level leaders are effective at hazard recognition and engage effectively as coaches with their people	0.44	0.19	6.96E-08

17

Correlation data between perceptions of safety culture (Statement 1) versus various measures of senior leadership characteristics (Statement 2) – 'Leadership Engagement', 'Safety Leadership Skills', 'Time in the Field' and 'Peer-on-Peer Engagement'.

Statement 1	Statement 2	r_s	r_s^2	p -value
Our organisation has the safety culture that we want	Our senior leaders are deeply engaged in driving improvement in our safety culture and performance	0.25	0.06	2.35E-03
	Our senior leaders have the necessary skills to allow them to be effective safety leaders	0.42	0.18	1.72E-07
	Our senior leaders spend sufficient time in the field	0.28	0.089	7.33E-04
	Our senior leaders are effective at hazard recognition and engage effectively as coaches with their people	0.27	0.08	1.32E-03

