Lendlease’s Chris Doyle: setting global standards in safety

What are the real drivers of workplace wellbeing?

Mental health: more than just change fatigue?

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JUNE 2019

Lendlease: setting a global standard in safety:
A holistic and concerted effort to improve OHS across Lendlease’s global operations has paid dividends, with significant improvements in safety outcomes.

content
I t’s time for another change.

For more than 70 years, the Safety Institute of Australia has been focused on the needs of the health and safety community. Over time those needs have changed, and we have changed with them. We were originally formed in 1948 as the Safety Engineering Society by a group of students from the first Industrial Safety and Accident Prevention course conducted by the Melbourne Technical College. By 1977, the building blocks of a profession were forming, and we saw the need to be more expansive as people from a range of backgrounds beyond engineers began to engage in safety roles. So we became the Safety Institute of Australia.

The further evolution of roles, legislation and language in the last 30 years has seen the rise of focus on health, and the way we conceptualise the work of the profession has now evolved fully as health and safety.

David Clarke, CEO of the Australian Institute of Health & Safety

The Institute is set for a significant change, which puts the health in health and safety, and reflects the transformation that we have already undertaken over the past four years, writes David Clarke

All of these things require significant investment, and we do them for and on behalf of the profession to help it evolve. They rely on the ongoing support of the profession itself and its willingness to grow and change. This work will continue.

We know that’s a full agenda, but we also know we have to do more. Although we all like to think of Australia as at (or near) the head of the pack when it comes to health and safety:

• There are a million small businesses who do not use – or have access to – health and safety advice or business standards. How can we help them deliver healthier and safer workplaces?

• Company boards are struggling with the wave of change in enforcement culture. How can we help them deliver healthier and safer workplaces?

• Today, there are students at school who will have successful careers but never step into what we might consider a traditional workplace. How can we help them develop knowledge and awareness they will need to keep themselves healthy and safe?

Although our name is changing, our vision for healthy and safe workers in productive workplaces is not. To be true to this vision means using our combined knowledge and strength as a profession to take on the bigger issues. This in turn can’t be done alone and requires the co-operation of governments, employer groups and unions, and a greater awareness of health and safety from civil society.

It’s an exciting and dynamic time to be in health and safety, and the Australian Institute for Health and Safety will be thinking forward and ensuring that our community of health and safety people will have a leadership role in all of these emerging issues in the years to come.

The OHS Professional editorial board 2019

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Advancing and evolving the cause of OHS

The OHS profession is changing and evolving at the coalface of business, and OHS professionals need to keep up to date with evolving challenges and trends in order to stay current and be effective in their roles, writes Craig Donaldson

The Australian Work Health and Safety Strategy 2012–2022 has identified the construction industry as a priority due to a high number and rate of work-related fatalities and serious injuries. Safe Work Australia statistics indicated that worker fatalities are relatively high with 3 fatalities per 100,000 workers (accounting for 16 per cent of all work-related fatalities) while serious claims are also high with 8.1 serious claims per million hours worked (accounting for 11 per cent of all serious claims). While the frequency rate of serious claims has decreased by 20 per cent over the last decade, the construction industry ranks third for both the number of fatalities and serious claims over the past five years.

Improving safety outcomes in such an industry takes a concerted, sustained and diligent effort, especially on the part of organisational leaders. This challenge is even more pronounced in multinational construction companies, working across different geographies with complex supply chain and contractor arrangements. International property and infrastructure group Lendlease is one company that has undertaken this journey. With around 13,000 employees globally, the $11.4 billion company has made sweeping changes to its approach to OHS to help improve safety outcomes. Our cover story for this issue features an interview with the company’s group head of health & safety, Chris Doyle, who explains how the company has overhauled its operations and significantly improved OHS. It is one of the group’s key strategies for driving long-term value in the business, and it has experienced significant improvements in safety results over the past decade. Its group LTIFR rate, for example, currently stands at 1.8 in the financial year-to-date (down from 6.6 in FY03), while its group critical incident frequency rate (CIFR, a measure of events that caused, or had the potential to cause, death or permanent disability) currently stands at 0.86 (down from 2.57 in the first quarter of FY13). For the full article please turn to page 16.

Also, in this issue we feature an interview with UNSW’s Dr Peta Miller (beginning page 14) about the latest trends and issues in psychological health and safety. Safe Work Australia estimates that poor psychological safety costs Australian organisations an estimated $6 billion per annum in lost productivity, and Miller explains that there are a number of psychological hazards and risks that work organisations need to be aware of. One of these in particular is the introduction of new technology into organisations, which is happening on a daily basis around the world thanks to digital disruption and transformation. People have consistently demonstrated a capacity to evolve and cope with change – including technological change – over the years, but Miller questions where the tipping point might be when the actual pace and volume outstrip humans’ innate capacity to cope: “While there are individual differences in our ‘change resilience’, is there a point at which people, not just those we currently think of as vulnerable like people with existing mental illnesses, but a point when it’s just going to be too much for most of us to cope with?” she asks.

This edition of OHS Professional also includes both an interview with as well as contributions from Kym Bills, the new chair of the AIHS College of Fellows. With a long and diverse career in safety, the profile feature (page 8) explores Kym’s observations on the evolution of the OHS profession, trends impacting practitioners and opportunities for professionals in the course of these changes. Over the coming three to five years, Kym sees OHS professionals building on certification with robust CPD and working collaboratively with domain specialists to provide the best possible targeted advice. “The noble goal of reducing death, injury and disease, societal expectations of expertise and ethics, the changing nature of work, and the threat of litigation, will all help drive the need to be more professional and responsive to organisational and client requirements,” observes Kym, who adds that the vision of the AIHS is to have safe and healthy workers in productive workplaces – something he intends to help support as the new chair of the AIHS’ College of Fellows.

Lastly, this issue also includes an interview with Danny Spadaccini, director of environment, health and safety for Alcoa Alumina and Alcoa of Australia – which is an AIHS gold corporate member. Alcoa has demonstrated an impressive record in OHS performance over the years, and Spadaccini explains why Alcoa is partnering with the Institute and also explores a number of ways OHS can best advance the profession. Historically, the role of safety was a policeman to drive compliance to legislation and company policy – but these days have passed. “Today, the role [of the OHS professional] has broadened to include being a consultant, consensus-builder, advocate, tutor, coach and mentor”...

“Today, the role [of the OHS professional] has broadened to include being a consultant, consensus-builder, advocate, tutor, coach and mentor”...
4 future health and safety issues

Changes in working practices, demographic shifts, technology and the environment are creating new OHS, according to a recent report from the International Labour Organization (ILO). Growing challenges include psychosocial risks, work-related stress and non-communicable diseases, notably circulatory and respiratory diseases, and cancers. The report, *Safety and Health at the Heart of the Future of Work: Building on 100 years of experience*, said more than 374 million people are injured or made ill every year through work-related accidents, and it is estimated that days of work lost to OHS-related causes represent almost 4 per cent of global GDP, in some countries as much as 6 per cent. The report highlights four major transformative forces driving changes and points out that all also offer opportunities for improvements. First, technology, such as digitisation, robotics, and nanotechnology, can also affect psychosocial health and introduce new materials with unmeasured health hazards. Second, demographic shifts are important because young workers have significantly high occupational injury rates, while older workers need adaptive practices and equipment to work safely. Development and climate change may increase air pollution, heat stress, emerging diseases, shifting weather and temperature patterns that can bring job losses. Finally, the increase in work flexibility may enable more people to enter the labour force, but may also lead to psychosocial issues and excessive work hours.

products that aren't subject to an Australian design, safety or performance standard, according to a recently released ACCC report *Quad bike safety: Final Recommendation to the Minister*, which said there have been about 130 quad bike-related fatalities in Australia since 2011, which equates to more than one a month. Six people daily are taken to emergency departments, with at least two of those admitted with serious injuries, according to the report, which said this costs the Australian economy at least $200 million per year. “This does not include intangible costs associated with fatalities and injuries, including but not limited to the pain and suffering of family, friends and Australian communities,” said the report. The ACCC estimates there are around 186,000 quad bikes in use across Australia and more than 44 new quad bikes are sold every day. However, the ACCC said in its report that these vehicles are unusual in that, unlike cars, trucks, tractors and motorbikes, they are not subject to any regulation, and do not have to meet any minimum safety or design standard prior to supply. “The design of quad bikes is deficient – their performance characteristics are limited to the pain and suffering of family, friends and Australian communities,” said the report. ACCC versus quad bike manufacturers

Quad bikes are the leading cause of fatalities in Australia of all consumer

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06 AIHS NEWS
Introducing our new name:

Introducing our new name:

The Safety Institute of Australia is now known as the Australian Institute of Health & Safety

A little forward thinking goes a long way

Over the last four years the SIA has been transforming the way we work, and we’ve now changed our name and brand to reflect that change.

And so… welcome to the Australian Institute of Health and Safety (AIHS). Over the next year you’ll see changes happening as we move into our new style in a way that ensures you still know where we’ve come from.

What will the new-look AIHS do?

We’ll do everything the SIA has done, and more. The AIHS will continue driving change in education, training and standards for the profession. We’ll keep up our work to give voice to the expertise of the profession and have strong input into health and safety policy and legislation. We’re also thinking forward to the workplaces of the future, and getting the health and safety message out to the whole community.

If you work in health and safety, we invite you to join the thousands of health and safety people who are working together to strengthen our growing profession, building an organisation that will be there when the future arrives.
Kym Bills: a collaborative approach to growing the College of Fellows

OHS Professional speaks with Kym Bills, the new chair of the Australian Institute of Health & Safety College of Fellows, about the evolution of the OHS profession, opportunities and challenges for practitioners, and his plans for the College of Fellows

How do you see the OHS profession evolving over the coming 3-5 years?

In answering this, we should remind ourselves that the Institute has defined ‘profession’ broadly and is intentionally raising the profile of occupational and workplace health in addition to safety. While practising members who have gained generalist WHS certification comprise the core of the Institute, we embrace all health and safety professionals including regulators, managers, lawyers, ergonomists, hygienists, process safety and high-risk specialists, academics, those who assist with return to work, and many others.

In the next three to five years I see generalist OHS/WHS professionals building on certification with robust CPD and working collaboratively with domain specialists to provide the best possible targeted advice. The noble goal of reducing death, injury and disease, societal expectations of expertise and ethics, the changing nature of work, and the threat of litigation, will all help drive the need to be more professional and responsive to organisational and client requirements. Our international role with INSHPO (Nathan Winter is president-elect) and the evolving Body of Knowledge and links to the Global Capability Framework will assist in this evolution.

The Institute’s vision is to have safe and healthy workers in productive workplaces. As a former economist, I see productivity as critical for achieving WHS and other societal goals. Stripping away unnecessary paperwork while ensuring major risks are understood and hazards controlled will continue to be a key aspect of the evolving profession, increasingly in combination with greater use of data, artificial intelligence and robotics. Communication remains fundamental and we must be mindful of workforce literacy, numeracy, ESL, learning style and cultural issues that can impede comprehension, and the impact of greater use of casual, contractor, consultant and outsourced workers.

What are 2-3 key opportunities for the profession in the process?

The Royal Commission into Financial Services and other recent major inquiries have seen a shift towards tougher enforcement of laws and regulations when behaviour fails short of what is required. Penalties and prosecutions from company boards downwards will increasingly be part of the corporate landscape. Health and safety is no different, with the Boland review of WHS legislation recommending tougher penalties including new industrial manslaughter laws. The profession has an opportunity both to influence policy and to provide tailored advice and solutions for concerned directors, managers and their organisations.

“To remain relevant, health and safety professionals must be evidence-based, responsive and agile”

Health issues will require a greater response from OHS professionals. These will include the familiar soft tissue damage, slips, trips and falls, chemicals, asbestos and dust diseases more generally (e.g. silicosis), and mental health conditions including from bullying and harassment. The well-demonstrated positive impact of employment on health will continue to see member engagement with return-to-work programs, thereby assisting individuals, employers and productivity. Our ageing population will both choose and need to work longer. And once in aged care, WHS issues for our professional advice will arise for both residents and carers whether remaining in private homes or in nursing homes and other residential facilities.

With ISO 45001:2018 now adopted in Australia, it provides an excellent opportunity for the profession to use as a robust framework to assist employers with WHS compliance and in integrating health and safety with other business processes. We should also be positively influencing the Australian Work Health and Safety Strategy to succeed the 2012-2022 Strategy.

What are 2-3 challenges facing the profession along the way?

Our members’ ageing demographics and the varying quality of non-degree WHS training and education are challenges. If one of our members provides poor advice and a workplace fatality or serious injury occurs, this could rebound on the Institute and its members more broadly in a coronial inquest if we cannot demonstrate robust accreditation, certification, mentoring and continuing professional development processes. Most of us are challenged in some way by the rapid pace of technology, ‘disruption’ and the changing nature of work. To remain relevant, health and safety professionals must be evidence-based, responsive and agile.

If we are to engage with boards and senior management of major companies, and with public service and other organisational leaders who have major health and safety responsibilities, we must truly understand our audience and the serious competing pressures they face. In addition to direct contact, national bodies
like the Australian Institute of Company Directors, the Australian Industry Group and the Institute of Public Administration Australia and their state-based constituent bodies provide a possible pathway to meet this challenge. Of course, appropriate engagement with relevant unions is also an important challenge. Collaboration with the right partners at the right time to advance our vision is both a challenge and an opportunity.

How do you see the skillset of the OHS professional needing to evolve to meet the above challenges and maximise opportunities?

With more and more portfolio work, individuals will have greater responsibility for their own professional development and the Institute will have a role to help them undertake and record this. With greater use of computers and robots, OHS professionals will need to manage those technology interfaces with both hard and soft skills. Hard skills will include analysis of data and ensuring algorithms are meaningful, while soft skills will include working with other professionals and teams that may be located around the country and overseas. Fluidity of work, including work from home, can bring family and productivity benefits for workers and employers and reduce exposure to road trauma and congestion, but also OHS concerns from ergonomics to mental health issues resulting from isolation. The generalist professional will need to review and consult carefully and be systemic in their analysis and advice.

How do you see OHS policy needing to change and evolve as well?

I hope to finally see harmonisation of WHS legislation across Australia and increased consistency of compliance and enforcement. Reducing unnecessary red tape – whether legislated or self-imposed – also needs to be prioritised based on good evidence-based advocacy and advice by the Institute and members. If the Institute wants a seat at the policy table, it must have sensible policies that are independent, proactive and evidence-based rather than self-serving, and be prepared to engage with ministers, senior public servants and regulators. This is not a task for amateurs. The AIHS’s chair and CEO, key directors like Peter Henneken, and the College’s policy chair, Leo Ruschena, are all well-equipped for this, but more hands on deck will be required.

What role do you see the AIHS and College of Fellows playing in the above?

The 200 or so Fellows who comprise the College of Fellows are the Institute’s thought leaders and repositories of wisdom and should be a driving force for the Institute. I have plenty of ideas through which the College can help the Institute and its membership more broadly. As with all my past roles, I want to collaborate with others of like mind inside and outside and aim for excellence. Priority number one for me is to engage with existing AIHS Fellows and see who might have the energy and who is able to make the time commitment to do more to help. Priority number two is to cast the net widely for new Fellows who are leaders in their health and safety fields and are prepared to work with and in the Institute. I know there are many who in recent years, for various reasons, may not have been encouraged to do so as much as we would wish.

Membership fees and other income allows for only a small (wonderful but over-stretched) secretariat, so the Institute will only grow and develop if it harnesses the expertise of volunteers committed to improving workplace safety and health.

The College of Fellows must take a leading role in advancing high professional standards, research, education and advocacy. In particular, the College executive currently comprises chairs of subcommittees on Ethics, Policy, Australian/NZ Standards, Awards and College membership, CPD, Mentoring, and the Body of Knowledge. If you have particular expertise and energy to make a difference through the College, please send me a message through LinkedIn and I will do my best to find time to explore what may be possible. Regarding prospective fellowship, an online process is accessible now on the Institute’s website.

What role do you see yourself playing in this?

Of course, I won’t be a one-man-band and the AIHS board, CEO/secretariat and the College executive will be crucial. I have had many years working in and with Commonwealth and state governments and regulators and hope that this can assist the College and Institute. When I set up and led the Australian Transport Safety Bureau for its first decade, I sought world-class excellence and was pragmatic in finding resources and collaborations and redesigning systems needed to achieve safety outcomes. Gender balance and diversity and succession planning were important elements too. Much of this is transferable to the Institute.

I have led teams of safety professionals and served on a range of government boards since becoming a Commonwealth Public Service Division head in 1994. It was relatively easy having the positional power to make decisions. My service on not-for-profit boards and working with volunteers was different and often harder. Most recently, I was employed by the CSIRO to run an unincorporated research joint venture for seven years where collaboration and outcomes from scientists, engineers and other academics relied on vision, the power of personality and obtaining new funding. I hope that this experience will also transfer well to the College. My experience with the WA Branch of the AIHS and now the SA Branch will help me remain grounded.

As a recent retiree from the paid workforce, I remain passionate about health and safety and will endeavour to encourage others to make a difference. In most cases, as well as giving back and serving others, volunteering leads to new friendships and personal development. I hope to devote at least three to five years to the Institute and ensure that there are many who can take my place.

About Kym Bills

Before his recent retirement, Kym was CEO of the Western Australian Energy Research Alliance for seven years employed through the CSIRO. He was previously Foundation Head of the Australian Transport Safety Bureau from 1999 to 2009. During 2009, Kym was appointed by The Hon Martin Ferguson and The Hon Norman Moore to review the Australian offshore petroleum industry safety regulations in light of the 2008 Varanus Island explosions, and he was subsequently Project Director of the National Mine Safety Framework WHS reform process. Kym has had a rich and long-spanning history around the issue of health and safety as chair of the Australian Centre for Natural Gas Management, the National Road Safety Strategy panel, the International Transportation Safety Association and the Commonwealth/State/NT Marine & Ports Group. Kym is a Fellow of seven professional bodies including the AIHS and has also served in the support of the Institute previously as the branch chair of our WA Branch and has been particularly supportive of the AIHS’s policy work.

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Alcoa: staying ahead of the OHS curve

OHS Professional speaks with Danny Spadaccini, director of EHS for Alcoa Alumina and Alcoa of Australia, about the latest trends in OHS, implications for the profession and what Alcoa is doing to stay ahead of health and safety challenges

What trends do you see ahead for OHS over the coming 3-5 years, generally and within Alcoa?

There are three key areas for the future:

1. Technology: We have everything from smart phones, lights, fridges and cars now. A significant project for Alcoa currently is the automation of valves and screen boxes – removing our employees completely from the line of fire. Alcoa is currently using drones for tank and pipe inspection. This removes the need for an employee to access either confined spaces or quite often plant at a significant height. We are now using apps in the field for data entry and collision avoidance systems at our mine sites. This is the tip of the iceberg; in broader industry, Smart PPE that measures and identifies surroundings is being developed, training using 3D and augmented reality goggles, PPE that monitors the physical condition of an employee and robotics which will manage high-risk tasks. Technology will make a significant difference and is only limited by our imagination.

2. We are developing a greater understanding of psychosocial hazards and substance abuse in the workplace. This is a concern for many occupational safety experts. The significance of these issues, and their effects on the individual – on safety, absenteeism and productivity – is driving change to how we manage this. This is an area where regulators and industry alike are working to address and manage these issues.

3. Organisations are recognising the importance of hiring safety professionals to manage safety. As community expectations, legislative change and transparency of safety performance increases, organisations are looking for the appropriate employees to manage safety.

What are the main challenges facing the OHS profession?

The profession has advanced globally a long way over the past 20 years. However, it still needs further definition. If you ask a person when they are ill who they would go to, most would say a doctor. Safety requires a significant set of competencies to manage, and yet in many instances, a safety professional is not sought out to manage safety. This is one of our challenges – to ensure that we communicate the value an appropriate safety professional brings to an organisation.

A second is the misconception that there is a single silver bullet that mitigates or manages all OHS risk in a business. Safety is a combination of how we manage people, process, systems, work environment, programs and the broader organisation. No single program will miraculously improve safety or change a risk profile. We need to continue to communicate the professional practice of safety.

What are the best ways OHS can advance the cause of the profession?

We need to continue to communicate the value that the safety professional brings to the table. Historically, the role of safety was a policeman to drive compliance to legislation and company policy. The days of the safety policeman have passed. Today, the role has broadened to include being a consultant, consensus-builder, advocate, tutor, coach and mentor. There is a wide range of competencies and skills needed to succeed in today’s workplace. These include hard skills such as knowledge of systems, process and chemistry. The skillset for success also includes soft skills such as communication, leadership, general business acumen and a technical understanding of your organisation’s core business. Important behaviours include customer service, problem solving, needs analysis and risk communication.

How is all of this coming together in Alcoa? What are some examples?

Alcoa employs graduates or undergraduates (with up to six months left of their university studies) to work in health and safety and other areas. In conjunction with the SIA we are offering discounted SIA membership to those graduates under the Graduate Program for the first 12 months, as well as access to Certified OHS Graduate Professional status if they meet certification education criteria. Over the past three years Alcoa has targeted two key programs – critical risk management and human performance. Critical risk management has been based upon the International Council of Mining and Metals guidelines and has increased our focus on the critical risks and their controls in our workplace. Human performance is a signature safety initiative that educates employees in the way people, programs, processes, the environment, organisation and equipment collectively influence safety. The initiative has been implemented globally across Alcoa and is used daily by employees to ensure tasks are completed as intended, the first time, with less chance of error.

Why has Alcoa chosen to partner with SIA to become a gold corporate member?

Alcoa is committed to continually improving its safety performance. Partnering with...
“This is one of our challenges, to ensure that we communicate the value an appropriate safety professional brings to an organisation”

About Alcoa of Australia

Alcoa of Australia operates one of the world's largest integrated bauxite mining, alumina refining and aluminium smelting operations. Alcoa of Australia is 60 per cent owned by Alcoa Corporation and 40 per cent by Alumina Limited. Alcoa employs approximately 4275 people directly, predominantly in regional Australia, and the company produces almost 45 per cent of Australia’s alumina and approximately 13 per cent of Australia’s aluminium.

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With the growth in understanding of risk management over the last 11 years, so too has the expectations from hiring managers requiring the selection and retention of competent practitioners to safeguard their businesses.

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Why industrial manslaughter is not needed

If industrial manslaughter laws are to be introduced, the Institute’s focus is on the need for them to be nationally consistent with links to criminal law resolved. However, there is still a lot of energy in the debate about whether they are required in the first place. John Darcy makes his case that introducing them on ideological grounds makes no sense when workplaces are getting safer.

Last year the ACTU claimed in a social media post that they had already won the war in their campaign to have the offence of industrial manslaughter introduced into state and territory OHS laws.

The unions had been bolstered by the Queensland Palaszczuk government having legislated for industrial manslaughter and believed that as one domino had fallen that other state Labor governments would follow suit. The union movement is also using the national review of model work health and safety laws to push their case for industrial manslaughter.

The Brack government promised the Victorian union movement that they would legislate for industrial manslaughter as part of their election commitments in 2002. Industry associations united very strongly to oppose industrial manslaughter being introduced into the OHS Act 2004. I was subsequently involved in the drafting of the portion of the OHS Act that was inserted as a substitute for industrial manslaughter – the offence of reckless endangerment.

The CFMEU recently latched onto a Queensland manslaughter conviction of an employer for the death of an electrical apprentice to push their case for industrial manslaughter. An employer was also charged with manslaughter following a double fatality tilt-up incident that occurred in October 2016. Both employers were charged by Queensland police under the state’s Crimes Act. There is no legislative gap – employers can already be charged with the offence of manslaughter for a workplace incident.

A look at existing provisions

The offence of reckless endangerment under the OHS Act provides that ‘any person’ (i.e. not just an employer) that recklessly engages in conduct that places, or may place, a person in danger of serious injury or death is guilty of an indictable offence that carries a maximum five years imprisonment or the maximum financial penalty applicable under the Act.

Since 2004, only one employer has been charged with the offence of reckless endangerment; during the same period, more workers have been charged with the offence (WorkSafe has subsequently downgraded the charges).

The offence of industrial manslaughter requires that the person’s conduct must cause the death of the worker and they must also be negligent in causing the death of the worker by their conduct. This is a much
tougher offence to prove than reckless endangerment. The marked difference between the Queensland industrial manslaughter provisions and the reckless endangerment provisions in Victoria, and in the model WHS Act, is that Queensland provisions are aimed solely at the employer.

The offence of industrial manslaughter in Queensland provides for 10 years jail and a $20 million maximum penalty. This is ideologically driven legislation.

Breach of duty under the OHS legislation is a criminal offence, triable on indictment. But in important respects, an OHS offence differs from a breach of the general criminal law.

First, the offence is committed whether or not harm is caused; it is the failure to provide a safe working environment which constitutes the breach. Second, proof of a breach of duty does not depend upon proof of a relevant state of knowledge or intent. With the offence of manslaughter it is the causing of a death which constitutes the offence, and that properly remains within the province of the general criminal law.

The introduction of the offence of industrial manslaughter is even less warranted now than it was in 2002.

**Industrial manslaughter and the model Work Health and Safety Act**

Under the model Work Health and Safety Act, which currently operates in all jurisdictions except Victoria, senior officers have a legal responsibility to exercise due diligence. Due diligence requires them to take a proactive role in ensuring that their business complies with its duties. Failure to ensure due diligence attracts significant personal liability.

Since officer due diligence was introduced very few employers have been charged with the offence, and typically, when charges have been laid, they have been laid against small business owners on top of the charges laid against the business. Regulators have effectively kicked the same small business owner twice; this was never the intent of the provisions.

In announcing the Queensland industrial manslaughter laws, the Queensland industrial relations minister Grace Grace claimed “companies won’t be able to hide behind elaborate corporate structures to evade their responsibilities”. Officer due diligence provisions exist for that exact reason – to ensure that officers can be held accountable for the failings of their organisations. Again, there is no legislative gap.

Enforcement of the law should not wait for a death or serious injury, and there is plenty of scope for regulators to target officer liability well before a death occurs under the model laws.

The Victorian union movement will be hoping that recommendations will be made for the introduction of industrial manslaughter under the review of the national model WHS laws and that the Andrews government will introduce the offences.

Victoria has achieved record low injury rates every year for the last five years. Workplace fatalities have been halved from the levels recorded 20 years ago. It would make absolutely no sense at all to introduce retrograde, ideologically driven laws when the state’s workplaces are actually getting safer.

John Darcy is a safety and workers’ compensation professional with 30 years’ experience and was most recently head of occupational health & safety for the Master Builders Association of Victoria.
More than just change fatigue

Poor psychological safety costs Australian organisations an estimated $6 billion per annum in lost productivity, according to Safe Work Australia. Workers with psychological injuries typically require three times longer to return to work than for other injuries, and workplaces with poor psychological working conditions also accrue 43 per cent more sick days per month.

Dr Peta Miller, senior lecturer at UNSW and former Safe Work Australia special adviser, explains that while psychological health and safety is now getting more attention and general guidance is being developed, there are some psychological hazards and risks that warrant closer scrutiny.

Potential psychological health and safety risks when new technology is introduced deserve more attention, Miller observes. “It is not just the quite justified anxiety people have sometimes about their own job security, but also the cognitive and emotional loads and resulting stress from trying to keep up.”

“As a species, we have consistently shown our capacity to evolve and cope with change – including technological change – but I wonder where the tipping point might be when the actual pace and volume outstrip humans’ innate capacity to cope,” says Miller. “While there are individual differences in our ‘change resilience’, is there a point at which people, not just those we currently think of as vulnerable like people with existing mental illnesses, but a point when it’s just going to be too much for most of us to cope with?”

The motivations for introducing new workplace technology will vary enormously, but Miller argues in our excitement about the productivity opportunities, real or imagined, we need to not forget WHS fundamentals. “If the new technology is well designed, it actually incorporates good human factors and user-centred design, and the all-important transition from the old to the new ways of working are well managed, then there can be great upsides,” she says.

Miller argues that “all too often, however, workplaces do not do truly comprehensive WHS risk assessments when planning to buy new technology or IT software”.

“I worry that genuine consideration is not always given, for example, to the additional workloads and stress from introducing new technology. It is not just a case of unreasonable change resistance by the workers; there can be real issues for them.” When asked about the examples of WHS risk assessments gaps, Miller notes the likely increases at least initially in cognitive and emotional loads, and so potential stress associated with learning to operate new tools and the safety procedures and working in unique new teams. “Sometimes new team members may be the technology itself,” she says.

“While in traditional industry, robots have been around for a while, the professional service robots and co-bots will increasingly also be part of our workplaces. We hope these have the inbuilt safety controls and functions described in ISO 10218 and 15066. But while these standards address physical safety, they do not focus on the psychological hazards and risks,” Miller points out.

“Here at UNSW, Dr Jai Galliott, one of our military robotics experts, is contemplating human technology interfaces and what safe workloads might look like in both normal and stressful operating environments,” she says. “Research currently being undertaken by Associate Professor O’Neill and I is confirming WHS professionals remain concerned about additional workloads associated with poor work design, including rushed-over, optimistic introduction of new IT, perfunctory user testing, and training not crafted to suit individuals’ learning styles is adding to workers’ stress.”

Good human technology interfaces, whether for existing or new plant or IT systems, are a critical contemporary WHS issue, she contends. “When people are thinking about mental health issues in the workplace, I think we justifiably think about workplace conflict and poor team communication, but do not often stop to think deeply enough about stressors like the technology not working well or as intended,” she argues.

Miller says organisations and OHS professionals generally need to pay far more attention to cognitive and perceptual loads – especially if new technology is being introduced. “We get plant safety and we get biomechanics, we get chemical safety and we get stress in a broad sort of sense – but we’re not looking deeply enough at the...
“All too often, however, workplaces do not do truly comprehensive WHS risk assessments when planning to buy new technology or IT software”

human–computer technology interface and what that means to cognitive and perceptual loads, and how that, in turn translates into fear, anxiety, stress and fatigue,” she says. “Health and safety professionals often come in after a WHS incident and hear management grumbles about change resistance and poor performance. But we know stress and poor performance are linked and how poor design of work and the technology interfaces can lead to these,” explains Miller. Miller advocates for better design of worker training to operate any new technology, especially when it has unusual features. Despite the evidence, she argues that in practice, not enough training in the workplace adequately considers the operating and learning context including the workers’ cognitive and emotional loads or uses evidence-based learning principles.

The diversity and speed of technological innovations, and the increasing need for sometimes quite specialised skills to assess the adequacy of human technology interface designs is a challenge for regulators and OHS professionals alike, Miller observes. “The reality is our regulators will never be adequately resourced to keep on top of the WHS risk associated with every new technological innovation. Australian work health and safety legislation often lags well behind industry practice and the evidence,” she says.

“As we know, Australia’s legislation is largely outcome based and good WHS risk management sits at its core. So, if the risk assessment actively includes the physical, cognitive, perceptual and emotional hazards and risks – and in enough detail – I think the model can work,” she claims. “That said, a common challenge we all face is not just doing single hazard or task-based assessments, but holistically and systematically considering the hazards and risks associated with the whole job within the evolving organisational context.”

Dr Miller notes that although most WHS professionals can do an ordinary WHS risk assessment well, not enough have the skills to comprehensively consider the human factors associated with new technology. Given existing and emerging technologies, OHS professionals will need to build the skills to provide competent, timely advice around these new issues. Miller says it is important our professional education systems and curriculum considers psychological health and safety and hazards and risks which may be present in human computer and technology interactions. She recognises the important role professional associations like the AIHS will play in challenging us to build our skills.

Miller argues as professionals we need to actively advocate for organisations to build in appropriately comprehensive WHS risk assessments and seek, where required, specialist advice whenever they are procuring new technology and systems. As individuals we need to know our professional limitations and, where required, work in collaborative, multidisciplinary teams.

“While there is now lots of generic workplace mental health guidance and a range of wellness programs, the vast majority are focused on secondary and tertiary interventions. We urgently need groups like Safe Work Australia to develop evidence-based primary prevention guidance, like on safe design of cognitive work, workload management and human–technology interface,” says Miller.

“It is pleasing to see the new ISO 45001 pays greater attention to psychological hazards and risks and that this will be unpacked in greater detail in an upcoming supplementary publication led by UNSW Dr Carlo Caponecchia. I really hope the new international guidance also includes more on human–technology interface and managing the psychological hazards and risks,” she says.

Peta is a senior lecturer-practitioner at UNSW, Canberra, specialising in human factors and ergonomics. She has over 35 years’ experience in both the public and private sectors in work health and safety (WHS) research, policy and practice. Her research focus is WHS, work design, psychological and musculoskeletal injury prevention, culture and metrics, and she is also a Chartered General OHS Professional (AIHS).
Lendlease: setting a global standard in safety

A holistic and concerted effort to improve OHS across Lendlease’s global operations has paid dividends, with significant improvements in safety outcomes. Craig Donaldson speaks with the group’s head of health & safety, Chris Doyle, about its strategy and how Lendlease has lifted its OHS game at all levels.

Lendlease is a leading international property and infrastructure group which creates, funds, builds, delivers and manages major urbanisation and critical infrastructure projects predominantly across Australia, Asia, Europe and the Americas. Headquartered in Sydney, the company employs approximately 13,000 employees and has a market capitalisation of $11.4 billion, and last financial year it generated almost $1.25 billion in revenue and $793 million in profit after tax.

OHS is one of the group’s key strategies for driving long-term value in the business, and it has experienced significant improvements in safety outcomes and results over the past decade. Its group LTIFR rate (based on a rate of instances per one million hours worked), for example, currently stands at 1.8 in the financial year-to-date (down from 6.6 in FY03), while its group critical incident frequency rate (CIFR) currently stands at 0.86 (down from 2.57 in the first quarter of FY13). The CIFR is an indicator unique to Lendlease and is classified as an event that caused, or had the potential to cause, death or permanent disability.

These outcomes are the result of a concerted effort across the group to improve OHS. From 2001 to 2010 the company was averaging about six fatalities per year, and a decision was made internally that the company needed to improve its strategy and practice around OHS and better align with where it was heading strategically as an organisation, according to Lendlease’s group head of health & safety, Chris Doyle. “As a group, we have been
“We need a risk mindset that is unrelenting in pursuing the safest outcomes in how we design, procure, plan, deliver and operate across our entire business”
Lendlease revised its global minimum requirements in 2015 and shifted away from a compliance-based approach to more of a risk-based focus. “This was about having a forward-looking approach where we manage the front-end risk on projects, rather than leaving it to day-to-day management in the field for our construction workers and asset managers in delivery. We wanted to de-risk projects even before the bidding and conversion phases,” says Doyle.

The global standards are customised for local markets and customers around the world and interpreted into relevant languages, according to Doyle, who says it is important that they take ownership of the standard in order for it to be effective. “It’s almost like a constitution in that way, so it is readily adopted by the business all around the world.”

Improving and engaging leadership

Around 2010 Lendlease implemented a leadership program called ‘uncompromising leadership’, which Doyle says was “about putting our ‘hand on our heart’ and asking if we were really adhering to our own global standards across all our geographies and contracting arrangements”. This program was the catalyst for a business decision to discontinue operations and contractor models in certain markets and scale back business in others. “When it came to contractor and project management environments in steadily shifting our main focus away from project and construction management which we focused heavily on over the past decades across some 40 countries, and we are moving into more sustainable areas of growth such as urban regeneration, gateway cities and large scale projects as part of our business strategy,” he says. “Our approach to health and safety needs to align with this, and we have reached a number of key milestones in this journey.”

In 2008 Lendlease introduced global minimum requirements for the first time, and these set global minimum standards applied in all the markets the company operates in. These standards extend to physical safety and people’s health and wellbeing. “This was a significant shift and stretch for us at the time,” says Doyle. “These requirements set out the minimum environment, health and safety standards and were designed to control risks associated with our operations and apply to the entire lifecycle of a project – even before a decision is made to bid for a job.”

“There is almost an individual approach that you have to take with change management in each business to get the desired outcome”
some countries, we didn’t feel that they could meet our global minimum requirements, so this was another key milestone,” he says.

In 2014 Lendlease wanted to extend its leadership program down to front-line leaders, so it developed front-line leader workshops which are open to Lendlease front-line leaders as well as supply chain front-line leaders on any projects. “This was partly around reinforcing culture and behaviour expectations as well as avoiding assumptions that front-line leaders are skilled in leadership and have experience in directing work and change management in the field. That’s been a dedicated program for us, which has resulted in success and a lot of positive feedback,” says Doyle.

Strong leadership of health and safety – particularly at the board and global leadership team level – has been instrumental in making safety a top priority across the group. “Without that level of inquiry and leadership, it’s really challenging for people in both the business and the health and safety function to make a difference,” he says.

“Over the years, I’ve seen lots of people from health and safety come and go from Lendlease; I’m generally of the opinion that almost all of them, for the right role, would come back because of the way health and safety is valued and prioritised here, compared to a lot of other organisations. That’s something I think is quite unique about the organisation.”

### Lendlease’s 5 pillars of value

There are five pillars which drive long-term value in the business of Lendlease:

**Health and safety:** Everyone has the right to go home safely to their families, friends and loved ones, every day. Lendlease remains committed to the health and safety of its people, subcontractors, and all of those who interact with a Lendlease place.

**Financial:** A strong balance sheet and access to third-party capital enables Lendlease to fund the execution of its pipeline and deliver quality earnings for securityholders.

**Customers:** Lendlease adopts a collaborative approach to relationships, delivering high quality products and services that respond to customers’ needs. Satisfied customers drive long-term value.

**People:** Lendlease’s people are the greatest contributors to success and underpin the ability to deliver its vision to create the best places.

**Sustainability:** Lendlease has a proud history of giving emphasis to environmental, social and economic outcomes. It is essential it continues to evolve its approach, to keep pace with global trends and integrate this thinking into business strategy.

Source: Lendlease FY18 Annual Report

### Reviewing health and safety

Lendlease is currently undertaking a group-wide review of how it approaches and manages safety across three key areas, the first of which is its global minimum requirements. “While we believe these standards provide an appropriate foundation to manage critical risk events, this review looks at the means and methods we use across our various jurisdictions and how their application can impact safety performance,” says Doyle.

The second area the review covers relates to culture and climate, according to Doyle, who explains that organisational culture and other climatic factors can impact the way people approach safety. “With the help of an independent expert, we are examining cultural inhibitors and enablers, in the context of driving further safety improvements,” he says.

“This has been a great exercise from Lendlease group approaching each region and each business differently, because of the inherent and different cultures based on a range of factors such as work type. There is almost an individual approach that you have to take with change management in each business to get the desired outcome.”

The third area being examined is risk perception and risk tolerance, particularly as they relate to field-based decisions. Lendlease’s global minimum requirements encourage a hierarchy of risk control in how safety is
managed, however, Doyle acknowledges that perceptions and tolerances can vary. “We need to strive to meet a consistently high standard in how risk controls are deployed. We will also review the way we identify, report and manage risk as it relates to safety in both the planning and delivery of activities across our business,” he says.

“Lendlease has also launched a group-wide education effort with supervisors called ‘engage and influence’. “More broadly, we are encouraging a greater enquiry-based approach to risk, through continually probing situations by asking the question: ‘What’s the worst that could happen?’ This approach requires a commitment by our people and our supply chain teams to embrace this way of thinking, not just in the field, but across the full lifecycle of what we do. We need a risk mindset that is unrelenting in pursuing the safest outcomes in how we design, procure, plan, deliver and operate across our entire business,” he says.

Implementation and adoption of strategy
There have been a number of keys to operational success in improving safety outcomes, according to Doyle, who explains that one of these has been getting leaders to visibly demonstrate safety leadership in visiting project sites. “This is obviously important, as is understanding

“I’ve seen lots of people from health and safety come and go from Lendlease; I’m generally of the opinion that almost all of them, for the right role, would come back because of the way health and safety is valued and prioritised”
the role they have at the front end of projects. A lot of non-safety decisions have to be assessed against potential safety impacts. So, where we have an opportunity for discussions with our team, clients and supply chain around cost, program design implications and the resourcing strategy for a project, these can all have significant downstream impacts on the time and resources available to our project teams and delivery,” he says.

“This has been one of our key focuses in setting up every project for success and having a better front-end focus. This has been particularly important for us over the past five years, and we know this has made a big difference.”

In terms of the focus on critical incidents, he says this is about adopting more ‘black box thinking’ and learning from events. “Even though no one is hurt in the majority of critical risk incidents, the most significant learnings might be around temporary works or structures, high voltage electricity or the movement of people and plant. Some of these significant near misses provide great insight and learning opportunities for us,” he says. “So, with the cultural focus around front-line leaders, they are able to report back to the business and feel comfortable in saying that there may be an issue with a project in terms of a potential compromise around safety. The cultural review is clearly identifying safety as a strong priority in the business.”

Another important element in this has been fostering a genuine culture of care across Lendlease, and Doyle says this manifests itself in a number of ways, “from approved welfare facilities or giving workers a voice – this has been a definite positive”, he says. “In some markets we probably do it better than others, because there is such a variety in what that means in different markets in terms of care for workers, and we still have a way to go with this.”

Challenges and lessons learnt

In its journey to improve OHS over the past 20 years, Doyle says there have been a number of challenges for Lendlease and lessons learnt in the process. “This has shown us that sometimes the pendulum can inadvertently swing between process and culture one way, or too far back the other way.”

“At any given time, a business may feel that it’s operating too much in the culture space and not enough in the process discipline. Yet another business may feel the exact opposite. It is important to understand that these are not mutually exclusive. Culture and process are two separate things, but they are tied together; there is a thread between them. So, we are learning how to put these two together and we’re trying to strike a better balance in the business,” says Doyle.

“While process is part of culture, it is important not to be onerous on compliance or meaningless clipboard checks. This balance is more about looking ahead and adding value, as opposed to stopping work on a daily basis because we didn’t have that discipline before workers got to site.”

Metrics, lag and lead indicators

Lendlease employs a range of both lag and lead safety indicators to track safety performance, minimise risk and help improve OHS outcomes. In 2012 Lendlease introduced a global reporting platform, making it one of a few multinationals in which every single operation globally reports on the same platform – providing visibility across all of its businesses around the world. This was coupled with a shift in safety metrics, with the introduction of a group CIFR in addition to existing metrics including its LTIFR. “An analysis found that
for about 85 per cent of lost time injuries across the organisation, the worst outcome was the lost time injury. We had a large catalogue of significant events, particularly around fallen materials or around temporary works, where the outcome could have been so much worse – yet no one was injured,” says Doyle.

“So, part of the reason for a group focus on risk events with the potential for fatal or permanently disabling outcomes was our reporting of critical incidents to the board and in annual reports, which elevates the focus of those critical incidents and their types, and to track these alongside our injury statistics. This has helped drive improved discipline around high risk activities in particular.”

For lead indicators, Lendlease measures a range of factors including safety observations, audits and the close out of action plan lists. “There are other things around lead indicators including the way that we review bids and then monitor our design and procurement approach. If we can get some greater consistency and measures around this, we get better outcomes in terms of the way we de-risk projects,” he says.

“Sometimes other project indicators are a good lead indicator for health and safety. For example, if a project has moved in its delivery program or that’s been tightened, or if a process needs to be conducted to take cost out of a project, or if the resourcing strategy has required adjustment – then these are probably good opportunities for a project to be reviewed from a health and safety perspective before things might go wrong. Factors such as tight or accelerated construction programs may carry a greater risk of incidents or critical incidents in our world, so looking at non-safety indicators is an important next step for us as well.”

Lendlease also conducts a range of benchmarking exercises internally and externally. However, Doyle explains that there are multiple challenges with external benchmarking as it includes every single person that works on its projects – and not all its peers or competitors do the same. “We bundle up our information to a group total and we’ve got different businesses in Australia and overseas, so on a like-for-like basis we probably don’t review ourselves against Australia-only data as a matter of course. We do more in communication, shared learning and information on standards/approach with other businesses, as opposed to a straight comparison of LTI data,” he says.

“The organisation and I have probably got some personal views on LTI data and how each organisation measures them. For us, it’s important to be consistent in terms of how we measure it, and we just want to make sure that we’re improving our approach towards eliminating them.”

Future plans
The main focus for Lendlease moving forward is to remain fatality-free. Doyle explains that Lendlease went without a fatality for four years – then experienced four in 14 months, the last of which occurred in May 2018. “We’re clear that we don’t want to have any further fatalities, and we also want to continue to decrease critical incidents. Five years ago, we had 320 critical incidents and in FY18 we had 120 – and tracking downward this year. On all the lag indicators we want to make sure we are trending the right way. We are looking to move towards more of a balanced scorecard, where it’s not just about incident and injury numbers but how well we are setting up our projects for success.”

Doyle says that the property and construction industry is different to others, in which office workers can more readily work flexible hours to help coach their kids in football, have meals with their family or do less weekend work compared to those on construction sites. “Parts of our industry are a bit slow to move in this regard compared to other industries, so I think opportunities for people to have more flexible hours to suit their lifestyle is also important to working safely,” he says.

Looking forward, there is also an opportunity for
Lendlease in the application of technology to potentially eliminate certain risks – particularly high-risk ones in areas such as scaffolding, for example. “We have to use a lot of scaffolding and temporary works when it comes to concrete frames, where people face risks working at height. So, there is a combination of things as an industry that we have got to look forward to in the next five years to be part of that change,” says Doyle.

**Results, outcomes and benefits**

Lendlease has experienced a significant improvement in OHS outcomes as a result of its holistic approach. “The ongoing reduction in injuries and events is a key focus for us,” says Doyle.

“Also, if we look at the operating discipline side of things, we are focusing on independent reviews of acute high-risk activities and the application of the hierarchy of risk control. We are putting every effort in to eliminate risks where possible, otherwise we want to ensure engineering controls or better are in place to get people out of harm’s way. We now see a lot more examples of that happening, so that is quite a positive for us.”

Doyle says there are still challenges for the group with regards to vertical construction and fallen materials risk, though safety performance in this area is “significantly better” than it has been in the past. “The elimination of material falling from high-rise buildings is something that we have spent a lot of time focusing on, and we are still looking to find improved ways of working to prevent that from happening. So, there are a few key areas where we have made good progress, and we will continue to focus on improving these,” he says.
What are the real drivers of wellbeing in the workplace?

There are a number of important drivers of wellbeing in the workplace, and organisational leaders and managers play a critical role in driving improvements in workplace wellbeing, writes AIHS College of Fellows chair Kym Bills

A recent research paper titled *Well-being in the workplace: Why it matters for organisational performance and how to improve it* provides some powerful guidance for Institute members and their organisations and clients. The sample size of the online survey underpinning the paper is very large: over 10,000 participants from 131 countries between 2016 and 2018 with an average age of 43 years, with 31 per cent male and 69 per cent female.

The research was led by an Australian, Martin Boult D.Psych, who is based in Melbourne as a senior director with The Myers-Briggs Company. Most readers will be aware of the Myers-Briggs Type Indicator (MBTI) that has been used (and sadly sometimes misused) in a large number of Australian as well as international workplaces and job selection processes.

With its roots in Jungian psychology, those completing the MBTI instrument are clustered into one of 16 MBTI types with each type having characteristics with implications for the way information is gathered and decisions made.

Regardless of your views about the MBTI instrument, the research is well worth considering and Dr Boult is keen to partner with employee groups in workplaces and organisations to follow up and deepen the research and assist the groups involved.

Boult’s paper cites US$40 billion is spent by organisations worldwide on ‘wellness programs’.

Evaluating the current state of wellbeing

Before investing in a wellness program, to maximise return on investment it is wise to evaluate current wellbeing in a workplace. A well-designed and tested online instrument is one way of starting that process. While wellness and wellbeing programs can be very helpful for workplace health, climate and productivity, we all know they are not an alternative to directly addressing workplace health and safety risks and controlling hazards.

The research paper expands on work by Martin Seligman and others in relation to ‘flourishing’, and Boult’s research finds that wellbeing comprises six key ‘PREMAN’ factors:

- **Positive emotions**: frequent feelings of happiness, contentment, pleasure
- **Relationships**: mutual feelings of caring, support, satisfaction
- **Engagement**: deep psychological connection and absorption in an activity of cause
- **Meaning**: having a sense of purpose and direction
- **Accomplishment**: pursuing success or mastery for its own sake
- **Negative emotions**: low levels of anxiety, pessimism, depression.

The relationships factor was rated highest for wellbeing, followed by meaning, accomplishments and engagement.

The state of wellbeing

The research found that participants from both Australia/New Zealand and Latin America reported the highest levels of wellbeing at work, while those in Asia reported the lowest. Men and women had very similar levels of overall wellbeing. Wellbeing increased with age. Professional occupations with service-related work reported the highest wellbeing (education and training, healthcare practitioner and technical, community and social service). The lowest occupational categories (still within a positive range) typically involve more practical and physically oriented work (food preparation and service, production, personal care and service). Overall, wellbeing was found to be lower for people with a preference for introversion compared with extroversion.

Drivers of wellbeing

As expected, higher levels of workplace wellbeing related to higher levels of job satisfaction, less likelihood of having plans to leave one’s current organisation, and increased levels of positive individual and organisational citizenship behaviours.

The research found that wellbeing at work can be enhanced. While there is much more detail for all 16 MBTI types, overall the most effective work activities for wellbeing are:

- Focusing on work tasks that interest me
- Focusing on a work task that makes me feel positive
- Undertaking work where I learn something new
- Taking breaks at work when needed
- Undertaking challenging work that adds to my skills and knowledge.

Outside of the workplace, the most effective
activities to enhance wellbeing are:
• Spending time with family or friends
• Listening to or playing music
• Reading
• Focusing on positives
• Exercising, playing sports, or going for walks.

The paper makes the following conclusions: “The importance of wellbeing in the workplace is underscored by our findings that the higher the level of wellbeing a person is experiencing, the higher their commitment to the organisation, job satisfaction, organisational citizenship behaviours, and the lower their intention to leave or disengage with their current organisation. With recent organisational research indicating up to 80 per cent of people in large organisations are not engaged with their work and the related incalculable loss in productivity resulting from this, improving the wellbeing of employees presents a crucial lever for addressing this issue.”

For organisational leaders and managers, “it is essential they deliberately invest in creating work environments that nurture and support healthy social relationships between their employees”. If investing in wellness and wellbeing programs, “the most significant approaches employers can employ is to provide opportunities for people to undertake work that aligns with their interests, involves learning, fosters positive emotional experiences and affords autonomy to rejuvenate when needed”.

For a copy of the paper please visit http://tiny.cc/mbriggs. To contact Dr Martin Boult please email MBoult@themyersbriggs.com or visit https://ap.themyersbriggs.com.
Any organisations are adopting OHS, accident and incident reporting technology to help support, streamline and improve both the strategy behind and practice of OHS. While digital platforms are making this technology more accessible to many companies across a wide variety of sectors, OHS professionals need to take a measured and researched approach to adopting and implementing such platforms.

A recent Navigo survey found that 78 per cent of OHS, accident and incident reporting systems sit outside company core HRIS platforms, with a range of in-house solutions in usage against best-of-breed platforms. Growth in OHS, accident and incident reporting system adoption also looks to continue over the coming year, with more than 60 per cent of companies planning to spend the same or more on their platforms, according to the survey.

Most medium to large organisations have adopted safety management systems, and proactive organisations are moving away from using spreadsheets and paper-based processes, according to Adrian Manessis, director of myosh. “Many of the software solutions, however, only reproduce what has previously been done on paper rather than implementing real process improvement,” he says. “There has been a gradual realisation that there are certain flexible and intuitive software tools that provide a much more efficient and cost-effective platform to manage and improve workplace safety.”

Compliance and best practice are two key boxes for OHS to check, and ISO 45001 was published in March 2018 following a five-year development process. The standard gives organisations of any size a universally accepted framework for improving employee health and safety, and aims to reduce workplace risks and create healthier, safer working conditions.

“There are some key differences between the new global standard and existing standards, such as OHSAS 18001 and AS/ NZS 4801. ISO 45001 emphasises the need to incorporate safety throughout all levels of an organisation, from top to bottom. This requires upper management to take on a stronger leadership role in respect to the OHS management system,” says Manessis.

Nathan Hight, co-founder & director of Safe365, explains that Safe365 has worked with 1700 organisations in Australasia over the past two-and-a-half years. In the course of this it has measured the maturity of each organisation relative to health and safety compliance requirements, and beyond that, against ISO 45001, IOSH Safety Culture Model and other best practice reference points. Hight observes that around 60 to 70 per cent of organisations are immature against basic compliance requirements, with about 50 per cent of these organisations some way off basic compliance. A further 20 to 30 per cent of organisations have developed a healthy level of maturity within, while Hight says about one in 10 build a level of comprehensiveness and/or excellence.

Challenges and pitfalls

There are a number of common challenges that organisations and OHS functions face when it comes to technology, and Manessis says most of these stem from not having sustainable processes in place. “Issues arise when records and processes are not stored, reported or managed with consistency. Changes in staffing can also impact safety management if processes are not consistent and defined,” he says.

Safe365 data has found that there is a real gap in ensuring directors and management have the knowledge they need to exercise due diligence, according to Hight. “The market has focused on tangible elements like risk registers, SSSP, SWIMS, worker inductions and other document-oriented aspects. Ensuring there is a strong degree of safety leadership is a challenge for many of our clients,” he says.

“However, once an organisation recognises this through their increased awareness, the solutions in this area – including ensuring a clear tone is set by leaders, sending the right safety signals and seeking assurance (breaking assumptions) – are quite easy and pragmatic to implement with senior people within the organisation.”

Hight says the other challenge many clients identify is the effectiveness of their internal audit and verification regime: “In other words, measuring plan against practice,” he says. “Are controls
that should be in place actually in place? Are those controls effective in managing the risk as originally assessed? Again, simple, systematic daily routines and good business hygiene can strengthen this important area quite easily."

**OHS, technology and boards**

With increasing legislative and moral thresholds, Hight says advancements in research around new approaches to health and safety, and greater understanding of the need to consider wellbeing risks for workers, boards and leadership teams are more aware than ever of the need for them to be diligent and be able to demonstrate it. This is coupled with many organisations now understanding that strong health, safety and wellbeing maturity has significant commercial impact, he adds.

“"This has created a desire from boards and management teams to seek more visibility of lead indicators such as capability and culture measurement of not only their own organisation but also visibility of what this data looks like for their contractors and supply chains where there are overlapping risks involved," says Hight. "We are observing much less focus on the traditional technologies, which have focused of capturing ‘shop floor’ data and basically storing these in online databases, and much more focus on layering multiple data sources into models that generate actionable insights, data sets that provide intelligence into how well the ‘fence at the top of the cliff’ is built rather than tracking incident and event trend lines, as has been the norm.”

Manessis explains that successful organisations and their boards view safety as an asset, and health and safety spending as an investment. "This is because a safe workplace adds measurable business value and can drive tangible improvements in performance, profit and culture. This notion that safety is good for business is not a new concept, but it is one that is gaining increasing traction as more in-depth research is released," says Manessis, who cites a study by the International Social Security Association – *The return on prevention: Calculating the costs and benefits of investments in occupational safety and health in companies* – which found that the return on investment of health and safety spending sits at 2.2.

"Today, information is spread at the touch of a button, and the modern public demand accountability and transparency. Rather than shy away from this, successful companies..."
take advantage of it. Health and safety initiatives are used not only to avoid a bad reputation, but also to build a good one. The companies at the forefront of this thinking treat their health and safety reputation as a business asset. They have built their success on a strong reputation for doing the right thing. And they like to report on it,” he says.

This also speaks to the notion of Corporate Social Responsibility (CSR), which has become a standard business practice and is now a core strategy for any modern business, big or small, Manessis adds. “It is the process of building trust with consumers, partners, governments, suppliers and employees. And the research suggests that a high level of trust within a company drives business performance by attracting new customers and retaining existing ones. Testament to this, a 2016 study found 64 per cent of CEOs were increasing their CSR investment,” he says.

“Not only can your safety reputation enable you to maintain your supplier relationships and win business tenders, it also helps to attract and retain your most valuable asset – your employees.” In a tight labour market, promoting a safe work environment is a valuable point of differentiation to competitors, according to Manessis, who cites a 2017 study which found that the safety of the work environment is one of the top criteria employees consider when assessing a job offer or position. “Potential employees rank safety ahead of other important considerations, such as the quality of potential co-workers, and opportunities for professional growth,” he says.

**OHS technology trends**

There are a number of important trends in the above, and Hight says some of these include greater consumption of data-driven insights, particularly as the correlation is demonstrated between building systematically high capability (the fence at the top) and harm reduction. “Boards and management teams want to know how they stack up versus the market, particularly given the commerciality of health, safety and wellbeing, and the same group want to be provided with ongoing visibility of their maturity profile and continuous improvement journey. Based on these factors, the market is ready for a technology overhaul where software as a service like Safe365 can provide much of this to support OHS professionals, leadership teams and boards,” he says.

Every single Safe365 user business has a client of some sort, and Hight says a consideration of increasing importance for B2B buyers is “how mature is this supplier or contractor when it comes to WHS?” and “is this supplier a safe pair of hands?”. “For some of our clients, they have submitted tender documents in order to win work where WHS capability has represented up to 25 per cent of the overall tender assessment weighting,” he says.

“The companies at the forefront of this can also be more confident in their ability to increase their understanding, and from that, they will take greater ownership. Doing this well will enable the OHS professional to deliver great, meaningful value for their client, which will not only translate into great WHS outcomes but also customer retention, success and satisfaction. The same applies for OHS professionals, whether in an external advisory role or when they are domiciled inside the business as a GM or manager of health, safety and wellbeing,” he says.

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**“Successful organisations and their boards view safety as an asset, and health and safety spending as an investment”**

“There is a very direct aspect to the value of working towards a mature, holistic WHS regime and bottom-line business performance. Beyond that there are numerous other business benefits, including elevation of the employment brand of the business – i.e. attract and retain talent – and productivity gains through improvements in worker diligence and attention to detail, which can flow over into improved quality and efficiency etc.”

Similarly, OHS professionals are discovering new technologies that are making it easier to report and collate data used for improvement, according to Manessis, who says these new technologies can improve efficiency, productivity, and improve profit and performance and make identification, investigation and reporting easier:

- **Configuration:** How you can easily change or add to the software to suit your needs, including messaging and workflow.
- **Integration with external systems:** and the Internet of Things (IoT): How low-cost wearables and other devices will help your safety program in future.
- **Specialised equipment:** such as drones will be utilised more frequently.
- **Other examples:** include geo fencing, geo locations, digital signatures, mobile inspections, fast hazard management, streamlined contractor management and automated workflow.
- **Drones:** can carry out inspections on large worksites much faster than traditional inspection methods. Using drones instead of workers is also fundamentally safer in a range of situations. Drones have also allowed high-quality 3D mapping data to become much more accessible. This enables better management, faster and more informed decision making, and provides an accurate high-resolution archival record of every inch of your site.
- **Better safety data:** The data being gathered initially for business-driven efficiency improvements is now being recognised as valuable to safety and compliance teams, who can now conduct virtual site visits to assess various issues, take measurements and write their reports all without leaving the office.

**Advice for OHS**

One of the biggest gaps for companies in OHS technology lies around the safety professional being able to engage and relate to executive teams and boards of directors, says Hight. Having the technical depth is important, however, Hight observes that it is important to adjust style and approach to align maturity levels and provide practical learning, and tactical and improved awareness outcomes for safety leaders in a business. “This will allow the client’s leaders to increase their understanding, and from that, they will take greater ownership. Doing this well will enable the OHS professional to deliver great, meaningful value for their client, which will not only translate into great WHS outcomes but also customer retention, success and satisfaction. The same applies for OHS professionals, whether in an external advisory role or when they are domiciled inside the business as a GM or manager of health, safety and wellbeing,” he says.
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The 2019 AIHS National Health and Safety Conference brought together stakeholders from across the health and safety profession to discuss challenges facing WHS professionals and practitioners as well as the latest ideas, innovation and research

The 2019 AIHS National Health and Safety Conference was held from 22-23 May 2019 at the International Convention Centre in Sydney. With a theme of ‘Back to the Future’, the conference challenged the thinking of OHS professionals, set the agenda for the future of safety and showcased some of the best national and international speakers on workplace health and safety.

Getting the most out of AI and machine learning

One of the speakers at this year’s conference was Lok Yiu, senior WHS insights and analytics officer at the NSW Government’s Centre for Work Health and Safety. Yiu spoke about applying artificial intelligence (AI) and machine learning in order to deliver optimal functional and business outcomes. He explained that OHS professionals can play an empowering role in this process, as data scientists generally don’t have the subject matter expertise required to understand what problems need to be solved in an organisation.

Instead, OHS professionals are the best people to provide answers to this, said Yiu: “In my experience, prior to model building, 70 per cent of my time was spent in figuring out only two questions,” he said.

“The first one is, what is the biggest ‘problem’ worth solving in your organisation? For example, a defined problem can be: out of your 25 warehouses, which warehouses will have at least one serious musculoskeletal injury that costs more than $10,000 in workers’ compensation, happening in the next 365 days?”

Yiu said OHS professionals and subject matter experts play a key role in understanding what OHS problems really matter and getting involved in translating a business problem to a data problem. “This process is critical to enable data scientists to draw assumptions and develop an algorithm that aligns with the business problem,” said Yiu.

The second question OHS professionals need to ask is whether existing data is sufficient to support a reasonably confident answer for the problem(s). Existing data can include workers’ compensation data, inspection records, leave history and workers’ average ages, for example, and Yiu said data scientists need to work collaboratively with OHS professionals to help understand this data.

“In most cases I have spent a substantial amount of time with inspectors to understand the reliability of data and the data workflows – for example, how the data is being entered, existing data validation rules, and potential sources of errors. OHS professionals play a key role here to fully release the ‘potential’ of your data by adding subject matter understandings,” he said.

As a data scientist, Yiu said OHS professionals don’t need to understand all the algebra or the arithmetic that sits behind machine learning models (this is a data scientist’s job), and he observed that the question of how OHS professionals can add value to the process is not well-discussed.

“If we can identify or enable a powerful real-time predictor, we can also use a similar approach to learn about workplace injuries and illnesses”

“If we can identify or enable a powerful real-time predictor, we can also use a similar approach to learn about workplace injuries and illnesses.”

“Speaking as an OHS professional, we are probably looking for AI to power a lot of solutions that can reduce costs, improve accuracy and augment risk management decision making,” he said. “To achieve these goals, we need to first solve the two fundamental questions I mentioned before.

“Following that, the next question would be: should the technical part of the problem be solved by an in-house team or be outsourced to a third-party data science service provider? Both options have their own pros and cons and need to be fully justified,” he said.

Assuming a decision has been made regarding this question, Yiu said the final issue for OHS professionals will be how well project outcomes are sold internally in an organisation.

“This is a process of translating a data answer back to a business answer. This is something that an OHS professional could do to provide a strong influence in deciding how to control the risk and educating people,” he said.

“A machine learning model will only be able to tell you how likely it is your warehouse will have a serious workplace injury; we as OHS professionals need to give an answer on what is the best controlling strategy and then sell this to the management and to staff,” he said.

In terms of future trends, Yiu predicted one of the biggest breakthroughs in the next five years would be the use of large-scale, real-time and automated AI methods to flag OHS-related anomalies in day-to-day operations – and using this real-time data to prevent incidents and injury.

“A perfect example would be the ‘Google flu trends’ [GFT] services, which predicts and tracks a flu spread based on a large number of real-time Google search queries about flu symptoms,” he said.

“It was reported that GFT was able to predict flu outbreaks up to 10 days before they were reported by the CDC [Center for Disease Control and Prevention]. In theory, if we can identify or enable a powerful real-time predictor, we can also use a similar approach to learn about workplace injuries and illnesses.”

Reducing bullying in the workplace

Also presenting at the conference was founder of Working Well Together, Michael Plowright, who spoke about managing and minimising bullying in the workplace. He explained that OHS professionals need to take a proactive role in managing and minimising workplace bullying, with 30 years of international research demonstrating strong links between bullying and workplace injury.

Such injuries are both mental and physical, as the former often manifests itself in physical symptoms, said Plowright.
"Bullying injury is something that occurs over a longer period of time, hence, the repeated behaviours characteristic in its definition. The longer the behaviour occurs, the greater chance the injury will be more serious," he said.

Plowright said that at its lower end, injury will be an unhealthy level of stress and anxiety along with sleepless nights. At the higher end, he said it can be post-traumatic stress disorder, suicidal thoughts and heart attacks. "It may end up in violence either towards oneself – taking of their own life – or others," he said.

Plowright observed that the success of managing and mitigating workplace bullying is "very likely a mixed bucket" across most organisations. "Some do it well, others not so much. Its success depends on organisational culture and whether a climate of safety exists for employees to raise their concerns without negative consequences. Is it safe for them to do so? That can come down to the individual leadership style of one manager who has the knowledge and skill in how to lead people."

Plowright pointed to figures released in 2016 from the Australian Workplace Barometer Project report, which found that 9.6 per cent of employees will experience bullying within a six-month period. The 2014 Workplace Bullying in Australia report also found that 41.6 per cent of Australian employees experience bullying at some time in their working life. "Our awareness of bullying has increased, which is a great start for bullying's management and mitigation, but it still has a long way to go," he said.

There are a number of steps organisations and OHS professionals can take to address workplace bullying, and Plowright said that acting early is vital in workplace bullying prevention and management. "If we can act early, we interrupt the bullying cycle and prevent injury. It goes without saying that all organisations need the tools – systems, policies and procedures – as the backbone to bullying prevention. Around that you require two key factors: education and support," he said.

Education includes understanding what is and is not bullying so it can be recognised in its early stages and prevented. Education also needs to be targeted to all employees so that bystanders – not just the bullied employee – can be empowered to step up when required to create a safe, positive and bullying-free workplace.

“We know that bullying can escalate from unaddressed conflict, so part of up-skilling our employees needs to be focused on how to appropriately and safely address conflict in its early stages. Emotional intelligence is vital in this process because it helps us to identify and act.”

The other side of this is support, and Plowright said all employees need to be supported to prevent escalation to injury. “The target of behaviours needs to be assessed for injury and a support plan developed to prevent WorkCover or legal claims,” he said.

Managers need to be supported to become leaders developing safe cultures, but also to performance manage when required. Employees who use bullying-type behaviours need to be supported to try and change their behaviours in ways that don't result in injury. "If they can't, they do need to be performance managed," he said. “Bullying prevention is about creating a safe workplace that is productive and a place that employees want to work. It is great for an organisation's bottom line."
The 10 top pattern causes of death and serious harm at work

Emeritus Professor Michael Quinlan recently spoke at the Australian Institute of Health & Safety’s 2019 Dr Eric Wigglesworth AM Memorial Lecture about the 10 top pattern causes of death and serious harm at work. OHS Professional speaks with Emeritus Professor Quinlan about these factors and what OHS professionals can do about them.

There are 10 top pattern causes of death and serious harm at work and what OHS professionals can do about them, according to Michael Quinlan, Emeritus Professor of Industrial Relations in the School of Management at UNSW.

Quinlan examined a large array of work settings and found they applied to everything from aircraft or shipping disasters to amusement parks like the Dreamworld incident.

“It and Pike River are but two examples. Numerous others could have been discussed but the key points are clear in these two cases, and I wanted people to think about this,” said Quinlan, who explained that the 10 top pattern causes of death and serious harm at work are:

- Design, engineering and maintenance flaws
- Failure to heed clear warning signals
- Flaws in risk assessment
- Flaws in management systems and changes to work organisation
- Flaws in system auditing
- Economic/production and rewards pressures compromising safety
- Failures in regulatory oversight
- Supervisor and worker expressed concerns prior to the incident
- Poor management/worker communication/trust
- Flaws in emergency procedures and resources.

“I found the failures also applied to single fatalities, not just multiple fatalities, and this point has been reinforced by people I have met, researched with or worked with since writing the book. The 10 pattern failures apply because in a way they represent the generic failure points within human organisation, where and why the elaborate defence mechanisms were built, break down and therefore what we need to target to avoid this,” he said.

How to build safer workplaces
There are a number of steps to follow in building safer workplaces across a range of industries, Quinlan explained. “First, failure can be a great teacher of how in practice human organisations fail and why. Problem solving relies on identifying patterns/repetition, because in terms of risk management, we can only deal with patterns, not entirely aberrant events,” he said.

Quinlan said the problem is major when incident investigations are too often treated as unique, and while every incident has some distinctive feature, it is the commonalities, the similar events in the past, that help to identify what is critical if things are to change. “I am not a fan of the Black Swan hypothesis,” said Quinlan, who also wrote Ten Pathways to Death and Disaster: Learning from fatal incidents in mines and other high hazard workplaces (Federation Press, Sydney).

“In all the incidents I have examined, the incident was predictable and prevention practical – almost all involved clear warning signals prior to the event and compromises to key systems due to a combination of profit/production overriding safety, disorganisation and failures in existing regulatory oversight.”

Second, Quinlan said the 10 pathways also provide an audit-checklist which can be used to identify, investigate, assess and redress limitations known to cause serious harm. This includes determining what needs to be done to build more robust and sustainable safety programs – which can also be extended to the area of health. “Reason’s notion of latent failure and his Swiss Cheese model is a valuable tool in understanding how catastrophic events occur even where defence in depth is in place. What my work does is identify which latent failures are repeatedly responsible for such disasters, helping to focus attention,” said Quinlan.

Third, as Andrew Hopkins has noted, the more thorough the investigation into an incident, the more pattern failures are found. “Pike River is a good example – it was thorough and found all 10,” said Quinlan. “The more you have, the more likely the incident is and the more ‘catastrophic’ the organisational failures.”

Having said this, two failures – namely production/cost pressures and regulatory failure – can be seen to contribute to other failures such as ignoring warning signals. Quinlan said these failures are hard because they require courage and application, and a commitment to social sustainability “which might annoy some powerful interests”.

“However, we need to address all the failures, not just the easier ones,” he said. Quinlan’s book also warned about the need to distinguish between routine and catastrophic risk in terms of minimising harm, and the limitations of both top-down systems and an over-emphasis on behaviour management. “While the latter are popular – especially given how fashionable psychology is today – and have their place, if you don’t deal with the underlying structural causes, no amount of behaviour modification will paper over this,” he said.

Relevance to other disasters
These failure points also have relevance to understanding recent financial disasters – and can assist in preventing a recurrence, said Quinlan. “Several years before I retired I taught a masters subject in managing global risk. This looked at risk/harm in an array of different circumstances, and it soon became apparent to me and my students doing projects that the 10 pathways applied to other forms of ‘disaster’, including government corruption, the rorting of migrant visa schemes and the financial practices that sparked the Banking Royal Commission,” he said.

“Some reading my book also saw the connection, notably Stewart Howe, an industry consultant, because as he so eloquently said they all represent failures in human organisations like unsustainable greed-driven practices, failure to heed warning signals and...”
and regulatory failure.” Around the time the Royal Commission into Banking released its report, Stewart wrote a short piece highlighting that eight of the 10 pathways were present in the banking/finance sector and attention to them would have prevented the disastrous consequences so many people suffered, and a recurrence. “We heard a lot about governance prior to the disaster, but as the evidence documented in the Royal Commission demonstrated, seemingly elaborate governance procedures did not prevent harmful and indeed unsustainable practices,” said Quinlan.

These financial disasters weren’t an isolated case but had repeatedly occurred in the past – for example, Stewart believes that eight pathways also applied to the US heart of the GFC.

**“Reason’s notion of latent failure and his Swiss Cheese model is a valuable tool in understanding how catastrophic events occur even where defence in depth is in place”**

Unfortunately, neither the Institute of Company Directors nor the media showed any interest in Stewart’s piece, according to Quinlan. “I find it extremely regrettable that with some notable exceptions, the media currently spends considerable time ‘milking’ human tragedies for the audience value and minimal time identifying/highlighting their underlying structural causes which would inform citizens and policymakers and contribute to preventing them,” he said.

“This is all about learning from past failures to build a more sustainable/fair society, and that is why I was so keen to include a wider context and Stewart’s work in my lecture. Eric Wigglesworth was a deeply thoughtful person, and I felt this is in keeping with his legacy.”

**Health, psychosocial wellbeing and safety at work**

Work has undergone substantial changes in Australia and elsewhere since the 1970s, particularly the growth of more contingent/precarious work arrangements like casual/temporary work, labour hire, franchising and various types of subcontracting.

“We shouldn’t get too carried away with the newness of the gig economy – it is in many respects just a return to and refashioning of quite old types of work – Uber and its like are simply subcontracting with an app,” said Quinlan.

“Having said this there is now a wealth of evidence that the growth of more insecure or flexible work arrangements have had, overall, significant negative effects on worker health, safety and wellbeing. The mental health effects of repeated rounds of downsizing in the public and private sector is just one example.”

Pioneering work since the late 1970s, especially the development and application of the job-strain and effort-reward imbalance models, have yielded hundreds if not thousands of studies demonstrating that aspects of work organisation can and do have profound effects on worker health and wellbeing (including mortality), Quinlan said.

“My research with Philip Bohle [a psychologist] focused on developing a model to better understand how work organisation, especially the growth of precarious work, affected OHS. We developed the Effort/Reward Pressure, Disorganisation and Regulatory Failure, or PDR model,” said Quinlan.

“Unlike the other models I mentioned, it deals with both safety and health and includes regulation. Obviously, it has parallels with 10 pathways though it is meant to address the wider health consequences of work.”

Quinlan said this has yielded some interesting findings on how work organisation affects older workers and bullying behaviours/intention to leave among migrant hotel cleaners. There is a lot of research on bullying, for example, but little on the underlying causal factors, and our study highlighted the importance of disorganisation and regulatory failure. “We are now beginning to understand just how important work organisation is if we are to build healthier workplaces,” said Quinlan.

**Effective OHS interventions**

As a profession, Quinlan observed that OHS has been concerned to build more robust and sustainable systems/programs and oversight (internal as well as regulatory, safety representatives and union-based) to protect the health, safety and wellbeing of those who work or those who visit workplaces.

“We need to continue this but also build on its wider relevance to building more sustainable organisations and societies. I emphasised in my talk that we need to leave the silo mentality and recognise that what happens to the climate, the environment, our reserves of scarce resources and how we manage our labour market all interact. They all have implications we need to be aware of when making decisions, and we need to make more integrated decisions if we are to build a more sustainable future,” said Quinlan.

There are natural nexuses between the environment and OHS which have been apparent for some time but still need to be developed further, he explained. Quinlan also observed that there is a nexus between OHS and sustainable financial management.

“In OHS we have learnt many lessons on how to build safer and healthier workplaces. As a profession, Quinlan observed that OHS has been concerned to build more robust and sustainable systems/programs and oversight (internal as well as regulatory, safety representatives and union-based) to protect the health, safety and wellbeing of those who work or those who visit workplaces. Effective OHS interventions As a profession, Quinlan observed that OHS has been concerned to build more robust and sustainable systems/programs and oversight (internal as well as regulatory, safety representatives and union-based) to protect the health, safety and wellbeing of those who work or those who visit workplaces. They all have implications we need to be aware of when making decisions, and we need to make more integrated decisions if we are to build a more sustainable future,” said Quinlan.

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Organising for Safety: How Structure Creates Culture

Author: Andrew Hopkins
Publisher: CCH/Wolters Kluwer
RRP: $70.00

A NU Emeritus Professor Andrew Hopkins’ new book, Organising for Safety: How Structure Creates Culture, was published in April 2019 by CCH/Wolters Kluwer. It is an important book that draws upon and handily summarises and updates Hopkins’ past themes while making a much more rigorous evidence-based argument that the culture of an organisation and its safety performance is determined to a large extent by its organisational structure.

In high-risk organisations, avoidance of catastrophe requires structures in which the relevant risk roles are centralised, well resourced and sufficiently senior to exercise control and, when necessary, report unhindered to the CEO and board. Hopkins also explains that good structure can still be undermined by a complaint board or management incentives that favour profit and cost-cutting or management incentives that overshadow the CEO and board, when necessary, report unhindered to the CEO and board. Hopkins is well placed to comment on the primacy of organisational structures as a reflection of power, particularly of the CEO and board, which is why they can so often be hard to change ahead of the compelling rationale of a major accident.

Hopkins still finds merit in the term ‘culture’ as ‘the way we do things around here’ and in directing management attention to practices. But safety outcomes will be much harder to achieve if structures do not reflect needed controls. Of course, competent people need to staff the desired structures. However, he is critical of alternatives to the structuralist approach that argues safety cultures can be created using educational workshops (a ‘hearts-and-minds’ approach), driven by the grassroots (spreading like a ‘virus’), engineered by behaviourist methods (‘behaviour-based safety’ or BBS), or created by leaders (as ‘felt leadership’). In turn he critiques the Patrick Hudson/Shell safety culture or organisational maturity ladder, Leandro Herrero’s idea of culture as a virus (a dodgy concept I recall seeing from 1976 in Richard Dawkins’ ‘meme’ and ‘virus of the mind’), and BBS being wrongly applied to process safety or major hazard risk.

A whole chapter is devoted to critiquing the ‘anarchist school’ represented by Sidney Dekker and Erik Hollnagel. Hopkins’ main concern is when their program is directed to reducing procedures and controls for complex and major hazard risk industries. Reducing the burden of regulation and mind-numbing paperwork is a worthy task, but some industries like aviation and space, nuclear, underground coal, and petroleum require much more prescription and mindful compliance. Hopkins reports that Dekker and Hollnagel do seem to accept this. They are in good company with Lord Robens back in 1972.

Professor Andrew Hopkins has written a very fine and helpful book that is worthy of careful reading and, more importantly, implementation of its key lessons for sustainable safety.

Reviewed by Kym Bills, Chair, College of Fellows and Board Member, Australian Institute of Health & Safety
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- View multiple business units, sites, projects with one log in
- View multiple contractor/suppliers with one log in
- Share data with other organisations and external health & safety advisors
- Incident / Event reporting
- Risk & hazard reporting
- Workforce engagement surveys
- Customised checklists completed via smartphone app
- Verifiable training records
- Online knowledge base resources plus direct customer support
- Ready to use out of the box
- Incredibly cost effective

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