

Sponsored by



CIR

CONTINUITY INSURANCE & RISK



► **Firm foundations** *The rules of risk in the construction industry have changed more than anyone could have predicted, which is why enterprise risk management is so vital in helping to provide a complete picture in a dynamic and uncertain environment. Martin Allen Smith writes p28*

► **Going for gold: Unlocking the PID's hidden value** *Whilst the standard PID is easy to follow, its visual nature can create negative and restrictive attitudes around risk. Reporting on multiple PIDs would be a good first step – but is there a way to take this even further? Rebecca Cope-Lewis believes there is p30*

Enterprise risk management



Sponsored by

It can be something of a cliché to talk about how these are uncertain times, but anyone could be forgiven for using that description of the business world over the past 18 months. The story for the construction industry is one of growth, but despite this, the sector is facing some of its biggest challenges in decades, with new threats – and opportunities – emerging.

There are two major categories of risk that pose the biggest threat to larger players in the sector. Firstly, current economic conditions are as complex as they have been for many years. Brexit developments and the mergers and acquisitions landscape both have the potential to affect UK construction companies and European contractors working in the UK.

Following Brexit, new controls and procedures have placed pressure on the supply of labour and raw materials, whilst the accumulation of cash reserves amongst a significant proportion of contractors during 2020 indicates a coming wave of M&A activity which could leave companies open to a variety of threats.

Secondly, cyber risks have surged to the very forefront of boardroom concerns across most industries in recent years, and the pandemic has served to both accelerate our reliance on all things tech, as well as increase the potential exposure. As technology and connectivity increase throughout the construction industry, a shortfall

“Updating schedules to track impacts will become more important than ever. Proper planning will also require contractors to accelerate the submittal and ordering process to avoid delays from late deliveries”

Firm foundations

❏ The rules of risk in the construction industry have changed more than anyone could have predicted, which is why enterprise risk management is so vital in helping to provide a complete picture in a dynamic and uncertain environment. Martin Allen Smith writes

in cyber security capability – highlighted by a number of disruptive and costly cyber attacks in 2020 – has made construction players vulnerable to exploitation by cyber crime gangs, hostile state actors, terrorists and others.

The issue of supply chains has perhaps become most prominent of all during 2021. No-one could have foreseen the impact of COVID-19 on supply chains for the construction industry, with price spikes for both basic materials as well as more complex items, like machinery.

While prices may eventually return to normal, Gallagher warned in a recent industry briefing that this is unlikely to occur in the short term given the double-hit of the pandemic and the post-Brexit transition. The firm advises that all contractors and suppliers should adjust their contracts and management practices to address those disruptions and price hikes. If they cannot get price protection in their contracts, materials will need to be purchased further in advance to lock-in pricing.

It is a situation that means that materials will also need to be ordered for delivery sooner than needed to avoid disruptions – which could have major effects on planning and require additional attention to contract payment terms. Updating schedules to track impacts will become more important than ever. Proper planning will also require

contractors to accelerate the submittal and ordering process to avoid delays from late deliveries and the need to order materials earlier will also make payment terms for stored materials more important than ever.

Labour shortages also represent a significant headache for the industry. On the one hand, the sector is seeing strong growth during 2021, but that situation is in danger of being severely restricted with the potential inability to deliver on projects. According to the latest construction and infrastructure survey from the Royal Institution of Chartered Surveyors, total workloads in Q2 2021 showed strong growth, with 38 per cent of respondents reporting a rise. Growth in the private residential sector continued to lead the market, with 50 per cent of respondents reporting an increase in activity (up from 39 per cent in the previous quarter and the strongest increase in the last six years). Infrastructure works also saw a rise, with 45 per cent reporting an increase, up from 34 per cent in the previous quarter. New energy projects in particular were cited as the area behind this growth.

As well as a sizable 82 per cent of respondents pointing to a shortage of materials hampering the market during Q2, the expected increase in material cost of almost 10 per cent in the next 12 months is running above the seven per cent growth anticipated for tender prices.

This is mixed with concern over

a lack of available labour – both for skilled labour and ‘white-collar’ roles, with 64 per cent saying a lack of labour will limit new activity. In particular, the survey found that in the case of bricklayers this concern has jumped from 34 per cent to 58 per cent while for carpenters it has increased from 33 per cent to 55 per cent. Simon Rubinsohn, RICS chief economist, said: “The tone to much of the feedback received in the Q2 construction and infrastructure monitor is pretty upbeat with new business enquiries picking up smartly and this being reflected in the expectation that workloads will continue to grow strongly over the next year.”

He emphasises the impact that material shortages and price hikes could have, but added: “Almost as significantly, labour and skills are increasingly being cited as obstacles for businesses looking to build out existing commitments or embark on new projects. For the time being, the issue appears most visible regarding skilled trades but quantity surveyors are also being highlighted as an area of growing shortage. Unsurprisingly, against this backdrop, some concern is being expressed about rising construction costs.”

Within this storm of volatile trading conditions, the role and function of ERM has inevitably had to evolve, and there appear to have been some rapid changes in emphasis over the past year in particular. According to the results of a RIMS enterprise risk management survey published earlier this year, more than 50 per cent of ERM programmes shifted their focus to health and safety and business continuity in response to the COVID-19 pandemic.

The survey sought to provide a perspective on the continued evolution of ERM, especially in terms

“While enterprise risk management is now an accepted mainstream business discipline, there is no room for complacency in efforts to make it fully integrated, agile and proactive”

of the impact the COVID-19 global health pandemic has had on them. It found that health and safety (56 per cent) and business continuity (54 per cent) have become ERM’s primary focus as a result of COVID-19. Twenty two per cent of respondents said they had seen an increase in resource allocation for ERM in response to the challenges of the pandemic.

Highlighting the advantages that ERM offers for enhancing board reporting, and its effectiveness in breaking down organisational silos and influencing strategic decision-making, the report found that 76 per cent of the respondents said their senior leadership teams and boards apply ERM insights into business decisions. Almost half said that “meeting strategic and operational objectives” was ERM’s greatest value.

While enterprise risk management is now an accepted mainstream business discipline, there is no room for complacency in efforts to make it fully integrated, agile and proactive. In a sector such as construction, underlying growth – despite the obstacles – is clearly a positive, but it also means more risk. That’s true not just in terms of project delivery, but also in funding lines, supply chains, material availability, skilled labour availability and site safety. Finding a better way to identify, measure and, most importantly, mitigate these risks will become increasingly important for companies

wishing to remain competitive in this growth market.

Jeff Okeson, vice-president and director of consult services at Faithful and Gould, says that the process of identifying and measuring risk includes the thorough collection of information that feeds into the analysis of these risks. As well as facilitated meetings with the project team, this can include the collection of historical performance and risk data from comparable projects. “This data is essential to properly modelling project risk so as to assist the project team in its mitigation work,” he explains. “It also drives the development of risk-driven cost and/or schedule contingency amounts. Accessing this information is not always easy, or even possible. According to a study conducted by BDO in 2017, as much as 95 per cent of construction data was thrown away, or not even collected in the first place.”

But, he asks, what if we could access this data and fully leverage its potential? Integrating emerging technologies to develop tools and systems designed to help accurately identify, assess, analyse and report risk could help promote better risk management practices and, ultimately, minimise risk across the construction industry.

There could also be scope to better use artificial intelligence in conjunction with existing practices, to accurately predict programme and project outcomes, potentially feeding global construction data into one massive database to the benefit of programmes and projects worldwide. Okeson adds: “Combining this data and technology with people and processes, along with the promotion of positive risk management cultures, could revolutionise the construction industry.”

The earliest evidence of probabilistic analysis can be traced back from Ancient Mesopotamia to the late 20th century when it was popularised for the masses in the form of the ubiquitous probability impact diagram, and two-dimensional it has remained ever since. In an increasingly complex and changing world the two-dimensional PID provides a very limited ‘flat-earth’ perspective of risk exposure. Those who have experienced negative events have taught us that qualifying risk in order to help us understand the degree of risk is far more complex than just multiplying a probability and an impact and placing that result on a PID.

Whilst the standard PID is easy to follow, its visual nature, usually based on a red, amber and green, or RAG, colour rating, can create different, often negative attitudes around the risks that fall into these various designated coordinates. We then dilute the risk assessment results by providing a single PID when we have taken the time to assess the risk on multiple impacts (such as time, cost and reputation).

To my mind, this generates a confusing picture of the true impact of the risk through the different perspectives resulting in a ‘levelling out’ of the assessment to such a degree that the understanding of the risks true impact becomes meaningless. Not only does representing risks in this way devalue the assessment process but it also

“Boards want simplicity but I doubt they want this at the expense of being able to make sound judgements based on good quality information. So why not provide a suite of PIDs from each perspective?”

Going for gold: Unlocking the PID’s hidden value

▣ Whilst the standard PID is easy to follow, its visual nature can create negative and restrictive attitudes around risk. Reporting on multiple PIDs would be a good first step – but is there a way to take this even further? Rebecca Cope-Lewis believes there is

removes the richness of the risk assessment and loses the ability to convey the interconnectivity of risks in relation to its impacts. Is the risk red because of its financial impact or its schedule impact or its security impact? The messaging has got lost in its 2D ‘flat-earth’ single dimensional perspective.

More and more, organisations are looking beyond just cost and time with regard to the impact a risk has on the organisation’s objectives. Perhaps less so for projects, where in the main cost and time are its primary concern. However, with the increasing scrutiny of investors, potential heavy fines from regulators and the ever-growing information security threats boards want to be able to understand the impacts of their risks from these perspectives. The inclusion of additional risk impact perspectives can turn a monochrome risk into a kaleidoscopic one.

If the board has taken its time and made an effort to agree on impact levels for these individual elements and the appetites that they have around these, why do we then insist on consolidating this into a single PID for board review?

I recognise that boards want simplicity but I doubt they want this at the expense of being able to make sound judgements based on good

quality information. So why not provide a suite of PIDs from each perspective?

Taking PIDs to the next level – ditch the RAG!

Reporting on multiple PIDs would be a good first step, but what if we were to take this further?

We all know that colours are emotive and for the colourblind confusing. I am not convinced that the RAG colour theme is conducive, and the focus on a colour detracts from a meaningful discussion on managing risk effectively and driving agile risk responses.

Red – Senior executives get very jumpy when risks are red, given the colour’s association with danger. They like to be in control, and red risks indicate that things are not as in control as they would like them to be. However, organisations are in the business of generating revenue (or for non-profit organisation a specific outcome) and all businesses will have risks they are subject to, in order for them to achieve their objectives. These may be inside or outside of their control, but that’s business. It is about how you manage the risk that is important – not the colour – yet how much time is spent on ‘managing’ the senior executives response (or perceived response) to seeing a ‘red



risk' on the register?

Amber – This is the middle ground, getting senior executives to accept a risk that edges into the 'red' is very difficult and can spark heated conversations (for all the wrong reasons) and moving an amber risk down to green is sometimes just as hard. Usually because the evidence to support this decision and the provision of the required assurance measures to demonstrate that the risk is being managed at an acceptable level often falls short. This means that a number of risks fall into this middle ground and then never seem to move from quarter to quarter or even year to year... What this tells us, is that if RAG is the risk appetite, then perhaps the risk appetite is higher than originally thought?

Green – Green is generally associated with the concept that the risk is of low impact/low likelihood, and it therefore allows us to become

complacent of these risks. Every organisation has these types of risks, but low impact/low likelihood risks are a result of doing business and risks at this level. Whilst important to be recognised, I would propose should really be classed as BAU events and managed and monitored in the same way as BAU activities are. What if we saw these risks as opportunities instead?

Focus on management levels, rather than risk colour

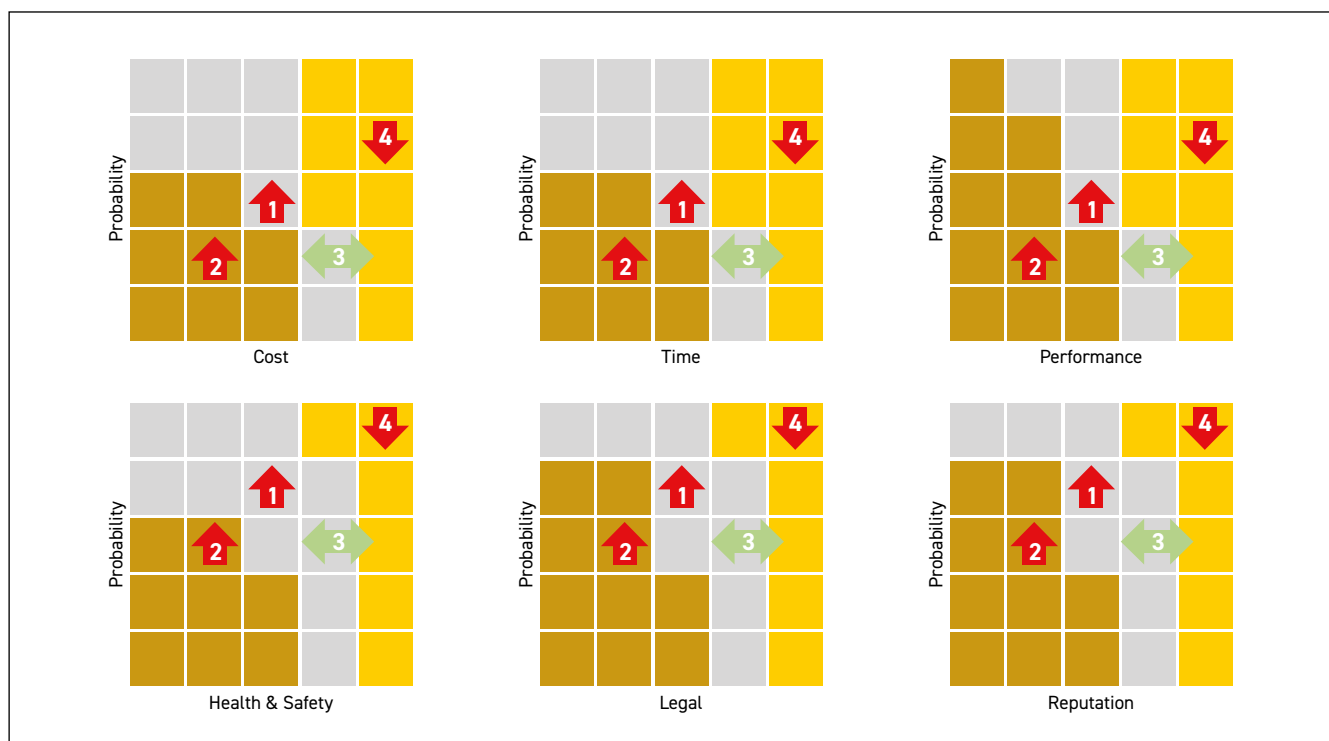
In times of crisis, companies often invoke the concept of Bronze, Silver and Gold Command (a concept brought in by the Metropolitan Police). These levels reflect the authority levels of decision making and therefore accountability when handling a crisis event.

What if you changed your PID colours to reflect the levels at which an organisation would like to manage and oversee a risk? Accountability

is something that I often hear as lacking within an organisation, with delegation the new norm. Denoting levels of accountability could be a game changer.

For example, gold level risks would be the responsibility and accountability of the board that is to say, the strategic handling of the risk. Silver level risks, the responsibility and accountability of business unit managing directors or functional

“What if you changed your PID colours to reflect the levels at which an organisation would like to manage and oversee a risk? Accountability is something that I often hear as lacking within an organisation, with delegation the new norm. Denoting levels of accountability could be a game changer”



heads as these would require a more tactical approach. Bronze level risks, the responsibility and accountability of the operational managers, as by their very nature are BAU / operational risks requiring immediate front-line action and response.

We can be sure that for every business continuity and crisis management plan in place in business, there is a senior executive nominated as the command/decision maker should a crisis or significant event occur. So why do we so often see PIDs where the low probability/high impact, or LPHI, risks are shown as green or amber?

Since the terrible impact of COVID-19 on businesses, I have started to see a change in the heatmap, where the red areas of the heatmap now extend to the LPHI coordinates. Hindsight is a wonderful thing, but this change does indicate that senior executives are recognising

that resilience and capability to respond to risks (which may or may not be inside of their direct control) are as important strategically as those traditionally seen in the top right-hand corner of PIDs.

Where does this leave the representation of risk appetite?

If we move to a Gold, Silver, Bronze PID, then this does leave the question as to how you know if the risk is within the organisational risk appetite or not.

The beauty of moving from the traditional RAG PID allows you to add the risk appetite as a third dimension to the PID. It also enables the organisation to assign an appetite to that discrete risk rather than generalising the overall risk appetite. Further, having an appetite for a specific risk enables the development of measures to understand the variance from the

organisation's risk appetite that they are willing to tolerate.

These, I do propose would be using the RAG colour scheme, as in this case you want a visual warning when something is moving out of is outside of the risk appetite for that specific risk.

Your heatmap now may look something like the graphic above.

Whilst I do not expect to see bronze, silver and gold PIDs too much in the future, I hope that perhaps by thinking outside of the traditional RAG PID may enable you to think differently about your risks, and subsequently the questions you want to be asking to drive appropriate risk management strategies within your organisation.

Rebecca Cope-Lewis is head of enterprise risk management at riskHive Software Solutions riskhive.com



riskHive®

20 years of innovation
delivered worldwide

enterprise risk management
and analytics software

- ENTERPRISE RISK MANAGEMENT,
KRI & GRC PLATFORM
- ANALYTICAL RISK MODELLING SOFTWARE
- SQEP RISK CONSULTING

www.riskhive.com

+44 1275 545874

+44 7818 898997