

Planning for grey rhino risks: How to prepare for the ‘unforeseeable’

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ABSTRACT

Grey rhino risks are high-impact but seemingly low-probability risks that get shuttled to the sidelines, often due to a misguided hope that the risk will not materialise in the near term, so mitigation planning can be delayed or dismissed. As the author has argued previously in this journal, it is time to change the way we look at risks in order to reassess and re-prioritise our grey rhino risks. We must stop shrugging our shoulders and treating grey rhinos as ‘unforeseeable’ and therefore absolving ourselves from doing anything about them. The author’s previous paper, “Rhinos and risk assessments: Adjusting risk assessment methodologies to account for “unforeseeable” events”¹ provided a methodology for pulling grey rhinos into the spotlight, so that we can see them more easily and recognise that their high-impact status requires both acknowledging and planning for. The present paper takes the methodology a step further — demonstrating how to plan for grey rhino risks that have been identified. Rather than continuing to tag grey rhinos as

‘unforeseeable’, we can and must prepare our organisations for them.

Keywords: gray rhino, grey rhino, risk assessment methodology, crisis leadership, executing crisis, crisis management



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INTRODUCTION

Many organisations focus their risk mitigation by crystallising their top risks based on (often complex) calculations of consequence and probability in order to narrow in on the best use of their limited budget. This may be appropriate for a first-time risk assessment, but as an organisation matures, it is important to branch out and look past the shoulders of that initial list to recognise grey rhino risks and start resourcing for them as well.

Grey rhinos are high-impact risks that seem to have — or which risk managers hope will have — less than a high likelihood of happening in the near future and which can therefore be pushed off for mitigation later.

Indeed, many risk managers still adhere to some version of the outdated strategy of rating the y-axis (likelihood) on an equal footing with the x-axis (impact) to narrow in on their high-likelihood high-impact risks (see Figures 1 and 2). Relying solely on this perspective of risk, however, can leave an organisation’s flank open to a grey rhino charge. It is incumbent on risk managers to mature their organisation’s

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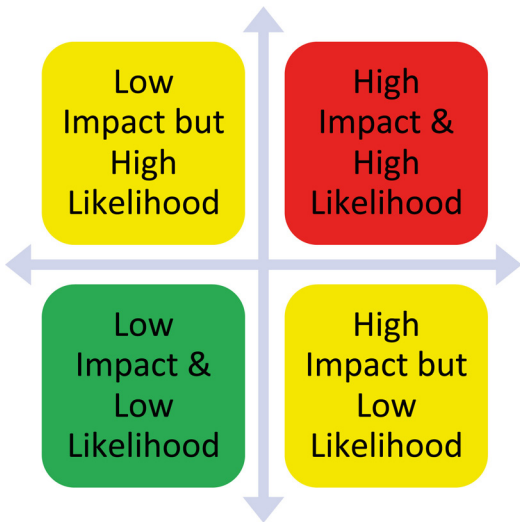


Figure 1 Assessing risk based on likelihood and impact

risk assessments to account for grey rhino risks in their risk assessment methodology, and to plan for them.

WHAT ARE GREY RHINOS AND HOW CAN WE IDENTIFY THEM?

A grey rhino is a highly probable event with a great deal of impact that is commonly dismissed or overlooked, often (although not always) because people fail to take it seriously enough. The term was coined by Michele Wucker to describe a

danger that is obvious, visible and charging straight at you.² Grey rhinos stand apart from black swans in that black swans are highly improbable and come out of the blue, whereas grey rhinos tend to be standing on the periphery all along. Despite telling ourselves they probably will not charge today, there is the constant possibility they just might.

As Wucker observes, when it comes to potentially catastrophic risks, these can seem so overwhelming that it is human nature to want to tune them out. Exacerbating this is the fact that humans weigh the present more heavily than the future; that is, people typically pay more attention to urgent risks than to slow-moving ones.

In other words, the element of time may be what is throwing off our risk assessments and causing us to de-prioritise grey rhino risks. A person’s judgment of whether the risk is likely to happen in the near future may cloud their vision of how probable it is. When it comes to mitigating daunting grey rhinos, people may well procrastinate if they think the chances of the risk happening this year are relatively slim.

Grey rhinos have an element of uncertainty — likely, sure, but hopefully not this

Risk Assessment Table

		Severity of Harm (Impact)		
		Low (L)	Medium (M)	High (H)
Likelihood	High (H)	3	4	5
	Medium (M)	2	3	4
	Low (L)	1	2	3

Figure 2 Basic risk assessment table

year. We know there is a chance they could happen, but if we convince ourselves there is no reason to believe they will happen soon, we may push them to the sidelines and focus on risks that have a higher probability of near-term materialisation.

Grey rhinos come in a wide variety — from a company's single source for a critical component to a volcanic eruption to a pandemic. They may be camouflaged not only by one's risk perceptions but also by the way risk assessments are done in the first place.

People's inherent optimism bias compromises their ability to judge the likelihood and timing of risks, and this can be a real obstacle to recognising and acting on the grey rhinos. Clearly, grey rhino risks are probable, but are they likely to occur in the near term or are we likely to have a few more years to deal with seemingly more pressing hazards first?

Rather than attempting to assess likelihood and timing, it is far better to re-weight our risk assessments to stop providing a false sense of security on our timing guesses. Impact is what matters. Rather than treating impact on a par with likelihood when it comes to the most severe risks, it is time to reweight impact so it factors more prominently in risk assessments while (error-prone guesses about) likelihood factors less.

Figure 2 represents a basic standard risk assessment, with likelihood or probability mapped on the y-axis and impact or consequence mapped on the x-axis.

Old-school risk-assessment methodologies like this can provide erroneous distinctions and a false sense of security. It is easy to convince ourselves that with a simple calculation of impact multiplied by (judgment call on seeming) probability (this year), we have done our due diligence as regards identifying the risks in most need of our attention. However, risks deemed high-impact but which we

hope will not happen this year (eg earthquakes or tsunamis or pandemics) can easily get mis-categorised as unlikely or rare, resulting in the same risk rating as a negligible but almost certain risk — a risk that no one would think twice about deferring to next year:

$$\text{high-impact (5)} \times \text{low-probability (1)} = 5$$

$$\text{low-impact (1)} \times \text{high-probability (5)} = 5$$

Why do we continue to skew our perspectives with this false sense of security by putting probability on a par with impact when impact is what really counts?

The methodology presented in this paper reweights risks so that as severity of impact increases from negligible to minor to moderate to severe to catastrophic, it jumps by a factor of 5 at each step. At the same time, as likelihood moves from low to medium to high likelihood, its weighting only increases by quarter steps (see Figure 3). This puts the emphasis where it is needed and minimises erroneous results from the assessment of probability.

This reweighted methodology minimises the human error that is inherent in judgment calls skewed by personal perceptions of the likelihood or immediacy of the risk and redirects focus on the consequence if the risk is realised after all.³

INATTENTIONAL BLINDNESS

Grey rhinos — not black swans — are the real danger.

Grey rhinos are not random surprises. They often emerge after multiple warnings and visible evidence — a matter of when, not if. The COVID-19 global pandemic was a grey rhino, not a black swan. Various governments repeatedly brushed off prior warnings and pandemic instances.⁴

Perhaps the problem is that although grey rhinos are visible and known, we

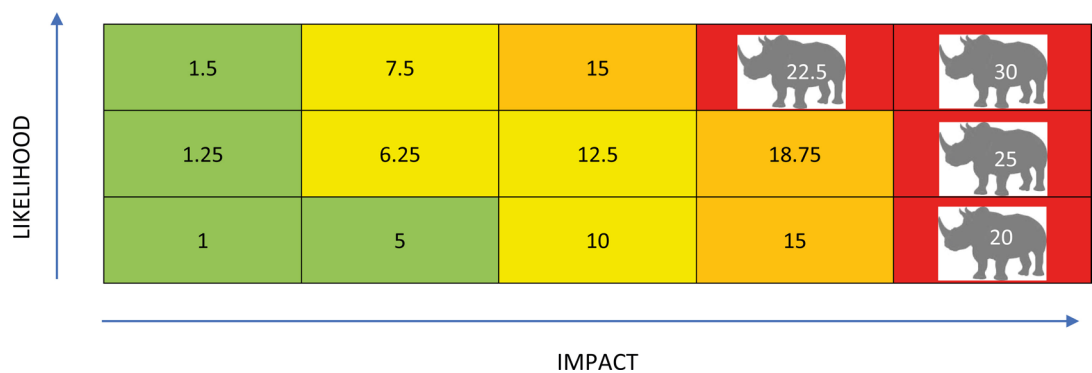


Figure 3 New risk weighting strategy to highlight grey rhinos

look right past them once we have categorised them as being insufficiently probable to rank among our top risks. This may be a form of inattentional blindness.

One of the best examples of inattentional blindness comes from the research done by Simons and Chabris, in which two groups of people — some dressed in black and some in white — pass basketballs back and forth. Observers are told to count how many times the participants in white pass the ball. Approximately half of the observers who are focused on the task of counting, fail to notice that someone in a gorilla suit walks into the circle and pounds his chest and then walks off screen. The gorilla is on screen for several seconds.⁵

As Weeks and Snape note, we see what we expect to see. Even follow-up studies that are similar in nature to the original ‘gorilla’ study have had similar results, demonstrating that even when we are primed to the possibility of an unexpected event, it does not substantially enhance our ability to recognise what we are not looking for. We see only what we are looking for.⁶

For example, Drew cites a study where researchers asked radiologists to perform a lung nodule detection task. A picture of a gorilla 48 times larger than the average nodule was inserted in one of the images,

yet 83 per cent of radiologists did not see the gorilla. Eye-tracking revealed the majority of those who missed the gorilla looked directly at it.⁷

The implications for inattentional blindness can be enormous: experts risk missing unexpected outcomes if they are tuned in to searching only for the patterns they expect to see.⁸

Being inadvertently blind to our grey rhinos because we have ruled them out by rating probability as medium or low can leave a critical gap. As Schutzer notes, grey rhino events are hitting our home, work and social environments with devastating consequences. Examples include the May 2021 ransomware attack on Colonial Pipeline (a US oil pipeline system); the 2020 California wildfires; the Northeast US blackout of 2003; and major hurricanes such as Sandy (2012) and Katrina (2005). These sorts of catastrophic events were warned about but ignored until they happened, causing huge disruptions, losses and panic. With global warming, disruptions due to natural disasters such as floods, hurricanes, tornados and fires are increasing in likelihood and frequency of occurrence. The drought-fuelled bushfires that ravaged much of southern Australia in 2019 and 2020 not only darkened skies and destroyed wildlife, but also damaged critical energy infrastructure, leaving tens

of thousands of homes without power. In 2020, intense cyclones, monsoon rains and floods hit densely populated areas in South and East Asia and led to the displacement of millions of people in seven countries. In 2021, unusually cold temperatures in Texas caused the state's power grid to collapse, affecting millions.

Schutzer likewise notes that cyber threats are increasing in frequency, lethality and complexity to the point that every entity can be assured they are going to be attacked and that there will be a good chance that at least one of these attacks will be successful.

We must become more resilient to grey rhinos, but how?

By planning for them, a little bit at a time.

BROADENING BEYOND OUR TOP TEN RISKS

One of the hallmarks of traditional risk assessments is the seeming ability to lock in with some degree of certainty the 'top ten' risks worth focusing on. Businesses spend countless hours and resources on lengthy, tedious risk assessments that attempt to predetermine every possible detail before committing budget to mitigating or controlling the top identified risks. However, assuming the risks are static and quantifiable (and that that quantified sum is accurate) can lead to business rigidity when agility and resilience should be the goals.

As Lindstedt and Armour recommend in their 'Adaptive Business Continuity' approach, it may be best to eliminate risk assessments entirely as some of the biggest disasters arise from events that seem to be improbable to the point of impossible. Even more importantly, 'when leaders are convinced that [risk management] addresses all potential issues through mitigation and insurance, they may be lulled

into a false sense of security that can put their entire organisation at risk of being able to survive a catastrophic event'.⁹

As Schutzer says, waiting for satisfactory ways to determine if a proposed measure is cost-effective may prove to be disastrous. Similarly, focusing only on top ten risks could lead to underpreparing for grey rhinos.¹⁰

Low-likelihood is not the same as zero-likelihood. As Sheffi notes, this means that high-impact low-likelihood risks may be more dangerous than their expected value implies because no one in the organisation will have experience with the event and their seeming rarity makes those risks easy to ignore.¹¹

According to Sheffi, the reason major disruptive events have such devastating impacts is rooted in the way companies approach risk management. Sheffi says most organisations identify their risks as high, medium, low and then further triage the risks based on how they should be handled. Low-impact low-probability risks (Figure 4, lower left quadrant) are of little concern, while the high-impact high-probability risks (Figure 4, upper right quadrant) get the most attention (and budget for mitigation). But it is the high-impact low-probability risks (Figure 4, lower right quadrant) that organisations are ill-prepared for, and this can result in catastrophic damage to the organisation as the defences are not in place.¹²

In today's world, organisational resilience requires not being caught off-guard.

As Gracey explains, risk managers tasked with building resilience capability require flexibility, adaptability, situational awareness and a willingness to fight organisational inertia, apathy and cultural barriers. It is vital not only to build leadership's awareness of potential gaps but also the need to plan strategically to close out those gaps.¹³

Before COVID-19 emerged as a global

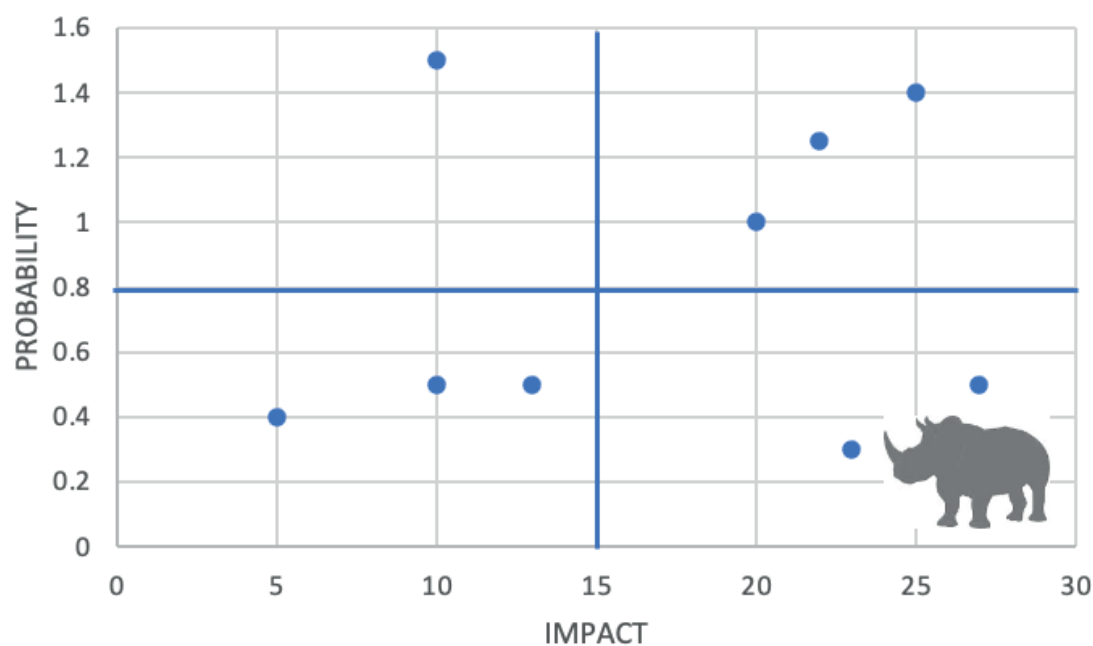


Figure 4 Reweighting risks using the new methodology makes it easier to identify grey rhinos (in the lower-right quadrant)

threat in 2020, institutions around the world had been trying to tackle the issue of pandemic preparedness, but were thwarted by underfunding and other hurdles. Despite the purported learnings as public health researchers and officials look ahead to future pandemics, the situation still remains largely the same. In the wake of COVID-19, there have been calls for better pandemic preparedness, driven by a sense that the outbreak could have been foreseen and prevented. Yet we tend to move on quickly, with new risks taking centre stage, resulting in a familiar cycle of what Bawany calls ‘panic and neglect’.¹⁴ This is a concern, as although we may not know when the next pandemic will happen, it is nonetheless certain to happen. It is a grey rhino that has been pushed aside by the current list of risks seemingly more probable in the near term.

As Bawany argues, ‘to understand the full range of potential disruptions and avoid the trap of “fighting the last war”,

companies must look beyond the last disaster’.

Further complicating the matter is the fact that the top ten risks may be differently perceived within the company:

‘The CFO may focus on risks that affect financial performance and future growth, and the head of operations would focus on health, safety, environmental, and manufacturing risks. Meanwhile, the head of procurement would focus on supply chain risks ... and the head of human resources would focus on risks relating to diversity, resource management, and training.’¹⁵

Building agility to uncertainty and differences of risk perception has been a challenge for decades and requires a deliberate focus on elasticity. As Bawany says, ‘organisations must be prepared for future disruptions’. Research by the Centre for Executive Education (CEE)

and the Disruptive Leadership Institute (DLI) on best-in-class organisations that have successfully navigated their disruptive challenges showed that they took concrete steps to anticipate, respond to, and capitalise on disruptive forces heading their way. ‘Effective planning is a critical factor for allocating the necessary resources with minimal cost and time’.¹⁶

Bawany’s best practices for building organisational resilience include strategic foresight to search for latent problems, connect the dots, and put in place a robust process for prioritising, sourcing and managing critical risks, not just top ten risks.

Of course, planning for all possible risks is not necessarily feasible or practical. According to Hatton and Brown, ‘organisations are embedded in a complex global web of technological, social, political and environmental conditions. It is impossible to imagine every eventuality that will occur. Planning for everything is also impractical’.¹⁷ To do so would be extraordinarily resource-intensive and plans would be unwieldy. Instead, as Hatton and Brown argue, organisations must find the right balance between planning for every contingency and being able to adapt or flex.

Sheffi seconds this concept of flexibility. As he explains, estimating probability requires information that is rarely available to managers or which relies on subjective estimates. To compensate for the difficulty in estimating the likelihood of specific disruptions, Sheffi recommends that management focus on redundancy and flexibility measures more generally, as such capabilities can help a company to recover from many potential disruptions, even those that cannot be imagined specifically.¹⁸

So, perhaps it is flexibility — rather than focused planning around specific risks — that is the crux of the best planning strategy for grey rhinos.

APPROACH

I recently had someone ask me, ‘here’s the list of our top ten risks — which are the grey rhinos?’. They seemed puzzled when I explained that the ‘top ten’ list was unlikely to include any grey rhinos at all.

The simple truth is that if we keep going back to the same top ten list, year after year, and prioritise budget for those risks only, we will continue to miss the grey rhinos. Once initial mitigation planning is underway for top ten risks, organisations need to look at their risk assessments with fresh eyes, especially the high-impact risks that did not make it into the top ten because they seemed less likely (or less likely to occur in the near term). The risks that could be catastrophic if they occur but seem lower-likelihood than the risks in your top ten list — these are the grey rhinos (see Figure 4, lower right quadrant). In order to see them, you have to stop looking for risk through the same lens.

This requires broadening out beyond the top ten to catastrophic risks that not only seem less likely to occur but which may not yet have made it onto the radar.

How

Many organisations cannot find their grey rhinos because they are looking in the wrong place.

Perhaps the biggest stumbling block to getting started is noticing the grey rhinos in the first place and calling them out by name.

The following steps describe how to do this.

Step one: Identify what is most important to your organisation

Start with your organisation’s mission statement if that helps. What sets you apart from your competition? What would drive your key stakeholders to make the leap to another organisation? Do not focus on

minor disruptions that are inconveniences; instead look at what your stakeholders would find inexcusable and would cause them to walk.

Define the threshold between what is inconvenience and what is unacceptable. Often this may fall in line with what you would consider mission-critical processes. Perhaps your stakeholders might find a delay of a few minutes or hours an inconvenience; but what if the delay is more than a day; or what if the delay is multiple days when they need what you provide in order to fulfil *their* just-in-time delivery to their clients?

Risk tolerance may be another place to take a close look. Have you been accepting risks that are not really tolerable simply because your probability calculations allow you to? If probability was not part of the equation to begin with, would your risk tolerance still be the same, or are there risks you could no longer justify?

Step two: Name the grey rhinos you are aware of

As mentioned earlier, the known grey rhinos are high-impact risks which, in terms of likelihood, do not rank in the top ten. (As shown in Figure 4, the need to plan for risks in the upper-right quadrant is obvious, while the high-impact risks that land in the lower-right quadrant may not get due attention.) Crystallise which grey rhinos you are already aware of using the previously discussed methodology for reweighting risk. Reassess your risks so that as severity of impact increases from negligible to minor to moderate to severe to catastrophic, it jumps by a factor of 5 at each step, while likelihood increases by only quarter steps as it moves from low to medium to high-likelihood (see Figure 3). This puts the emphasis where it is needed and minimises erroneous results from the assessment of probability.¹⁹

Your grey rhino risks may now include some risks that would otherwise have landed in the lower-right quadrant of traditional risk assessments (and therefore been ignored). Starting your planning with these may be sufficient. Over time, though, you will want to identify whether there are additional grey rhinos that should be added.

Step 3: Hunt out the grey rhinos that are hiding

Building a capability for noticing early warning signs (signal detection) and escalating those signals upwards can increase an organisation's situational awareness and ability to identify potential threats before they become a crisis.²⁰

There are multiple ways to do this.

Pull together a focus group to brainstorm. Ask your subject matter experts what keeps them up at night. This does not need to be particularly complex. Were there any near-misses that have them thinking 'what if'? List these things. They are often your grey rhinos in their clearest form. Do not be dissuaded by those that seem improbable. The seeming improbability is often what makes them grey rhinos.

Lucht recommends anticipating risks and opportunities through 'risk sensing', which involves employing human insights and advanced analytics capabilities to identify, analyse and monitor emerging risks.²¹ She suggests that even a simplified version of the process — without advanced analytics — can be useful. Lucht's organisation convenes a cross-organisational committee once a year, tasked with identifying and prioritising five areas of risk not previously assessed. They could be areas of risk and opportunity present within the organisational culture or that are emerging within the industry or society at large. The risk-sensing exercise is done in tandem with the reassessment of previously identified

risks in a continuous cycle that picks up and incorporates in newly emerging or newly sensed risks.

Look at what is in the news and interpret the events through your organisation's lens. Get in the habit of thinking about how your organisation would/could react (or prepare) if you were in the impacted organisation's shoes.

For example, perhaps your organisation has no operations in Russia or Ukraine and has not been impacted by the conflict. Still, noticing the disruption the war causes for impacted organisations should trigger self-examination of the impact of political conflict in your organisation.

I once had a client that had set up its data centre in an old Second World War tunnel that had been retrofitted and hardened. For the most part it was a clever and seemingly well-considered solution... except that a few meters away, on the other side of the wall, was a less-stable political environment that could inadvertently impact their operations for reasons outside their control.

The 2023 Silicon Valley Bank meltdown is another example. Perhaps your organisation has no dealings with Silicon Valley Bank, or any small bank for that matter. Can you think broader? Are there other small cogs in your process that could impact you? Is there a small but always reliable vendor that supplies a specialty raw material at a great price and with great service? How would it impact you if there were a disruption to their ability to serve your needs?

Planning for grey rhinos

Once you have got your grey rhino list, sort by what is highest-impact, regardless of seeming probability (see Figures 3 and 4).

To be clear, it is not necessary or even desirable to stop planning for top-ten high-impact high-probability risks. That

must continue unabated. Focus on that in the first year until you have begun to get a handle on those risks. Once past the first year of risk mitigation planning, however, it is essential to also begin turning your attention to your grey rhino risks.

Start small but begin by chipping away at resourcing each of the highest-impact grey rhinos a little bit at a time. Perhaps a full-fledged solution is beyond your budget, but one-tenth the cost per year will still get you there in ten years. Alternatively, are there controls that can be put in place that would reduce the vulnerability further?

Perhaps, in some cases, generalised business continuity planning may be a sufficient start, even where additional budgeting or vulnerability reductions are unavailable. Consider broad-brush strategies to increase resilience — no matter the loss scenario (such as planning for a loss of people, loss of facilities, loss of technology etc., regardless of whether the loss is due to a fire, pandemic, civil unrest or grey rhino).

Then home in more specifically on your grey rhino risks with more specific planning over time. The solution, according to Sheffi, can be pretty straightforward: just planning for an event can help mitigate and lower the resulting impact.²²

As Sheffi notes, being aware of the risk in advance and developing contingency plans can provide a leg up:

'A company can reduce the likelihood of disruptions by ... trying to avoid situations particularly prone to disruptions (for example, suppliers located in flood plains or unstable countries). A company may also implement safety, quality, and security measures, including cyber security. Yet such preventative measures cannot entirely eliminate risks — and tend to target only the most foreseeable causes of business disruption.

Companies can reduce the impact of a disruption by being prepared to deploy a timely and effective response.²³

For example, spare inventory, alternative suppliers, spare capacity, layering defences ... predefining escalation procedures so response can be swift, and having business continuity plans already in place.

This is not to say that contingency plans need to be created for every ‘meteor strike’ risk possibility. Instead of getting twisted up trying to plan for every conceivable possibility, Sheffi counsels planning resilience to *effects* rather than specific *causes*. *What* is disrupted matters more than *why* it is disrupted. (It may not be necessary to plan for a critical process disruption caused specifically by fire and also a disruption caused specifically by storms and yet another in the event of a meteor strike. Rather, plan for a disruption to the critical process.) Sheffi says business continuity plans should focus most on if the supply chain, process or location is disrupted, no matter the reason.

In a recent case study, Jaques notes how the telecommunications company Optus failed to plan for a catastrophic system failure because they believed the level of redundancy built into their system meant such a crisis was unlikely.²⁴

His advice: whether or not you think it probable — if you are in the food business, you should prepare for an incident or allegation of widespread food poisoning. (It makes no difference whether you are a family-run restaurant or a major manufacturer; you still need to plan.) If your company handles chemicals, you should plan for spills, leaks, fires and explosions. If you are processing confidential customer information you need to plan for cyber attack or exposure of sensitive data. If you are in the transport business, prepare for a crash. All of these examples have been in the headlines recently and often

the organisations involved claimed they were unprepared because the disaster was unexpected.

Lean production practices and single points of failure mean increased flexibility is even more important than in the past. Is there standardisation you can begin building into production lines, facilities or processes to provide more interchangeability? Are teams following a common process so that personnel can temporarily substitute for each other in a pinch? If one facility needs to close (for whatever reason), can additional production be ramped up elsewhere to fill the void? If parts, products and teams in various parts of the company have some degree of commonality, it is easier for them to be plug-and-play in the event of an unexpected interruption.

In 2021, Emergent BioSolutions was forced to destroy approximately 400 million doses worth of the key component for COVID-19 vaccine under development at its Baltimore, Maryland area facility because of quality control and contamination issues — just as demand for the vaccine was at its peak. Emergent had assured both Johnson & Johnson and AstraZeneca it could handle manufacturing for both companies, even though the AstraZeneca line required 80 process changes from the Johnson & Johnson manufacturing line. Had Emergent BioSolutions been in a position to scale up in multiple locations, configured similarly, would it have created enough resiliency so that the company could have avoided its crippling class action lawsuits claiming they overconfidently misled investors about their preparedness to handle both contracts?^{25,26}

Can you use case studies like this, failures reported in the news, or even near-misses within your own organisation to paint a picture of possible planning paths your organisation may want to consider?

As Hatton and Brown point out, risk and resilience professionals sometimes forget that other people do not fill their days thinking about what might go wrong. Business continuity professionals and risk managers can change that by telling stories and explaining use cases that paint a picture. This is especially effective following a crisis (or near-miss) where new awareness of the potential problems and their impact can be harnessed.²⁷

The biggest hurdle to planning for grey rhinos is starting. Once we have seen them and know they are there, we cannot put our head in the sand and hope they will not charge anytime soon. It is a far better strategy to begin the slow and careful process of wrangling them.

CONCLUSION

Identifying grey rhinos and recognising them for the threat they are can be a stumbling block for many organisations because of the way we have traditionally done our risk assessments to identify high-impact high-probability risks and to look no deeper into high-impact risks we hope will not materialise before we can get to them. Quantification of probability has lulled us into a false sense of security that we have concretely nailed down the risks we need to worry about and prepare for. We must stop leaving our flank wide open and being so surprised when a purportedly ‘unforeseeable’ grey rhino unexpectedly charges.

The first step in seeing seemingly ‘unforeseeable’ grey rhinos is to change our risk assessment methodology, reweighting impact so it factors more prominently while (error-prone) likelihood factors less.

Once we can see our grey rhinos, we must begin planning for them by methodically closing up our defences a little bit at a time, while building our resiliency through broad-brush process strategies like

those discussed here. Grey rhinos are not unforeseeable; we need to expect and plan for them.

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