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# Supply Chain Resilience Report 2021

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# Foreword

Welcome to the 12th edition of the BCI's Supply Chain Resilience report. This report comes after a year where many organizations have seen their supply chains disrupted and tested more than ever before. COVID-19 first entered most organizations' radars at the beginning of 2020, and supply chains were quickly affected. Factory shutdowns in the Far East were the cause of early disruptions and, as the virus quickly became global, disruption became more widespread: logistics channels required rapid remodelling, suppliers became unable to meet contract terms and manufacturing plants closed due to component shortages.

Business Continuity's role in helping to avoid and mitigate disruption has come to the forefront this year. Encouragingly, more organizations than ever before are now recording, measuring and reporting on performance-affecting supply chain disruptions via an enterprise-wide, coordinated approach. There has been a significant increase in the number of organizations using technology: for the first time, more than half of organizations are now using technology to help streamline the recording and analytics process.

While COVID-19 will have been partially responsible for increasing the use of technology in the monitoring and reporting process, the area where it has had most impact is in supply chain mapping. With key suppliers unable to meet contract requirements and other organizations discovering backup suppliers sourced from tier 2 suppliers, the need to fully understand supplier networks has been highlighted. With laws and regulations being introduced to encourage and enforce ethical supply chain practices, the need to implement best practice in supply chain mapping is now of paramount importance.

The severe supply chain disruptions and their concurrent knock-on effects to organizations' balance sheets has resulted in Management taking a much greater interest in supply chain resilience, something which continuity, risk and resilience professionals have been wanting for many years. 83% of professionals report that management commitment to supply chain risk is now "medium" or "high" and some are already seeing funds diverted to Business Continuity for investment in additional staff and/or technology.

While positives can be taken from 2020, there is still work to be done before supply chain disruptions become more manageable. As an example, just 1 in 6 organizations carry out due diligence on key suppliers at the procurement stage, with a quarter leaving it until contracts are signed. Many organizations are still failing to carry out appropriate levels of due diligence on their suppliers, particularly those beyond their immediate suppliers.

Nevertheless, 2020 has been a force for change, and the positive increases we have noted this year in terms of the depth of due diligence, mapping processes and closer relationships with suppliers will mean organizations are better positioned to deal with future global disruptions. We just have to ensure the lessons learnt are not forgotten.

We are delighted to have the support of Everstream in producing this year's Supply Chain Resilience report, particularly given how the use of technology for managing supply chains is moving from a "nice to have" to a "must have". We hope that this year's findings are useful and allow you to benchmark your organization's processes and procedures against your peers and further enhance your organization's supply chain resilience.

**Christopher Horne FBCI**
Chair of the BCI

# Foreword

Everstream Analytics is honoured to have partnered with the Business Continuity Institute on this report; perhaps the most timely and important supply chain resilience report to date.

To say that lessons can and must be learned from our combined experiences in 2020 is likely an understatement. But because of the unprecedented nature of the Covid-19 pandemic it is important to ensure that we learn the right lessons.

This report draws from a depth of data and in person interviews that will allow readers to more fully understand how the pandemic impacted global supply chains, how different companies reacted and the lasting changes that will be with us for years to come. It also analyzes other ways in which supply chains were disrupted and how the impact of these events was compounded by the pandemic.

One of the lasting changes from 2020 will be a rethinking of how companies must address supply chain risk. Underpinned by new technologies, risk analytics will be embedded in supply chain decision making and will become a competitive advantage for those companies that can be more agile as well as more resilient than their competition. This shift presents a significant opportunity for business continuity professionals to protect and create value across the enterprise by partnering with their colleagues in supply chain functions.

The remarkable speed with which vaccines have been brought to market will help bring the pandemic under control but other risks are on the rise. Major weather events are growing in severity and frequency and longer-term challenges from climate change will require a holistic, end-to-end, dynamic and predictive approach to managing supply chain risk. Our acquisition of Riskpulse in 2019 is a response to our clients' need to better predict the impact of weather and climate on their supply chain networks and we continue to invest in technology that helps companies discover unknown sub-tier suppliers and hidden risks.

Last but no means least we acknowledge the daily work of the front-line workers who have kept food and medicine moving through global supply chains and who now carry hope-restoring vaccines across the globe.

As we say at Everstream Analytics, this report will help you to Get In Front of What's Ahead.

**David Shillingford**
CEO
Everstream Analytics

# Supply Chain Resilience Executive Summary

# Executive Summary

**More organizations than ever are now using technology to assist with supply chain management and mapping:** More than half (55.6%) of organizations are now using technology to help analyse and report on supply chain disruptions, with the number using technology to help with supply chain mapping seeing a major increase to 40.5% (2019: 22.6%). More than half of organizations (57.6%) report that COVID-19 has been the reason for investment in new technology and tools.

**The number of supply chain disruptions organizations encountered in 2020 was higher than any other year in the report's history:** 27.8% of organizations reported more than 20 supply chain disruptions during 2020, up from just 4.8% reporting the same number in 2019. Organizations blamed COVID-19 for the dramatic increase in the volume of disruptions, although European respondents reported disruptions due to Brexit-related issues.

**COVID-related disruptions were more likely to occur beyond tier 1:** The importance of knowing your suppliers' suppliers was emphasised this year when respondents reported that 40.2% of COVID-related disruptions were due to disruptions in tier 2 and beyond. Although this year's research shows that organizations' due diligence beyond tier 1 is improving, COVID-19 has served as a tool to uncover where the gaps in processes lie.

**Solving the logistics puzzle has been a key challenge to organizations during 2020 — and is set to continue into 2021:** All methods of transportation have been affected because of COVID-19. At the start of the pandemic, air freight providers repurposed passenger planes to make up for the lack of belly cargo availability, land transport had its own challenges with goods being held up at borders and sea freight is now struggling with global container shortages. With global vaccine transportation dubbed the biggest logistics project since World War II, the logistic headwinds are likely to continue into 2021 and beyond.

**Senior management are now more engaged with supply chain issues:** 82.7% of respondents report management commitment to supply chain risk is now "medium" or "high"; up nearly 10 percentage points on 2019. The report shows how supply chain issues led to balance sheets taking a hit in 2020 which has meant board interest has become high. With Governments now clamping down on issues such as modern slavery within supply chains, BC professionals are confident that this elevated level of interest can — and should — remain.

**Organizations are now more likely to interrogate the BC arrangements of critical suppliers:** More than three-quarters of organizations (75.2%) report checking that key suppliers have BC arrangements in place, up from two-thirds in 2019. Interestingly, most professionals admitted this was not due to COVID-19, rather ongoing reviews of how suppliers should be managed. A further positive finding this year is most organizations are now going beyond a "tick box" exercise when carrying out their due diligence processes: more than half now request full details of BC programmes rather than merely asking if a plan is in place.

**More due diligence should be carried out pre-contract:** Just 1 in 6 organizations carry out due diligence on all key suppliers' BC programmes at the procurement stage, and a quarter fail to do so until after contracts have been signed. Ensuring BC arrangements are checked pre-contract is vital to ensure suppliers can continue to meet contractual requirements during periods of disruption.

## Levels of Reporting and Technology Uptake

### A third of organizations are now carrying out firm-wide reporting of supply chain disruptions

This is up from a quarter in 2019

**Do you record, measure, and report on performance affecting supply chain disruptions?**

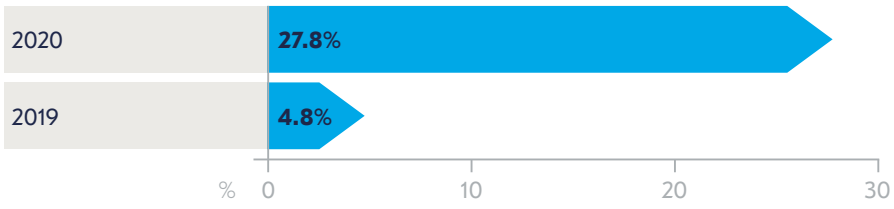
| Year | Firm-wide reporting | No reporting |
|---|---|---|
| 2020 | 32 | 22 |
| 2019 | 25 | 23 |
| 2018 | 30 | 27 |
| 2017 | 32 | 31 |

## Frequency and Origin of Supply Chain Disruption

### The number of organizations experiencing multiple disruptions increased dramatically in 2020

The number of organizations experiencing 10 or more disruptions increased by over 20 percentage points

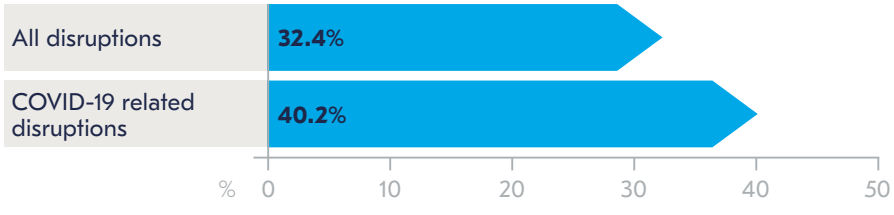
**The percentage of organizations experiencing 10 or more disruptions**




### COVID-19 related disruptions were more likely to be in tier 2 and beyond

40% of COVID-19 related supply change disruptions occurred beyond tier 1

**Percentage of organizations experiencing disruptions in tier 2 and beyond**




### COVID-19 has increased the number of organizations using technology for supply chain management

**For the first time, more than half of organizations are using technology to help record supply chain disruptions**

**55.6%**

**are using technology to record, measure and report on supply chain disruptions**

**41% of organizations are now using technology for supply chain mapping, up from a quarter in 2019**

**40.5%**

**are using technology to develop supply chain maps**

**Over half of organizations admitted COVID-19 increased their use of technology for supply chain mapping**

**57.0%**

**of organizations have increased their use of technology for supply chain mapping as a direct result of COVID-19**

## Causes and Consequences of Supply Chain Disruption

### Cross border land transport has been the primary cause of logistics disruption in 2020

More than three quarters of organizations experienced disruption in cross border land transportation

**Percentage of organizations reporting logistics issues by transportation type**

**84.0%** Delays in cross border land transportation

**70.0%** Delays in domestic land transportation

**65.0%** Delays in sea transportation

**63.0%** Delays in air transportation

### COVID-related supply chain impacts will continue to dominate over the next twelve months

But concern over loss of talent and skills as a result of COVID is the main worry

**Top 5 concerns practitioner concerns for supply chain disruption over the next 12 months**

**66.0%** Loss of talent/ key skills

**65.0%** Human illness

**60.0%** Health & safety incident

**53.0%** Adverse weather

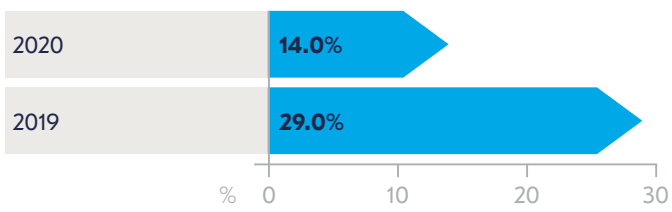
**53.0%** Natural disaster

## Insurance

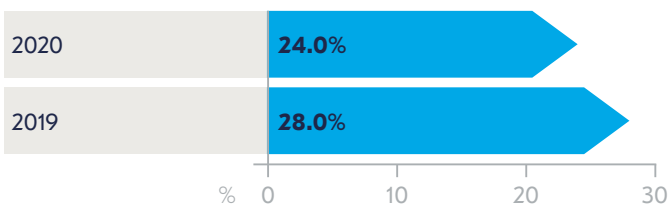
### Despite COVID-19 presenting issues, more organizations reported having cover this year

Fewer organizations had no cover this year, but less reported having over 50% of losses covered

**0% of losses insured**




**More than 50% of losses insured**

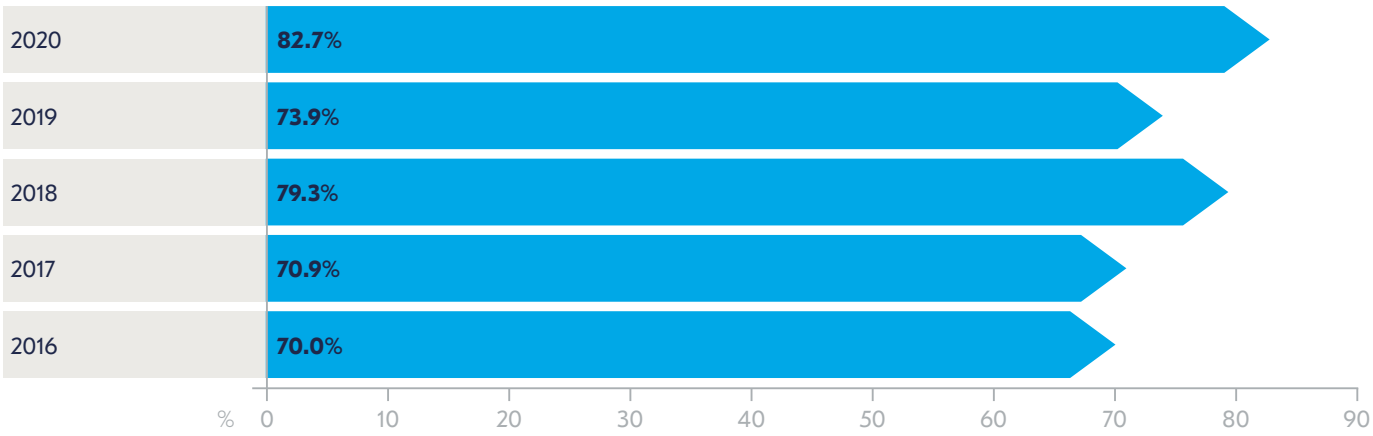


## Business Continuity Arrangements and Due Diligence

### Management have become more committed to managing supply chain risk

**Over 80% of organizations report that top management commitment to supply chain risk is now "high" or "medium"**

**Percentage of organizations reporting top management commitment to managing supply chain risk as "high" or "medium**




### COVID-19 has created positive improvements to management commitment to supply chain risk

**More than three quarters of organizations report a greater degree of commitment as a result of COVID**

**Has top management commitment changed as a result of the COVID-19 pandemic?**

**48.8%**
Yes, top management are now much more committed

**27.4%**
Yes, top management are now somewhat more committed

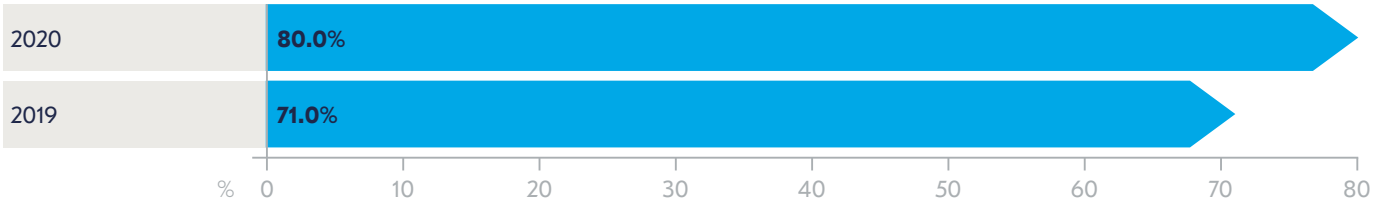
**22.6%**
Top management commitment levels remain unchanged

**1.2%**
No, top management are now somewhat less committed

### More organizations than ever now have business continuity arrangements in place for supply chain disruption

**Four out of five organizations now have arrangements in place**

**Percentage of organizations with BC arrangements in place to deal with supply chain disruption**



## Organizations are starting to go beyond tick box exercises when carrying out supplier due diligence

Organizations are now interrogating plans rather than merely determining if a supplier has a BC plan in place

**Top three methods used by organizations to understand the BC arrangements of key suppliers**

**56.5%**

**Evidence of plans being exercised**

**56.5%**

**Certification or alignment to a recognised standard**

**50.6%**

**The presence of a BC programme and not just a plan**

## Organizations still have difficulty performing due diligence on key suppliers beyond tier 1

Half of organizations fail to carry out sufficient due diligence on key suppliers in tier 2

**Percentage of organizations who seek to understand the BC arrangements of key suppliers**

| Tier | Yes, for some | Yes, for all |
|---|---|---|
| Tier 1 suppliers | 49.4% | 32.5% |
| Tier 2 suppliers | 18.5% | 32.1% |
| Tier 3 suppliers | 9.0% | 19.2% |
| Tier 4 and beyond suppliers | 7.6% | 10.1% |

## More due diligence needs to be performed at procurement stage

**More than a quarter of organizations do not enquire about suppliers' BC arrangements until after a contract decision has been made**

**38.1%**
Yes, it is an integral part of our procurement process from the start

**31.0%**
Yes, but only where the contract risk is deemed high

**17.9%**
Yes, but after the purchase decisions have essentially been taken

**13.1%**
No

**Only 1 in 6 organizations check the BC arrangements of all key suppliers pre-contract stage**

**15.9%**
Every tender/proposal (100%)

**28.1%**
Majority (51-99%)

**28.1%**
Sometimes (25-50%)

**11.0%**
Rarely (1-24%)

**1.2%**
Not at all (0%)

**12.2%**
Don't know

**3.7%**
Not applicable

# Overview

2020 will be referred to as "the year of COVID-19" for many years to come. Since the publication of the previous Supply Chain Resilience report a year ago, global supply chains have been tested more than many organizations have experienced in their lifetime. Organizations have had to remodel their supply chains to ensure continuity of supply, whilst others have had to review manufacturing models; returning to stockpiling in some cases and reducing the reliance on just-in-time (JiT) manufacturing. Many organizations have shifted their entire strategic direction, meaning key suppliers from 12 months ago have been replaced by an entirely new suite of organizations. Business continuity (BC) professionals in many organizations will have had a busy year ensuring there is BC cover for new processes and procedures and the necessary due diligence is performed on new suppliers.

Furthermore, whilst many organizations adapted their strategies when COVID-19 first hit the headlines, the impacts are still continuing. Organizations who diligently stockpiled supplies at the start of the pandemic are finding stocks are now depleted, and new supplies are difficult to acquire because air and sea transportation options from the Far East remain limited. As recently as mid-February, Detroit-based General Motors announced it was suspending production until mid-March due to a global shortage of semiconductors[1].

For some areas in the world, supply chains are also being hit with secondary complications: in the United Kingdom, for example, organizations are encountering delays at shipping ports due to Brexit-related issues[2], whilst United States' supply chains continue to be impacted by the US-China trade war[3].

There are also some anomalies affecting global supply chains which have been swayed by consumer preferences during COVID-19. One large transportation company noted a significant drop — particularly from the United States — in demand for goods from China which, in turn, resulted in customers demanding goods from different locations. This required a complete shift in the organization's supply chain strategy.

Secondary complications aside, one of the primary reasons why supply chains were impacted so heavily by the pandemic was because COVID-19 hit quickly and the global impact was immediate. Last year's Supply Chain Resilience report showed that whilst incidents involving tier 1 suppliers dropped below 50% for the first time in the report's history, incidents in tier 2 and tier 3 rose slightly. For all incidents this year, the proportion of incidents occurring across all tiers was comparable to 2019. However, when examining incidents directly relating to COVID-19, the majority of occurred beyond tier 1. We also reported last year that two-thirds of organizations do not carry out the necessary due diligence on their suppliers below tier 1, and this year's figures are evidence in themselves that some organizations' lack of ability and/or lack of resource to carry out this due diligence is leading to failures occurring deeper into organizations' supply chains.

Throughout the year, we have noted organizations making dramatic changes to their supply chain strategies: research carried out for the BCI The Future of Supply Chain in June 2020 showed that 60.2% of BC Managers were planning to carry out deeper due diligence on their suppliers post-COVID-19, 66.2% were looking to use more local suppliers and 43.0% were planning to source less from the Far East. Whilst some of these figures will be continuing to wax and wane, COVID-19 will undoubtedly have an impact on future business continuity practice concerning supply chain processes and procedures.

1. Bushy, C. (2021). Semiconductor shortage to hit GM earnings. Financial Times, [online]. Available at: https://www.ft.com/content/7348d241-2f5d-4354-b927-4c13b9a75557 [accessed 17 February 2021].
2. Tingle, R; May, L; Wright, J (2021). Will Santa be stuck in Britain's ports chaos? Daily Mail, [online]. Available at: https://www.dailymail.co.uk/news/article-9033641/Honda-halts-production-Swindon-plant-shortage-car-parts-chaos-ports.html [accessed 17 February 2021].
3. Huang, Y; Smith, J (2021). In U.S.- China Trade War, New Supply Chains Rattle Markets. Carnegie Endowment [online]. Available at: https://carnegieendowment.org/2020/06/24/in-u.s.-china-trade-war-new-supply-chains-rattle-markets-pub-82145 [accessed 17 February 2021].

# Levels of Reporting and Technology Uptake

# Levels of Reporting and Technology Uptake

- COVID-19 has helped to drive better practice in reporting on disruptions.
- More organizations are centralizing reporting processes leading to a better response.
- Technology is being exploited within organizations to help improve, streamline and speed up reporting processes.
- The challenges of COVID-19 has led to a big increase in organizations employing supply chain mapping.

# The number of organizations who report on disruptions is continuing to increase

Ensuring that supply chain disruptions are not only recorded diligently but are also stored in a way that the data can be easily mined and reported on is crucial. This ensures that trends can be captured and identified and points of weakness located and acted upon accordingly. Ever advancing big data and datamining techniques mean even the smallest disruptions can be added to databases to give a complete, detailed view of supply chain issues. Last year we noted that the number of organizations who were not reporting disruptions had fallen to an all-time low in the report's history (23.3%). This year the figure has fallen further to 22.3% demonstrating that despite organizations reporting an elevated number of supply chain issues because of COVID-19, they are also tracking these disruptions more effectively.

Furthermore, the number of organizations that are practising a co-ordinated approach to reporting is also increasing: nearly a third (32.4%) of respondents said reporting was co-ordinated and reported across the whole enterprise, up from only a quarter (25.0%) the previous year. Such an improvement is demonstrative of the increased levels of interaction between departments this year as a result of COVID-19. As further evidence of this, the BCI's *The Future of Supply Chain Post-COVID-19*[4] report showed that whilst nearly three-quarters (61.9%) of organizations already had a cross-functional risk management centre prior to COVID-19, an additional quarter (26.7%) either established one during COVID-19, or were now planning to introduce one. As this report will reveal, the increased level of collaboration has meant organizations' response to supply chain disruption has seen a marked positive increase this year.

4. BCI, The (2020). COVID-19: The Future of Supply Chain. The BCI. Available at: https://www.thebci.org/resource/covid19--the-future-of-supply-chain.html [accessed 17 February 2021].

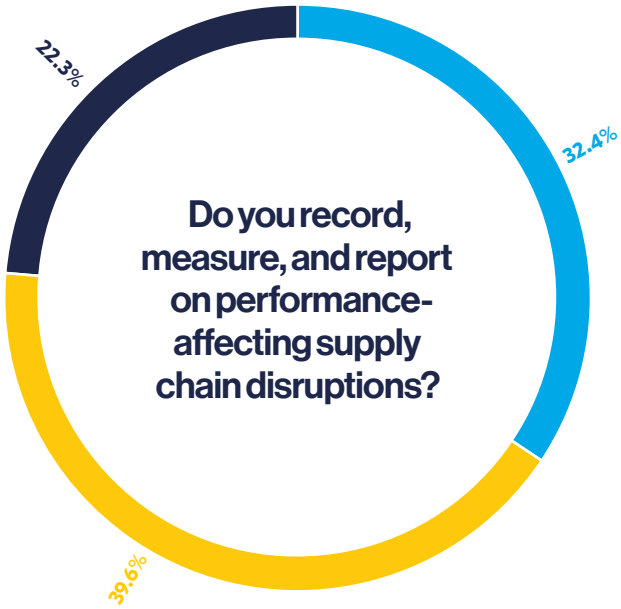



**Figure 1.** Do you record, measure, and report on performance-affecting supply chain disruptions (i.e. where an unplanned cost has been incurred or loss of productivity or revenue experienced)?

| Year | Firm-wide reporting | Reporting within certain departments | No reporting |
|---|---|---|---|
| **2020** | 32 | 40 | 22 |
| **2019** | 25 | 52 | 23 |
| **2018** | 30 | 43 | 27 |
| **2017** | 32 | 38 | 31 |
| **2016** | 34 | 38 | 28 |
| **2015** | 28 | 37 | 35 |
| **2014** | 26 | 40 | 34 |
| **2013** | 25 | 39 | 36 |
| **2012** | 25 | 37 | 39 |

**Table 1.** Levels of reporting supply chain disruptions (2012-2020) (Percentage)

As mentioned before, organizations are increasingly using technology to predict, monitor, record, measure and report on supply chain disruptions. With supply chains becoming increasingly dynamic and more interconnected, particularly during the past year, the use of tools such as big data analytics, internet-of-things (IoT) devices and artificial intelligence are becoming the norm in many organizations. Because of this, there has been a notable step-change in the number of organizations who are using technology to help with disruptions: over half (55.6%) report using technology, up from just 42.7% in 2019. Although COVID-19 has been the driver for technological change within some organizations, interviews revealed than many organizations were planning to introduce technologies this year anyway as its solutions were becoming more accessible and more cost effective for their individual organizations.

> **"We're already trialling tools to help with managing our suppliers. We had some we'd got done in house which had worked well up to now, but some real limitations were exposed this year with the pandemic. So Management want us to invest and we're already trialling some stuff now."**
>
> Senior BC Manager, Manufacturing, Germany

One interviewee described how tools had been developed in-house to help with KPI measurement which, in turn, will help to drive efficiencies in the supply chain and ultimately save on costs.

> **"We have a custom disruption dashboard. It has everything on it; all the automation in the robots. So we know that if a building is cited to take 5,000 packages an hour, we can look at how many it is actually taking; how the robot is working. Say, is it working at below 5,000 we can report on that; we report on the speed. So how quickly does it take for a package to move through our network? We've got hundreds of indicators which boil down into about 20 different KPIs."**
>
> Business Continuity Manager, Logistics, United Kingdom

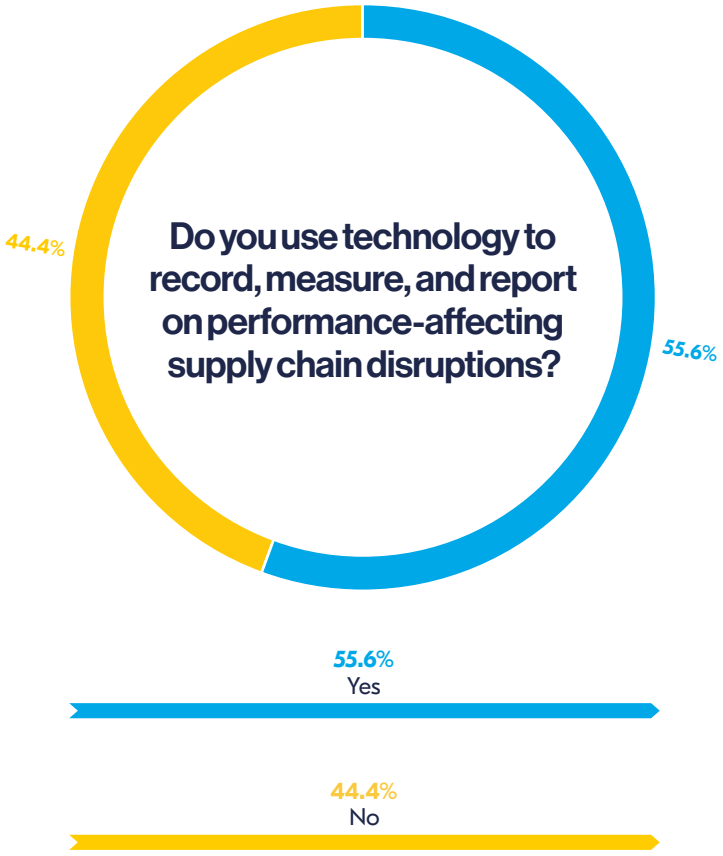



**Figure 2.** Do you use technology (e.g. risk analytics indicators) to record, measure, and report on performance-affecting supply chain disruptions?

# The advantages of supply chain mapping technologies is being realised

One of the areas which is increasingly seeing more input from technology is in supply chain mapping. In 2019, just under a quarter (22.6%) of organizations used technology to develop a comprehensive supply chain map. This would allow relationships between tiers could be explored and would help provide an insight into the potential consequences of supply chain disruption to that organization. In 2020, 40.5% of organizations reported using supply chain mapping to some degree within their organizations with many admitting COVID-19 had been a key driver to this: interviewees explained how, prior to COVID-19, they had failed to realise that back-up key suppliers still ultimately sourced from the same region. With many regions unable to deliver at different points of the pandemic, they found they were left without crucial supplies.

> **"We were very reliant on components – semiconductors – coming from Shanghai and Shenzhen and supply just stopped. We had backup suppliers in Taiwan but they sourced their materials from the same place as the two on the mainland. This left us in a bit of a pickle to be honest and we had to shut down for six weeks. We're now ok again but we can't let that happen again and I'm already looking at technology to better map out the supply chain."**
>
> Supply Chain & Procurement Specialist, Technology, United Kingdom

Furthermore, even though many organizations have now effectively sourced alternative suppliers, the cost of global shipping has reached levels which is threatening the existence of many small- to mid-sized organizations[5]. The demand for medical equipment from Asian countries during the pandemic has been very high, meaning empty containers are now scattered around the world with imports into Asia scarce. The most recent statistics for S&P Global Platts show the cost of shipping a container from North East Asia to Europe as $10,000 – five times as much as usual[6]. Although countries such as China could theoretically produce more containers (most are produced in the region), it is unlikely they will as they will be aware that demand will wane post-pandemic.

Supply chain mapping can help organizations to quickly identify which lines of supply will be affected in the event of a certain geography being affected by an incident.

5. Nunis, V. (2021). Shipping crisis: I'm being quoted £10,000 for a £1,600 container'. BBC [online]. Available at: https://www.bbc.co.uk/news/business-55740063 [accessed 17 February 2021].
6. Larsen, M (2020). Asia in container crisis as world's demand for medical equipment increase. ScandAsia [online]. Available at: https://scandasia.com/asia-in-container-crisis-as-worlds-demand-for-medical-equipment-increase/ [accessed 17 February 2021].

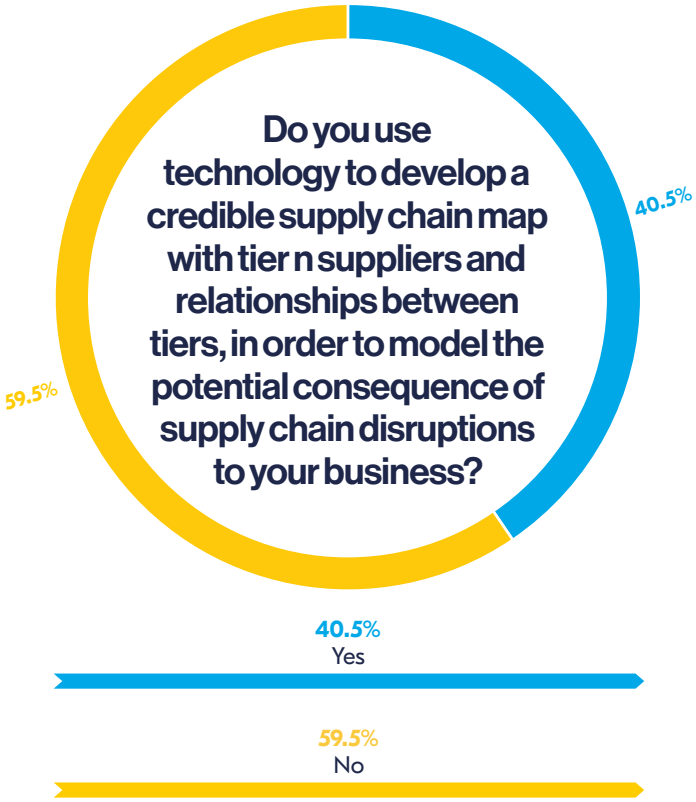



**Figure 3.** Do you use technology to develop a credible supply chain map with tier n suppliers and relationships between tiers, in order to model the potential consequence of supply chain disruptions to your business?

**"We might not have mapped our supply chains using technology yet, but there's a lot of work being done in terms of seeing where our risks are. We use big data to do a massive pull on incidents happening around the world so we can see where they're happening and how bad they are; if there's something that'll affect our plants here. When we look at solutions for supply chain mapping we'll probably investigate something that helps with this too. It's our own and it works really well, but it's just clunky at the moment."**

Supply Chain & Procurement Specialist, Technology, United Kingdom

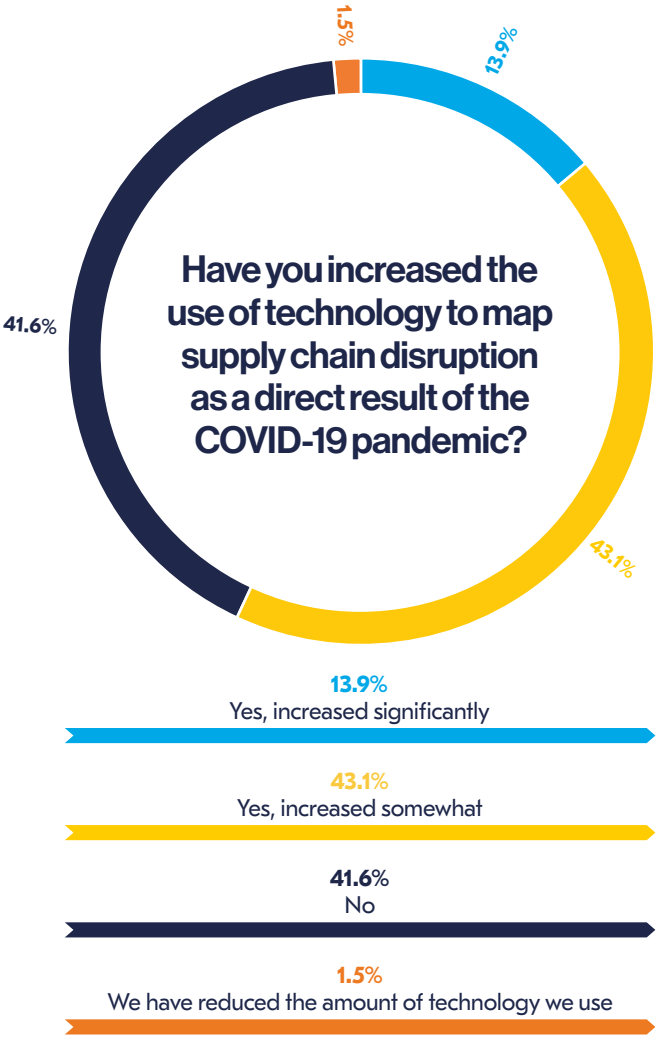



**Figure 4.** Have you increased the use of technology to map supply chain disruption as a direct result of the COVID-19 pandemic?

Indeed, some 57.0% of survey respondents reported they increased the use of technology to map supply chain disruption as a direct result of the pandemic, with 13.9% saying their usage had increased significantly. These statistics were backed up by multiple interviewees reporting they are already trialling mapping software as a direct result of the pandemic.

The importance of using technology to map supply chains has been prominently featured in multiple journal and business press articles over the past six months: The Harvard Business Review reported that, although expensive, supply chain mapping was quickly becoming a vital tool in today's environment[7], whilst Supply Chain Quarterly ran an article explaining how companies which had invested in supply chain risk management tools (such as supply chain mapping tools) had been better placed to weather the supply chain disruptions resulting from the pandemic[8].

An interviewee for a large transport company explained how his organization had developed its own products and services to map disruptions which was particularly effective.

7. Choi, T; Rogers, D; Vakil, B (2020). Coronavirus Is a Wake-Up Call for Supply Chain Management. Harvard Business Review [online]. Available at: https://hbr.org/2020/03/coronavirus-is-a-wake-up-call-for-supply-chain-management [accessed 17 February 2021].
8. Vakil, B (2021). Supply chain resiliency starts with supplier mapping. Supply Chain Quarterly [online]. Available at: https://www.supplychainquarterly.com/articles/4298-supply-chain-resiliency-starts-with-supplier-mapping [accessed 17 February 2021].

# Frequency and Origin of Supply Chain Disruption

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- **The number of supply chain disruptions organizations experienced during 2019 represented a mammoth increase on any year in near-term history.**
- **In 2019, 4.8% of organizations experienced over 10 disruptions. In 2020, it was 27.8%.**
- **Organizations are getting better at managing disruptions beyond tier 1, and interviews revealed that organizations have made changes this year to acquire more information for key suppliers beyond tier 1.**

Organizations noted a significant increase in the number of supply chain disruptions encountered in 2020 compared with the previous year. COVID-19 was the major force in driving up the number of incidents, but other incidents during the year still had an effect: Hurricane Laura hit the Gulf Coast in August 2020 which caused issues in utilities sector[9] and with around 80% of world trade now passing through areas with declining political stability scores[10], disruptions from sources other than COVID-19 were still evident.

Last year's report showed that a quarter (25.6%) of organizations had not encountered any supply chain disruption at all. This year, just 12.2% of organizations managed to get through 2020 without suffering a single disruption. However, when looking at the number of organizations that have experienced multiple disruptions, the figures have changed dramatically: in 2019, less than one percent (0.7%) of organizations reported having 51 or more disruptions; in 2020, the figure rose to 10.0%. To put the figures further into perspective, 2019 saw fewer than one in 20 organizations (4.8%) experiencing more than 10 disruptions. This year, the figure was 27.8%. For most organizations, the impact of COVID-19 in terms of the quantity of impacts was beyond anything experienced in peacetime.

9. Zeiger, D (2020). As Supply Chains Recover After Laura, Storm Season Continues. Institute for Supply Management [online]. Available at: https://www.ismworld.org/supply-management-news-and-reports/news-publications/inside-supply-management-magazine/blog/2020-09/as-supply-chains-recover-after-laura-peak-storm-season-continues/ [accessed 17 February 2021].
10. Sneader, K; Lund, S (2020). COVID-19 and climate change expose the dangers of unstable supply chains. Fortune [online]. Available at: https://fortune.com/2020/08/27/covid-climate-change-logistics-supply-chain-stability-coronavirus/ [accessed 17 February 2021].

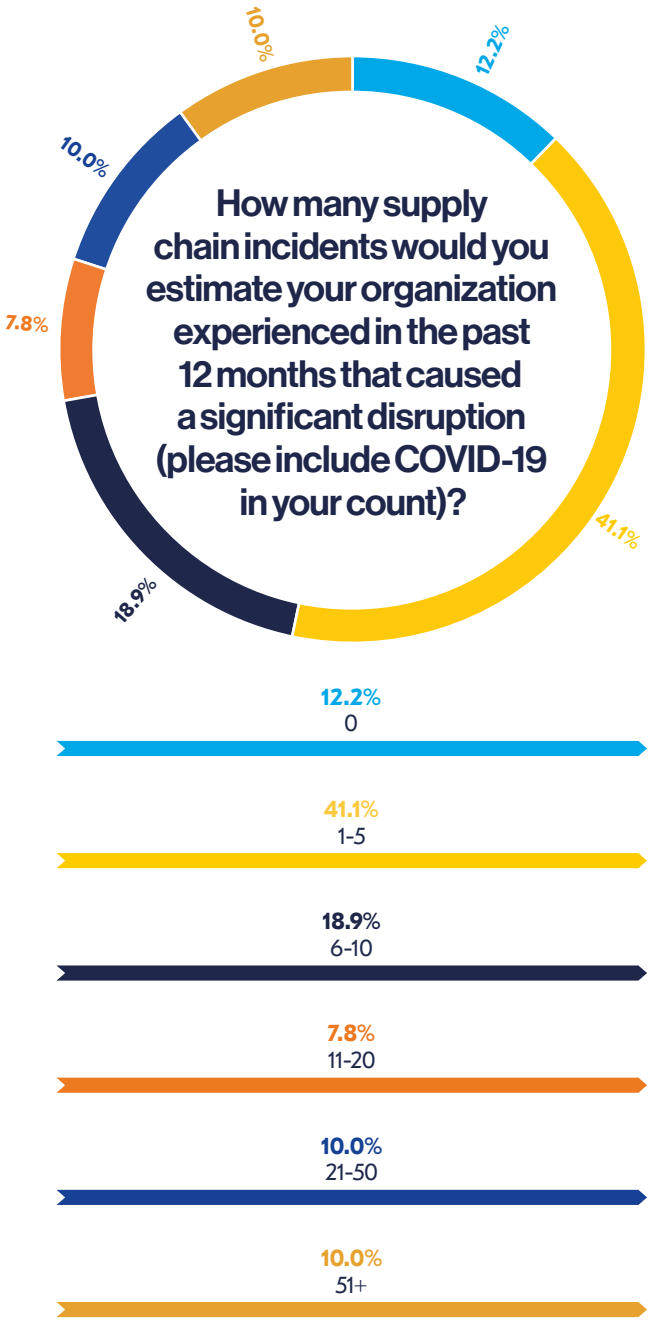



**Figure 5.** How many supply chain incidents would you estimate your organization experienced in the past 12 months that caused a significant disruption (please include COVID-19 in your count)?

When analysing the source of disruption, an increasing number of organizations are reporting disruptions beyond tier 1: respondents reported just 41.2% of disruptions in tier 1 in 2020 (2019: 41.2%) with 18.6% reporting disruptions in tier 2 (2019: 22.0%) and 13.7% of disruptions in tier 3 and beyond (2019: 10.3%). Encouragingly however, the number of organizations reporting that they do not analyse the full supply chain to identify the cause of disruption has fallen to 26.4% this year (2019: 27.5%) demonstrating that COVID-19 has already prompted many organizations to perform greater levels of due diligence after suffering multiple supply chain disruptions because of COVID-19.

Every year, the Supply Chain Resilience report raises the issue of performing deeper due diligence: organizations are becoming much better at managing their closest suppliers, but it is those deeper in their supplier network which organizations fail to carry out sufficient due diligence on. For many organizations, carrying out due diligence beyond tier 1 can be difficult; some claim it as impossible. However, many organizations entered into closer relationships with their critical suppliers during COVID-19: the BCI's *Supply Chain Post-COVID-19 report* showed that 57.2% of organizations spoke to their critical suppliers once a week or more at the start of the pandemic. This enabled both parties to share potential issues, and many found this gave early warning of potential issues arising deeper into the supply chain. Other organizations have found themselves reorganizing their supplier network this year and have performed greater due diligence on new suppliers at the procurement stage of the relationship. By setting agreements early (e.g. ensuring the supplier provides early warning of issues arising in tier 2 and beyond), disruptions can be avoided later on in the relationship and agreements put in place to ensure suppliers meet contractual demands.

However, it is the quarter of organizations that do not analyse their full supply chains to identify the cause of the disruption which is of the most concern. Although many smaller organizations — particularly those with service-driven propositions — may feel they have less need to do due diligence, impacts can still be felt. Furthermore, this figure changes little when considering company size: 21.2% of organizations employing more than 1,000 people do not analyse their full supply chain compared to 33.3% of those who employ under 1,000 people.

## The source of disruption for non-COVID-related supply chain events in the past 12 months

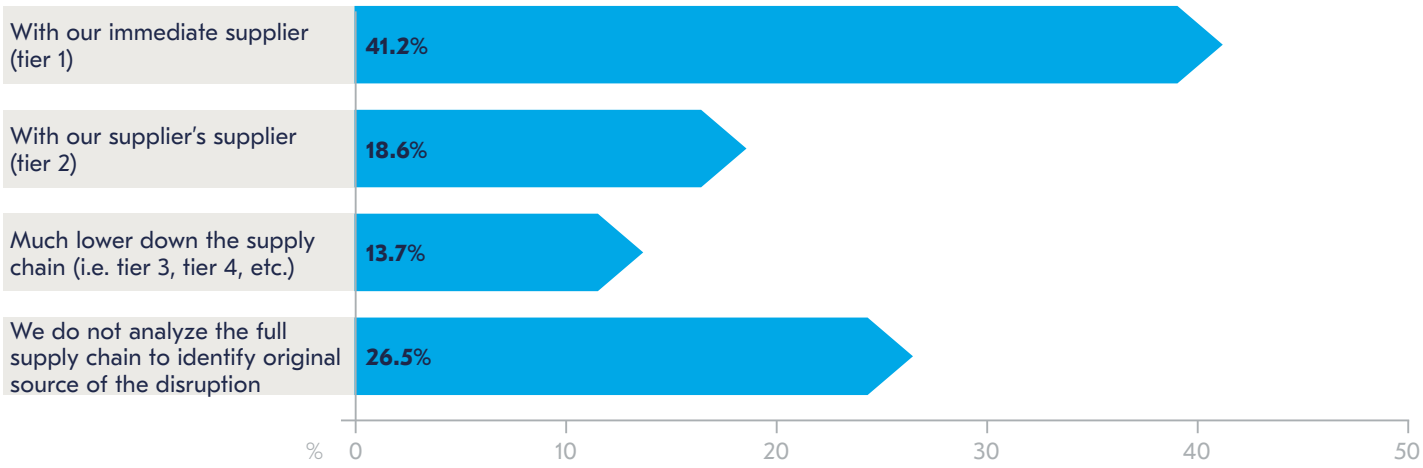



**Figure 6.** Considering the ALL supply chain incidents you are aware of in the last 12 months, where was the predominant source of disruption across non-COVID-related supply chain events?

# Nearly half of COVID-19-related supply chain incidents were in tier 2 and beyond

This year, we additionally asked survey respondents where the source of disruption occurred for COVID-19 related supply chain incidents. Here, the results were even more pronounced: 40.2% of organizations reported disruptions in tier 2 and beyond for COVID-19 related disruptions compared to 32.4% of overall disruptions. Part of this reason may be due to realignment of critical suppliers as a result of the pandemic: research conducted by the BCI in 2020 showed that many organizations had to switch their strategic direction during the year because of changing demand for products and services. For many organizations, this meant that non-critical suppliers became critical suppliers, and vice versa. Because of time allocated to concentrating on their organization's response to COVID-19, some professionals were unable to allocate the extra time required to perform the necessary due diligence on a new set of critical suppliers which led to problems arising.

**"We had to reassign which suppliers were key this year, we had a big change of direction. But our team is so small, just me and one other, and we just couldn't do the necessary due diligence. Then those suppliers had issues when June arrived. We blamed ourselves, Management blamed us. It was pretty disheartening but we just didn't have the resource. The good thing is now the water's settled they realise we've got staff issues here. So I think we'll get a couple of new people here."**

Resilience Lead, Retail and Wholesale, Australia

## The source of disruption for COVID-related supply chain events in the past 12 months

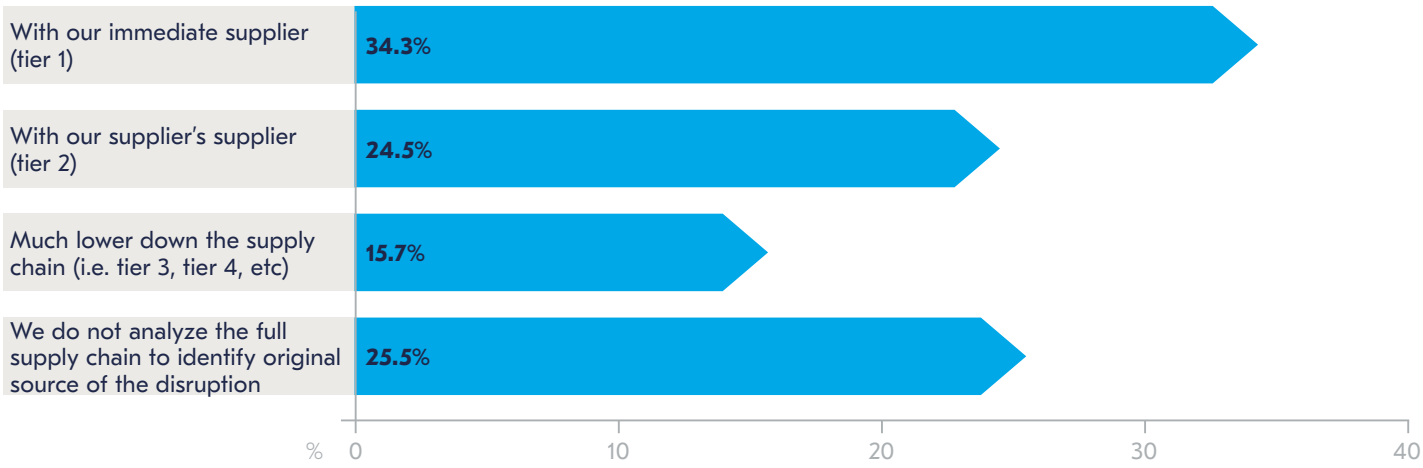



**Figure 7.** Considering the COVID-related supply chain incidents you are aware of in the last 12 months, where was the predominant source of disruption across COVID-related supply chain events?

# Causes and Consequences of Supply Chain Disruption

# Causes and Consequences of Supply Chain Disruption

- **Logistics disruption has occurred across all transportation types, affecting different methods of transportation at different parts of the pandemic.**
- **Increases in container charges from China has led to some organizations moving goods to air transportation despite the significant cost.**
- **Organizations are looking to drive efficiencies into their supply chain to help with delays.**
- **Although COVID-19 has been the major disruptor in 2020, supply chain disruptions due to other causes have failed to wane. Disruptions due to cyber-attacks/data breaches and bad weather also increased over the course of the year.**
- **The financial cost due to supply chain disruptions was significant: 16.7% of organizations reported a "severe" loss of revenue.**

When analysing the reason for logistics disruption, delays in cross border land transportation caused the most disruption in 2020, with 39.0% of respondents reporting it had a major (18.0%), serious (16.0%) or catastrophic impact (5.0%) on their business.

A third of organizations (34.3%) also reported that delays in cross border land transportation caused major, serious or catastrophic impact, with a further quarter (25.0%) reporting the same impact from being no longer able to acquire critical supplies.

Interestingly, this question suggests the major problem for most organizations at the time the survey was carried was with land transportation. With many organizations encountering air transportation delays at the start of the pandemic, many switched to land transportation to try and ship goods more efficiently, particularly as traditional sea transportation routes were encountering delays due crew having to quarantine and ships being unable to dock. In the first half of 2020, China State Railways Group reported that 5,122 China to Europe freight trains were operated, equating to a 36% year-on-year increase. UTLC ERA, a joint venture between the Belarusian, Kasakh and Russian railways, noticed an increase in volume of almost 70% year on year in the first seven months of 2020[11]. Road transportation also encountered problems, particularly in areas of East Asia where HGV drivers were forced to quarantine in their own cities and were unable to turn up for work which resulted in critical delays.

11. Knowler, G (2020). Rising volumes create bottlenecks on China-Europe rail network. Journal of Commerce [online]. Available at: https://www.joc.com/rail-intermodal/rising-volumes-create-bottlenecks-china-europe-rail-network_20200909.html (needs subscription) [accessed 17 February 2021].

# Different types of transport have been hit at different points during the pandemic

However, this survey was clearly taken at a set point in time: concerns now are centred more around sea transportation. As discussed above, demand for Chinese goods is high but with low levels of imported goods, containers are left scattered around the world with the costs of shipping a container increasing five-fold . Furthermore, with container shipping lines becoming unpredictable, failing to meet customer requirements and offering sub-standard services, paying for airfreight — even at the cost of $7 a kilo — is now becoming a viable, and sometimes vital, alternative to sea transportation. Being aware of the shifting challenges around different forms of transport is vital so plans can be developed to consider this.

Insufficient stockpiling of goods features towards the bottom of the table but, for those organizations who had previously relied on being able to acquire goods quickly for a just-in-time (JiT) manufacturing model, it caused production to be delayed. In many instances, this ultimately resulted in organizations not being able to deliver goods at anticipated or, in some cases, contracted levels. Some 25.3% of organizations reported that this had had a major, serious or catastrophic impact on the business. The BCI's *Future of Supply Chain Post-COVID-19 report*[13], published in June 2020, revealed that almost a fifth (19.6%) of organizations are planning to stockpile more goods as a direct result of COVID-related disruptions. Although physical storage may be an issue, good practice suggests a proper measurement of safety stock can be beneficial to organizations in periods when an elongated crisis, such as COVID-19, affects the organization.

Some organizations are working hard to try and drive efficiencies into their logistics networks so goods can still travel — even if less vehicles are available. An interviewee explained how their organization had carried out a significant amount of work prior to COVID-19 to ensure alternative transport options were available if the primary means became unusable. This put the organization in good stead when COVID-19 hit and they were able to continue to deal with customer demand effectively.

**"You've got a trailer, and speed is king at [this company]. You might have a trailer with one pallet on it. If you slow that trailer down by say, eight hours, can you actually get 20 pallets on it instead? That's something that's been really key focus for us because getting the efficiency has been really important. We've really had to do a drive for efficiency, which leads to less trucks on the road, resulting in less costs, but also less pollution. So, multiple effects."**

Business Continuity Manager, Logistics, United Kingdom

**"We did a lot of work in 2019 on looking at proactive solutions, looking at different modes of transportation (e.g. air versus ocean versus truck), and making sure that we understood, from a Business Continuity perspective, what options we had to deliver our products. That's really helped us this year. We had a lot of plans for this year, besides COVID. And then when COVID-19 hit, and we went to crisis mode: we really worked at the plans that we had in place and went about implementing those and making sure that, when we had a customer that needed a shipment, that he or she got it. We are driven by a very customer-focused strategy and that helps."**

Logistics Leader, Engineering, United States

12. Larsen, M (2021). Asia in container crisis as world's demand for medical equipment increase. ScandAsia [online]. Available at: https://scandasia.com/asia-in-container-crisis-as-worlds-demand-for-medical-equipment-increase/ [accessed 17 February 2021].
13. BCI, The (2020). COVID-19: The Future of Supply Chain. The BCI. Available at: https://www.thebci.org/resource/covid19--the-future-of-supply-chain.html [accessed 17 February 2021].

## How has COVID-19 negatively impacted your supply chain?

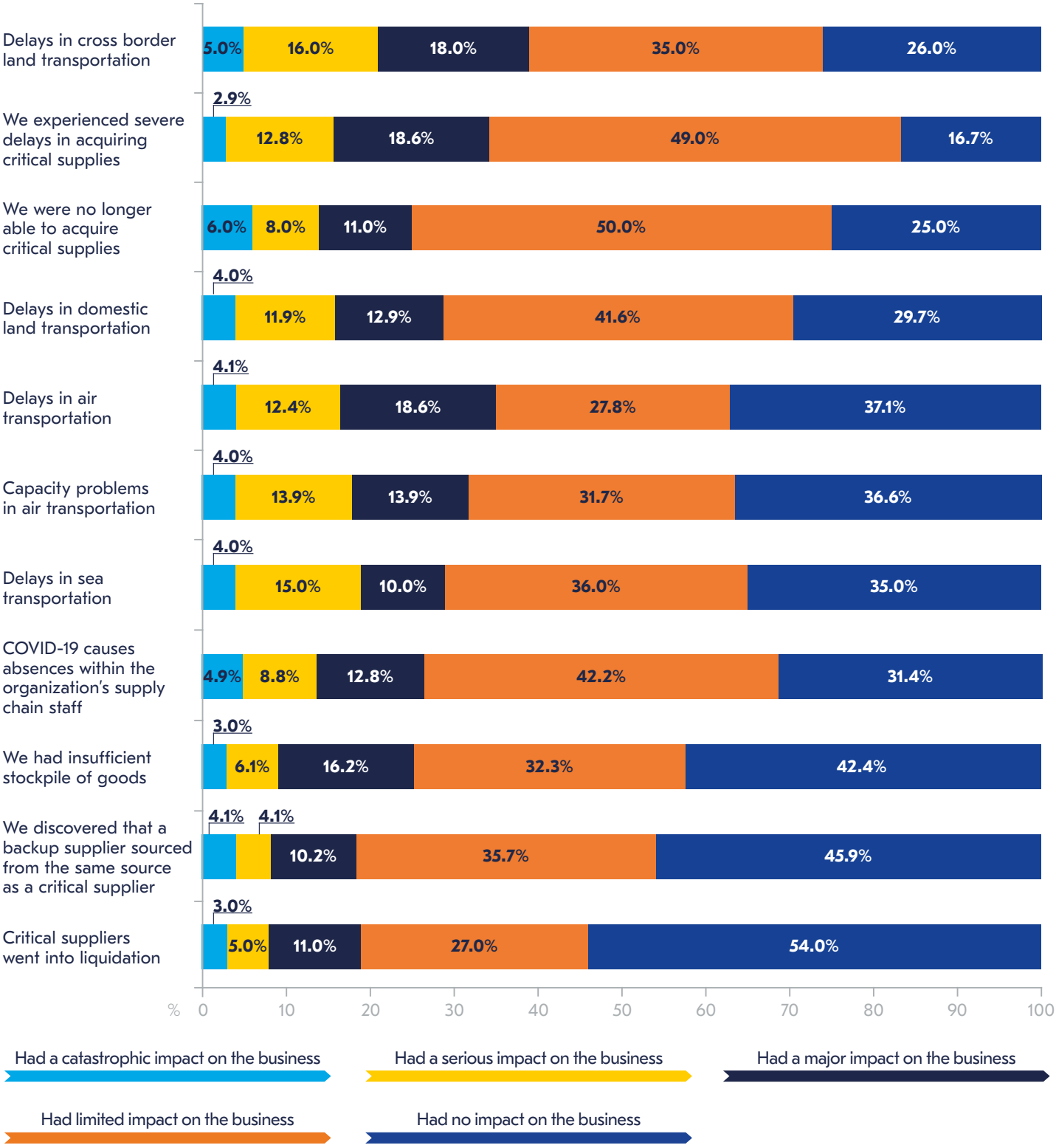



**Figure 8.** How has COVID-19 negatively impacted your supply chain?

# Human disease tops the list for supply chain disruptions in 2020 – but other disruptions should not be discarded

When analysing the causes of disruption over the previous 12 months, human illness unsurprisingly heads the table with 83.3% of organizations admitting it caused disruption in their own organization over the past year. Transport network disruption and loss of talent/skills also placed high in the list of disruptions, causing 44.1% and 46.1% of disruptions respectively. Both causes are undoubtedly, for most organizations, due to the secondary impact of COVID-19.

However, whilst COVID-19 was the cause of most supply chain impacts over the past year, more traditional disruptions such as adverse weather, cyber-attack/data breach and natural disasters still placed high in the table with a greater number of respondents reporting they caused disruption this year: this year, 42.2% of respondents reported adverse weather caused disruption in the supply chain this year compared to 35.1% in the previous year's report. Whilst supply chain incidents due to adverse weather are not related to COVID-19, such an incident is likely to have a greater effect due to organizations within the supply chain having to deal with such an incident on top of COVID-19.

Equally, a third of organizations (33.3%) reported disruptions caused by cyber-attacks and/or data breaches in 2020 compared to a quarter (26.1%) in the previous year. Again, such disruptions are also tainted with the secondary impact of COVID-19: it was widely reported during the year that cyber-attacks increased because of the pandemic, with fraudsters using COVID-19-related topics in phishing attacks, many of which circumvented any virus protection measures that organizations had in place. In the first quarter of 2020, phishing attacks increased by 600%[14]. In May 2020 in the UK, Her Majesty's Revenue & Customs (HMRC)'s released data to show that 5,152 phishing scams reported by the public, up 337% on March when lockdowns first came into place[15]. CheckPoint Research also noted that in November 2020, there were 1,062 "potentially malicious" domains registered relating to vaccines: more than the previous three months put together[16]. Such attacks are unlikely to relent soon, and it is not surprisingly that 52.9% of respondents believe such attacks will be a concern in 2021 and 54.9% for the next five years.

14. Sjouwerman, S (2020). Q1 2020 Coronavirus-Related Phishing Email Attacks Are Up 600%. KnowB4 [online]. Available at: https://blog.knowbe4.com/q1-2020-coronavirus-related-phishing-email-attacks-are-up-600 [accessed 17 February 2021].
15. Coker, J (2020). HMRC Investigating Over 10,000 COVID-Related Phishing Scams. Infosecurity Magazine [online]. Available at: https://www.infosecurity-magazine.com/news/hmrc-investigating-covid-related/ [last accessed 15 January 2021].
16. Scroxton, A (2020). Surge in Covid-19 vaccine phishing scams reported. Computer Weekly [online]. Available at: https://www.computerweekly.com/news/252493523/Surge-in-Covid-19-vaccine-phishing-scams-reported [last accessed 15 January 2021].

# Near term disruptions will continue to focus on disruptions linked to COVID-19

Although nearly two-thirds of organizations (64.7%) believe that COVID-19 will be a continuing source of supply chain disruption in 2021, the concern that tops the list is loss of talent/skills. Whilst some respondents are clearly classifying this as a general risk for 2021 rather than something that will directly affect supply chains, one interviewee noted that staff within teams involved in procurement and/or supplier management had already moved to other organizations — often with new career pathways — after such a challenging year in 2020.

> **"The fallout with Management [due to a failing in Business Continuity processes], meant a couple of the team found new jobs in September. Good brains. They both went to jobs outside the industry, one in education and another in sales, but this is a risk in a part of an organization where there's been so much disruption and stress. It's like those medics we see who've been responding to COVID-19 and have seen such awful things, they've left the sector. It's a very sad state of affairs."**
>
> Resilience Lead, Retail & Wholesale, Australia

The "classic" risks to supply chains remain at the top of the list of concerns for the following 12 months: natural disasters, adverse weather and cyber-attack/data breach are still considered to be of a concern by more than 50% of respondents during 2021. And respondents are right to be cautious: destruction caused by wildfires, for example, is increasing year on year: since the year 2000 in the United States, an annual average of 7.1 million acres has burned every year. This is more than double the annual acreage in the 1990s (3.3 million acres)[17].

In Australia, the situation is even worse: climate change means the Australian summer now lasts a month longer than it did 50 years ago. Bushfires cost the Australian economy US$100m a year — more than 10 times that in the US[18] - and the risk to suppliers and businesses is increasing every year.

New laws and regulations are a concern for 45.1% of respondents, with the United Kingdom set to be a nation which will be heavily affected by this in 2021. The country's exit from the European Union is already impacting supply chains. Whilst many hope the early issues encountered are temporary (such as export taxes and goods being delayed at ports), the short-term issues being experienced are already having significant impacts on global supply chains. Many British exporters of food produce, for example, are experiencing delays due to the introduction of health checks, certificates and customs declarations. The delays ultimately result in goods being rejected by European buyers.

British companies that sell-on products manufactured in Asia back into the EU also face extra tariffs, and large companies are far from immune: ASOS is already expecting a $21m hit as many products sold on the European market enter via Asia. Although issues are likely to be resolved over time, the near-term impacts are set to hit supply chains — and organizations' balance sheets — hard.

In addition to Brexit, another impact in Europe will be the introduction of new legislation that will require companies to track their supply chains to eliminate suppliers and countries that violate human rights and environmental regulations. The US has had similar legislation in place with the Dodd-Frank Act in 2010 and other European countries have had their own laws, but this is the first time it will be made into broader EU legislation[19].

With COVID-19 still pressurising supply chains in 2021, the year ahead looks set to be a challenging one. However, for those organizations with plans in place and with sound supply chain mapping in place, management of the risks will be easier.

17. Congressional Research Service (2021). In Focus: Wildfire Statistics. US Congress [online]. Available at: https://fas.org/sgp/crs/misc/IF10244.pdf [accessed 17 February 2021].
18. Procurious HQ (2020). Top 5 Supply Chain Risks to Watch in 2021. Procurious [online]. Available at: https://www.procurious.com/procurement-news/top-5-supply-chain-risks-to-watch-in-2021 [accessed 17 February 2021].
19. https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/659299/EPRS_BRI(2020)659299_EN.pdf [accessed 17 February 2021].

## Over the longer term, the COVID-risk will wane with concerns centring around more traditional disruptions – but organizations will now be more risk aware

Human illness still remains the top concern for the next five years, and we are likely to see the impact of COVID-19 on supply chains for many years to come. However, not all of them will be negative: BCI research indicates that supply chains will become more local, stockpiling will become more prevalent and organizations will be increasingly looking towards technology solutions to help manage their supplier network[20].

Overall however, in the longer term, practitioners see traditional risks becoming more apparent. When interviewees were asked what they felt was the biggest concern to supply chains over the next five years, the most frequent answer was "climate change". Indeed, climate risk is no longer something which is reserved to the Corporate Social Responsibility pages of Annual Reports: it is already having real, tangible impacts on organizations and their supplier networks. Organizations are increasingly looking at reporting using the Triple Bottom Line (TBL) theory where "people" and the "planet" are considered alongside "profit" to better gauge an organization's commitment to corporate social responsibility and the environment Ethical supply chains are also a component of this and the importance of good mapping procedures is again highlighted here.

Whatever the future holds in terms of supply chain risk, COVID-19 has served as a warning to organizations that a global event, particularly one on the scale of the pandemic, has the potential to hit supply chains with catastrophic consequences.

20. BCI, The (2020). COVID-19: The Future of Supply Chain. The BCI.
Available at: https://www.thebci.org/resource/covid19--the-future-of-supply-chain.html [accessed 17 February 2021].

## Percentage of respondents reporting disruptions due to specific incident type in the past twelve months

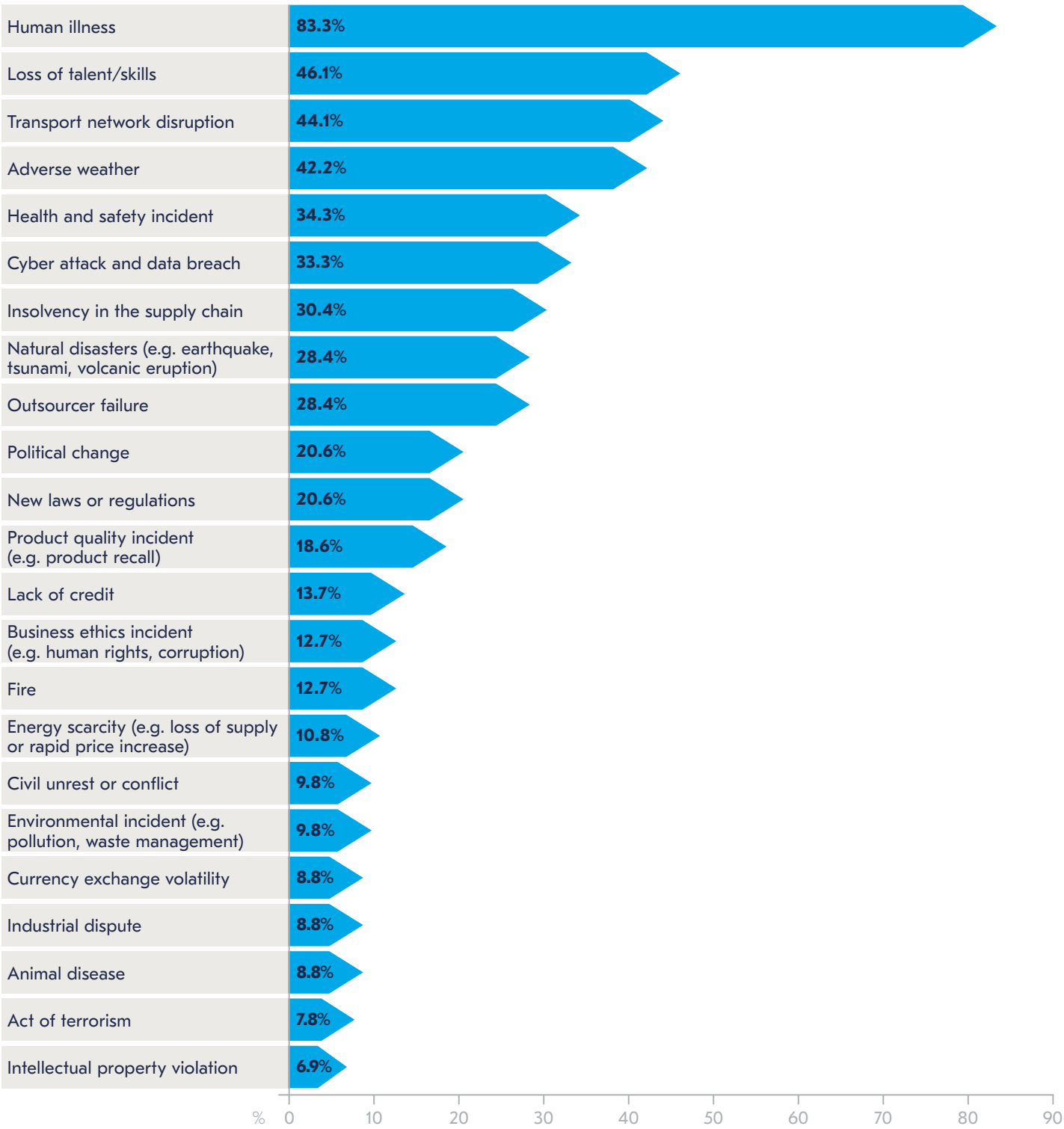



**Figure 9.** Considering the following incidents, please tell us whether they caused any disruption to the supply chain of your organization in the past 12 months.

## Percentage of respondents reporting concern for disruptions by specific incident type in the next twelve months

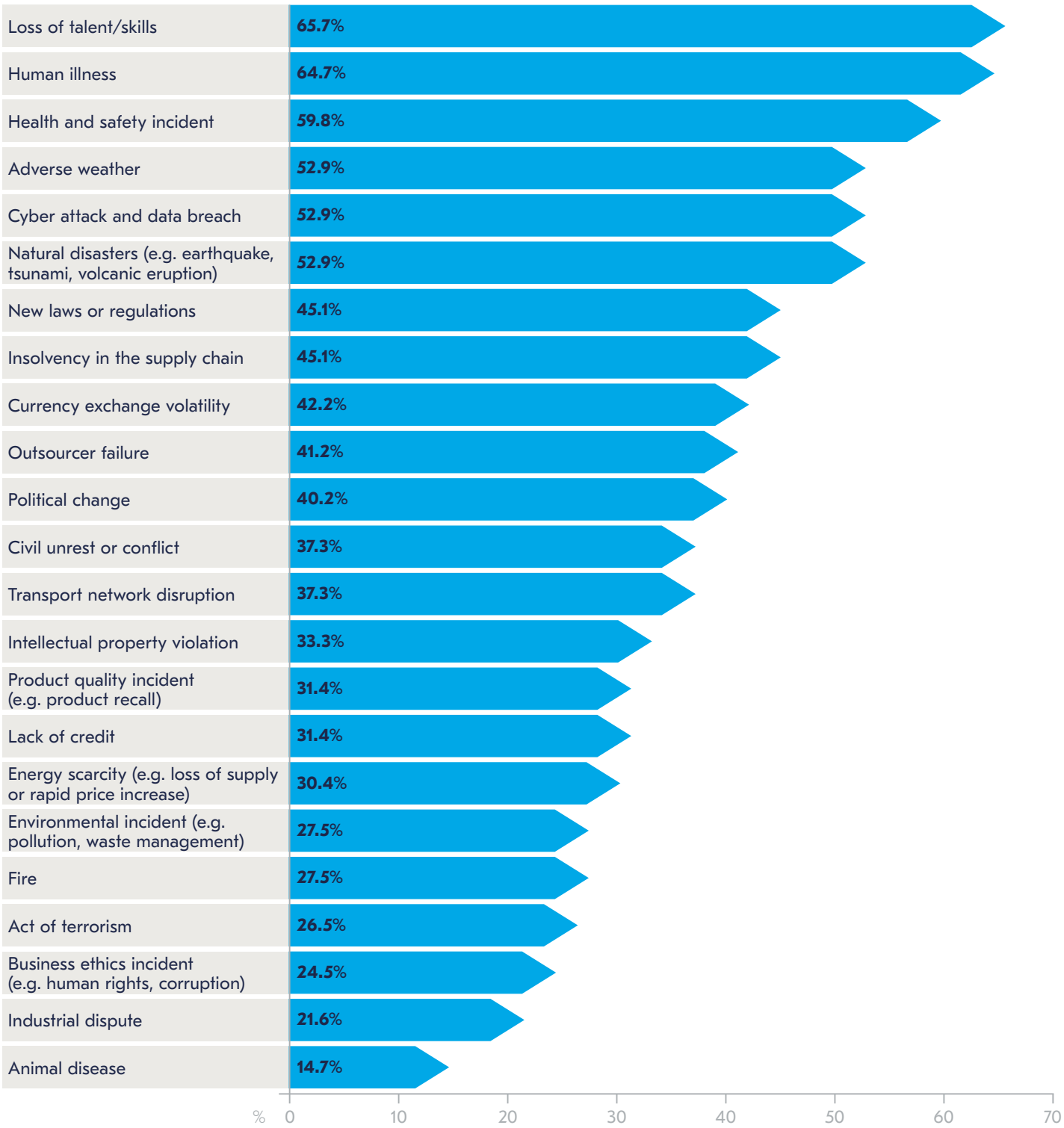



**Figure 10.** Considering the following incidents, please tell us if they are a cause of concern for the next 12 months.

## Percentage of respondents reporting concern for disruptions by specific incident type in the next five years

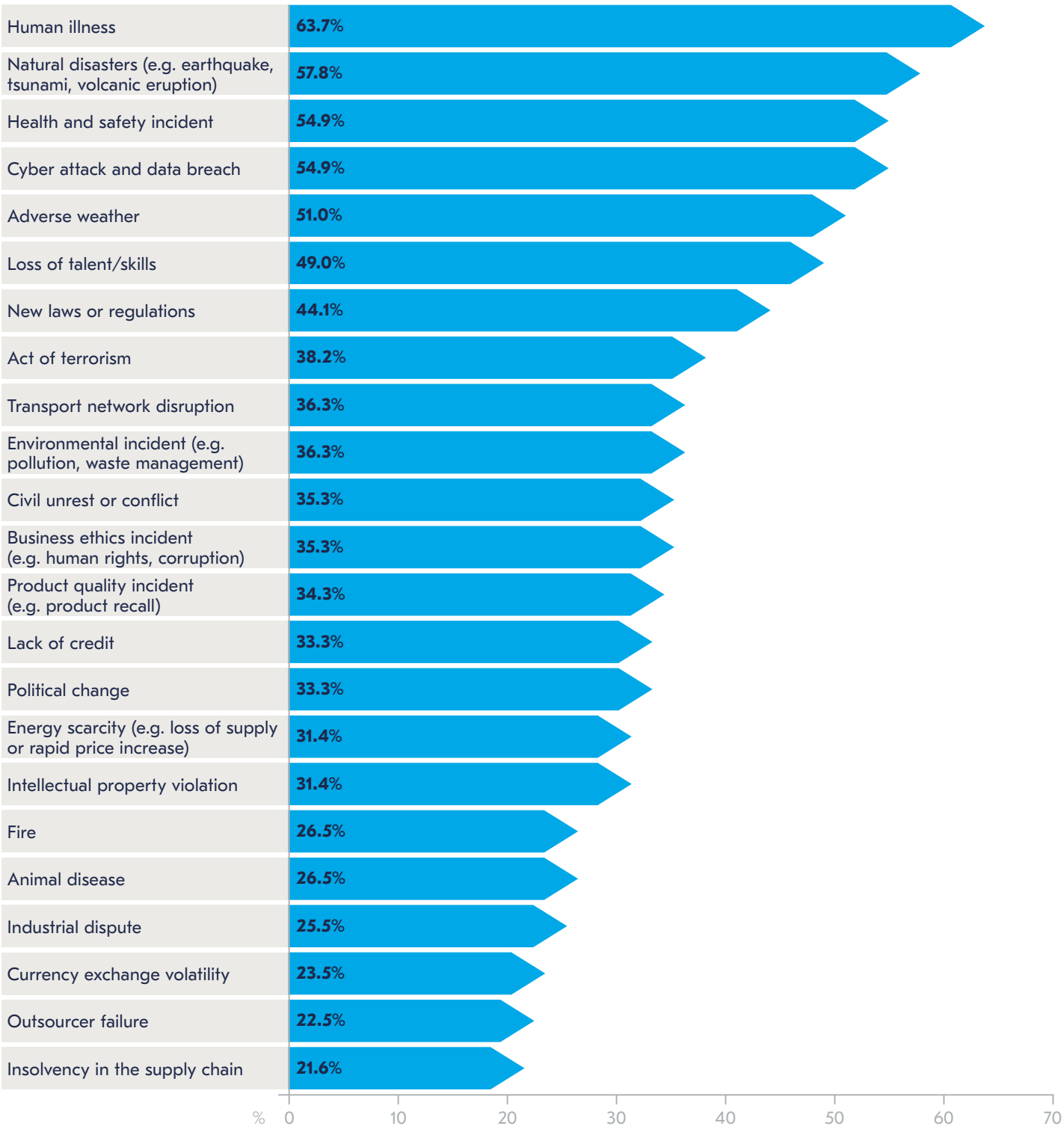



**Figure 11.** Considering the following incidents, please tell us if they are a cause of concern for the next five years.

# Loss of revenue tops the list of consequences for disruptions over the past 12 months

Loss of revenue ranked in fourth place in last year's report for the consequences of disruption and has risen to the top of the table this year. Less than a quarter of organizations reported they incurred no financial loss because of supply chain disruptions, whilst 16.7% of organizations said the pandemic caused "severe" loss of revenue. Many organizations — particularly those with sound Business Continuity Plans — acted quickly to mitigate financial loss: the BCI's *Coronavirus Preparedness Report* showed that after just two months of most countries going into lockdown, over a third of organizations (36.4%) had already moved suppliers and a similar proportion (35.8%) had shifted to more local suppliers[21]. However, some organizations may have been reliant on insurance policies specially for supply chain disruption but are now finding their insurance does not cover COVID-19 related disruptions: Triple-I's Global Macro and Insurance Outlook suggested that supply chain-specific policies tend to have significant waiting periods and deductibles that would come into effect only under the absolute worst-case pandemic scenario[22]. Many organizations still have yet to test what "worst-case" actually means, however.

Loss of productivity — whilst having less of a severe impact than loss of revenue — was still reported by over three quarters of organizations (76.5%). Some reported only a minor loss: these were typically office-based organizations (such as financial or professional services companies) who were able to adapt to a remote working model quickly and had less reliance on complex, global supply chains. The loss of productivity encountered was typically related to teams being unable to interact as efficiently in an office-based environment. Some 40.7% of financial/professional services firms reported no loss of productivity whilst just a quarter (25.0%) of manufacturing organizations had no dent to productivity.

Impacts which rated high in last year's report such as damage to brand/reputation and customer complaints plummeted in this year's table: customer complaints received ranked second in the list of impacts last year, and fell to fourth from bottom in the table this year. Organizations reported that customers had been more forgiving this year because of COVID-19 and were empathetic to organizations when products were delayed because of supply chain issues.

> **"Customers were different this year. It's strange as the service delivered to them was worse, I think. We weren't so good at answering queries on the phone, and goods were delayed going out. But it's almost like they felt sorry for us because of the situation. They're more forgiving. This made us push even harder to really improve our service over the year. Like a thank you to them."**
>
> Senior BC Manager, Manufacturing, Germany

Another survey respondent made an important point about the cost of supply chain disruption, explaining it was difficult to put a financial value on the cost of a supplier no longer able to produce and/or ship parts. This made it difficult to ascertain whether it was a severe risk or a moderate risk and caused the company challenges in terms of assigning a value to that risk.

21. BCI, The (2020). Coronavirus Preparedness Report — Issue 5. The BCI. Available at: https://www.thebci.org/resource/bci-coronavirus-organizational-preparedness-report---5th-edition-.html [accessed 17 February 2021].
22. Global Macro and Insurance Outlook (2020). Global Macro Outlook. Insurance Information Institute [online]. Available at: https://www.iii.org/sites/default/files/docs/pdf/global_macro_industry_outlook_q1_2020.pdf [accessed 17 February 2021].

## Which of the following impacts or consequences arose from all your incidents/ disruptions experienced in the last 12 months?

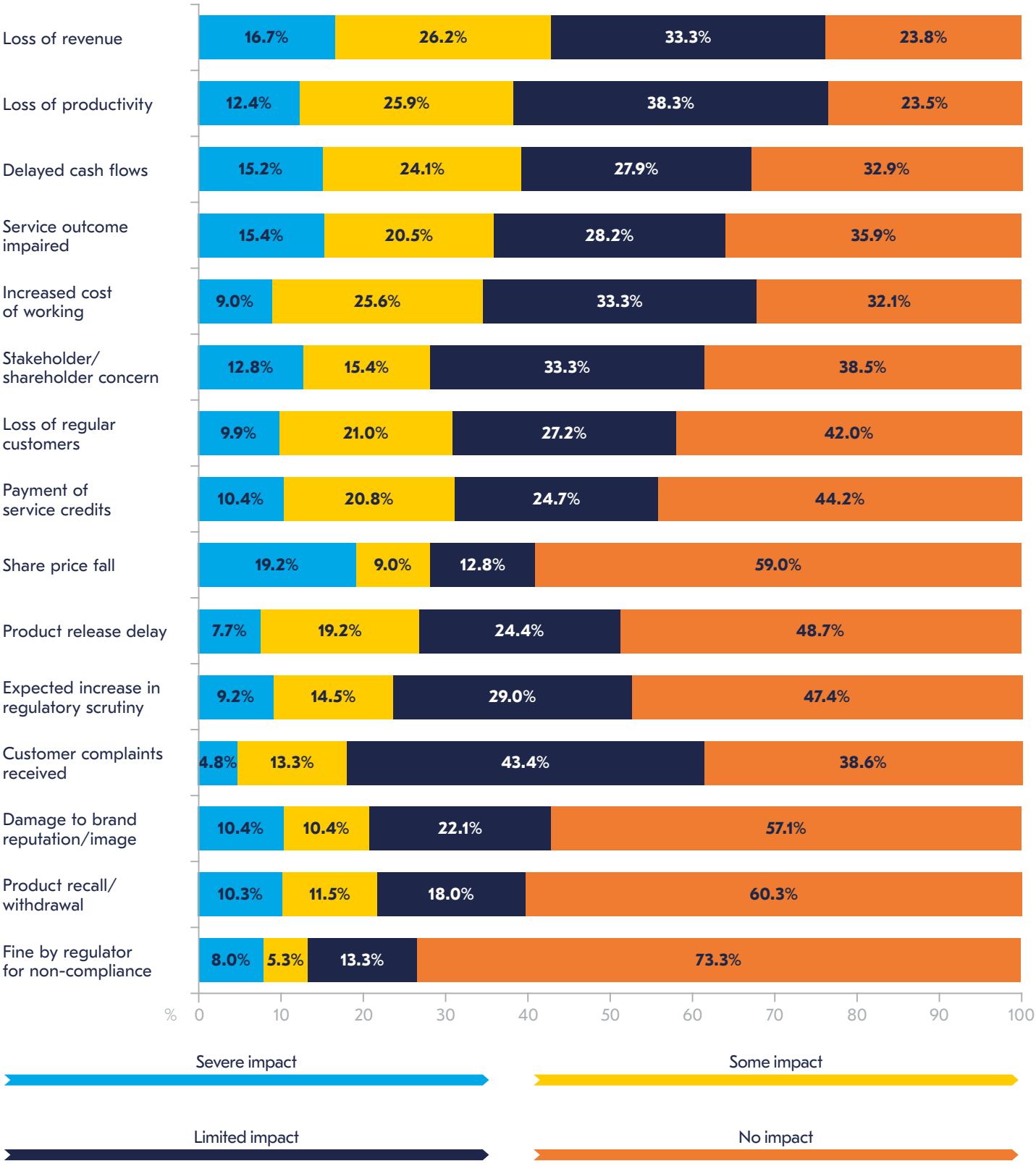



**Figure 12.** Which of the following impacts or consequences arose from all your incidents/disruptions experienced in the last 12 months?

Respondents were also asked what the consequences were of their most major supply chain disruption over the past year. Given COVID-19 was the primary disruption for most organizations in 2020, the results for the consequences for the single, largest disruption were near identical to the results for disruptions from all events. The only notable change was customer complaints received: just 4.8% of respondents reported customer complaints to have a severe impact on their organization when considering all disruptions, whereas 9.1% reported the same when considering the consequence of their largest disruption. Although it was discussed above how many customers were more forgiving because of the COVID-landscape, other organizations still had major disruptions during 2020 which were a secondary impact of the pandemic and incurred significant customer grievances.

**"We'd been managing ok with COVID-19; we were all working from home and it was all good. But then we had a cyber-attack, a phishing attack, hit several employees in the company which took our systems down for 10 hours. I think we could have dealt with it in the office, but with everyone remote and with their own laptops, it took much longer. This impacted our ability to ships goods for about three days and we had a lot of complaints then. Lost sales. We could have done without that."**

Resilience Lead, Retail & Wholesale, Australia

## Which of the following impacts or consequences arose from your singular, most major incident/disruption experienced in the last 12 months?

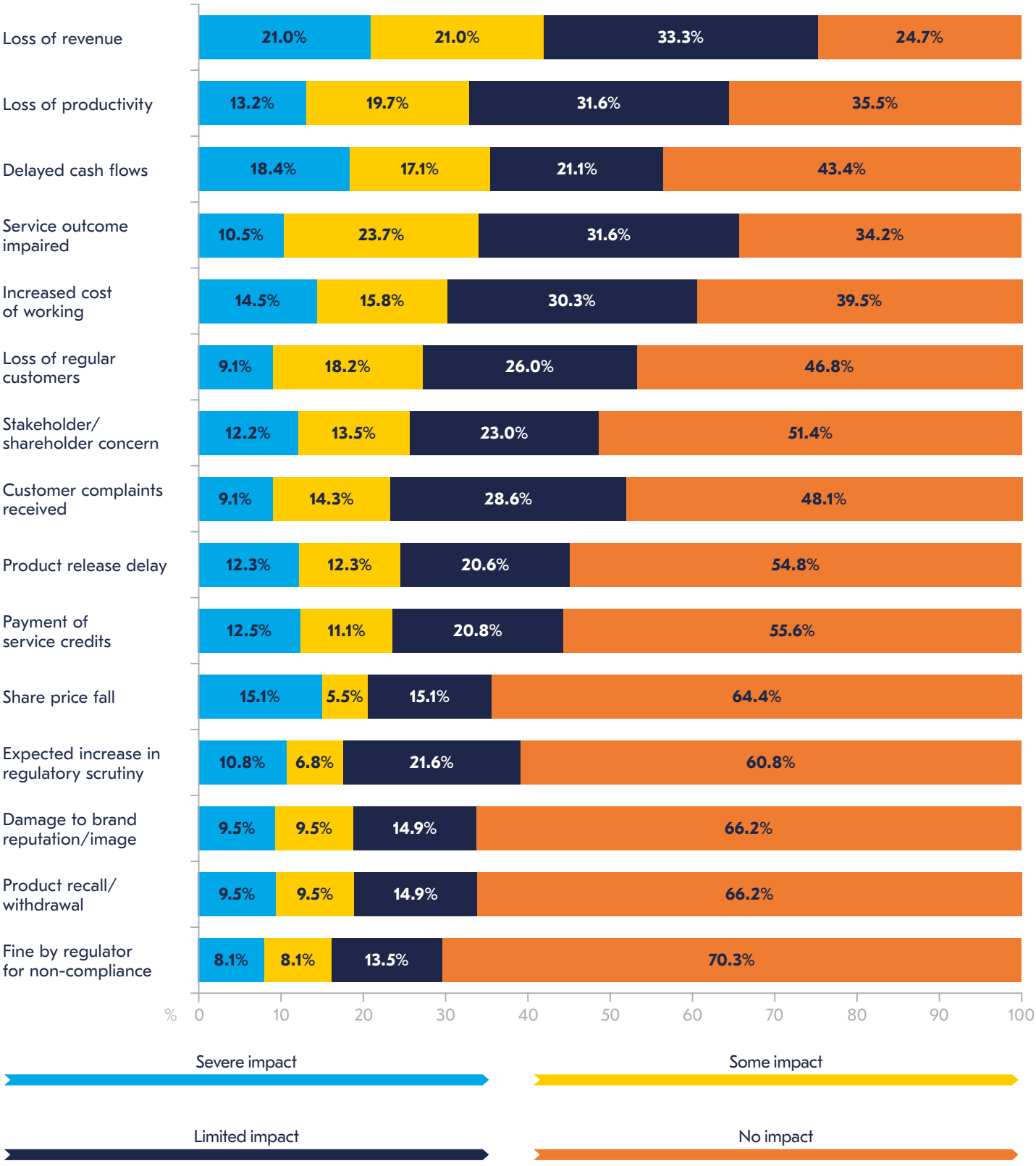



**Figure 13.** Which of the following impacts or consequences arose from your singular, most major incident/disruption experienced in the last 12 months?

# Insurance

# Insurance

- **Over three-quarters of organizations reported either partial or full coverage of the financial impact this year (up from 56.7% in 2019) but the number who had full losses insured halved.**
- **A third of respondents believe the insurance market does not have enough products tailored to supply chain needs; up from just 15.9% in 2019.**

For those organizations that were able to quantify their losses, 76.2% reported either partial or full coverage of the financial impact. This is a significant uplift from 2019 when just 56.7% of respondents reported the same level of coverage, although the number of organizations reporting 100% of losses were insured fell slightly to 10.2% this year (2019: 12.8%). Many organizations found they were left without cover after clauses in their policies provided no cover for pandemic-related scenarios. In the United Kingdom, a case went to the Supreme Court to appeal against the Financial Conduct Authority's Business Interruption Case. The Court ruled that most insurers would have to pay out for disruption caused by COVID-19 after thousands of businesses appealed against claims being refused[23]. A minority of organizations will have policies which provide specialist supply chain coverage, although as a still niche insurance product, there is currently no information currently available as to if claims made through this specific type of insurance have been successful.

23. Wallace, M (2021). Revealed: The Supreme Court ruling for FCA business interruption insurance case. Insurance Business UK [online]. Available at: https://www.insurancebusinessmag.com/uk/news/breaking-news/revealed-the-supreme-court-ruling-for-fca-business-interruption-insurance-case-243648.aspx [accessed 17 February 2021].

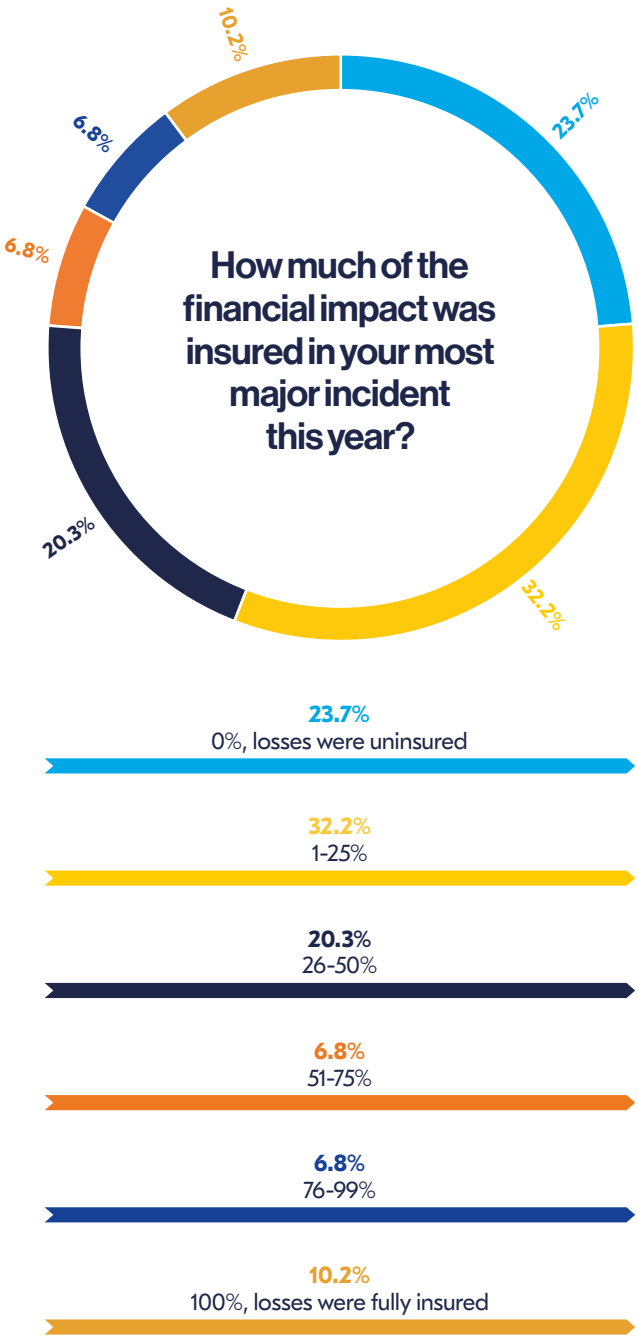



**Figure 14.** How much of the financial impact was insured in your most major incident this year?

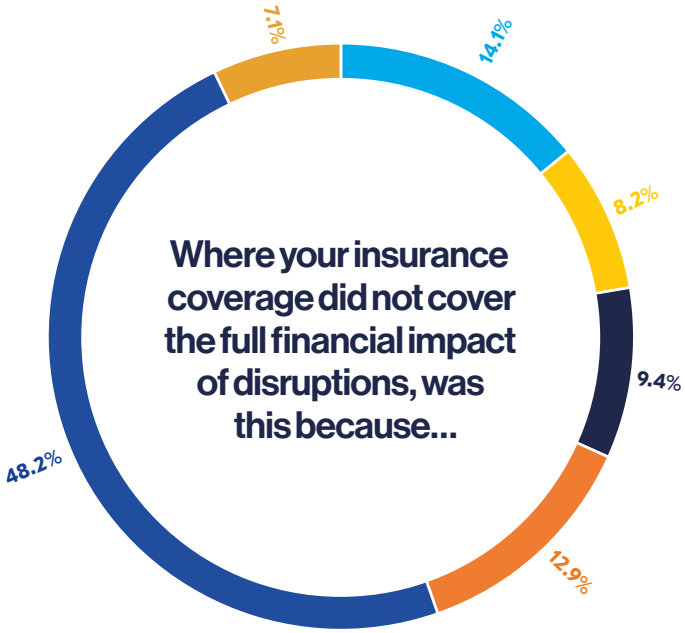
Where the financial impact was not insured, 14.1% of organizations reported taking a risk-based approach to insurance coverage requirements; being prepared to take the financial impact on any losses. Although a smaller proportion than the previous year (29.1%), it suggests that some organizations may need to consider reassessing their approach in the coming year to better bridge the assessment gap. 8.2% - a similar proportion to the previous year — were only covered for traditional physical damage events, and 9.4% were unaware of new non-damage supply chain covers.

However, the leading cause for non-payout (after those taking a risk-based approach) was due to a COVID-related clause with 12.9% citing this as their reason for non-payout. It should be noted that the survey was carried out before the UK High Court ruling allowing businesses to claim (in many circumstances) for Business Interruption Insurance. Although such a ruling was made on UK soil, the same issue is already being brought to the fore in other nations, with action imminent in the United States for example[24].

Whilst larger organizations may be able cover the impact themselves through taking out a risk-based approach to insurance, many small- to mid-sized businesses do not have strong enough balance sheets to cover the cost of COVID-19. One interviewee believed insurers needed to step up and better serve SME customers at this time.

> **"The real people who need our help is the SMEs— because they don't have the balance sheet to carry a supply chain issue and won't have for the foreseeable future. And there's clearly a lot of them in any significant global supply chain. So that's where I really think the insurance industry should step up and add value, those that do will get the SME customer loyalty."**
>
> Consultant, Supply Chain, United Kingdom

24. Torchiana, W; Gilman, R; Rosenberg, M (2020). Covid-19: United States insurance summary. International Bar Association [online]. Available at: https://www.ibanet.org/Article/NewDetail.aspx?ArticleUid=3c9aed3a-0256-4958-91a7-e52b109b71bf [accessed 17 February 2021].




**14.1%**
We were happy to take the rest of the financial impact

**8.2%**
We had only covered traditional physical damage events

**9.4%**
We were not aware of new non damage supply chain covers

**12.9%**
The insurer would not pay out due to a COVID-related clause

**48.2%**
Do not know

**7.1%**
Other

**Figure 15.** Where your insurance coverage did not cover the full financial impact of disruptions, was this because...

# Many believe the insurance market does not have enough products tailored to supply chain needs

**"More specifically about supply chain coverage, I think customers should be pushing the insurance industry for improvements in this, even if it's only for damage events and for better limits. This is because we know financially, that's where a lot of their risk is. The insurance industry claim they exist to help their customers manage risk, but are failing to adequately deliver in one of the most important risk areas that their customers face."**

Consultant, Supply Chain, United Kingdom

With the financial impact from supply chain disruption being extreme for many organizations in 2021, some will now be looking towards their insurers for cover to mitigate against future financial losses due to supply chain disruptions. Specialist supply chain coverage is still fairly limited in the market and, with insurers' reluctancy to payout on COVID-19-related claims in 2020, many organizations feel there are insufficient products in the market to cover for supply-chain related issues. Indeed, whilst nearly a quarter (24.7%) feel insurers do have enough products tailored to supply chain needs, 35.9% feel it does not. With just 15.9% reporting there were not enough products in 2019, the 20-percentage point rise this year is indicative of increasing demand for specialist supply chain cover as a direct result of COVID-19.

Insurers will also be reviewing their own policies as a result of the pandemic and all organizations that have insurance would be advised to review their policies to check what cover will be provided going forward. Whilst some organizations may not have been prepared for the pandemic, insurers will already be drawing up new policies and amending terms and conditions of existing ones. One interviewee highlighted that now is the time for organizations to be pushing the insurance industry for more products and better limits on existing products.

**"The insurance industry will be looking at this in a lot of detail. Some specialist insurers did offer insurance around pandemics prior to this year, but they will now be running for the hills and instead saying "there's no way." This is because they realised the accumulation risk, and how bad it could get. What they're really saying now is that the government should step in on pandemic coverage."**

Consultant, Supply Chain, United Kingdom

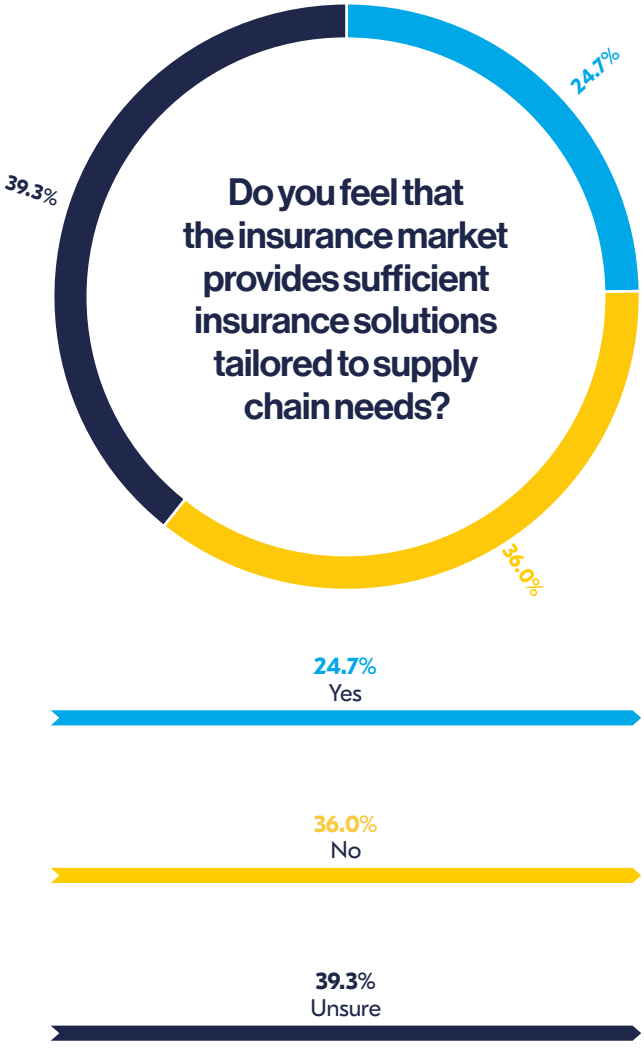



**Figure 16.** Do you feel that the insurance market provides sufficient insurance solutions tailored to supply chain needs?

# Business Continuity Arrangements and Due Diligence

## Business Continuity Arrangements and Due Diligence

- Senior Management are taking a much greater interest in supply chain management in 2020.
- 49% of respondents report management are "much more committed" to managing supply chain risk as a result of COVID-19, and 27.4% are "somewhat" more committed.
- Nearly 80% of organizations now have Business Continuity arrangements in place to manage supply chain disruption, up from 70.9% in 2019.
- Organizations are performing greater due diligence on suppliers' BC arrangements: it is becoming less of a "tick box" exercise with organizations requesting full copies of plans and in-depth questionnaires on programme details. There is still much room for improvement here, however.
- During 2020, organizations performed greater levels of due diligence at the procurement stage of supplier relationships with 38% now reporting Business Continuity checks are an integral part of the procurement process.

Previous editions of the Supply Chain Resilience report have shown Senior Management having primarily medium- or low-commitment to managing supply chain risk. This has led to supply chain risk not being given the priority it should be in Boardrooms and, in some cases, departments dealing with suppliers and supplier risk being starved of resources. This means departments are unable to carry out the necessary due diligence on new suppliers, invest in supply chain mapping tools or provide necessary training to staff.

This year however, 82.7% of respondents report that top management commitment is now "high" or "medium" — a significant improvement on the 73.3% reported in 2019. The number reporting "low" or "no" commitment has shrunk to an all-time low of 17.28%.

An interviewee highlighted that in his experience working in an Australian mining organization, the CEO had supply chain management within his personal objectives. He had regular meetings with the CEOs of their critical suppliers which enabled a two-way relationship to form which, in turn, created resiliency as both sides could be alerted early to any potential problems. Another reported how senior Management had become very aware of the importance of risk management, or supplier management, because of the type of leaders they had within the organization.

**"There was an Australian mining company I worked with around eight years ago. Their CEO had supply chain risk management as part of his personal objectives. He set quarterly meetings with the CEO — his counterpart — of key suppliers. It was only with about three or four of the key suppliers, but that was his investment, because he knew then he had a personal relationship which was crucial in times of shortage of supply."**

Consultant, Supply Chain, United Kingdom

**"I give my leadership credit. I think they realized last year how much benefit we could get from risk management. When [COVID-19] happened in January, I came back to the office after traveling in Asia, and our company President came to me and asked 'What do you think about this, and how is it going to impact us?' And I said 'This is going to be a competitive advantage for us.' Back in January, I told him that the work that we've been doing on risk management and how this is going to turn out to be a competitive advantage for us in the logistics space because I can deliver these products regardless of what happens around the world. I have a lot of confidence in our team and the work that we can do. I agree that we've proven it. However, I felt last year that I had the support to get this advance this work because I think that people in [my company] are very technical. Most of them are like me. They're very engineering-focused, and they recognize the value of being proactive versus reactive. It made it a pretty easy sell to those who were more from a technical background."**

Logistics Leader, Engineering, United States

## How would you assess your organization's top management commitment to managing supply chain risk? Top management commitment is:

**Figure 17.** How would you assess your organization's top management commitment to managing supply chain risk? Top management commitment is:

With supply chain disruption decimating balance sheets and, in some cases, sending businesses close to liquidation, many management teams have taken a more active interest in this area of their business. Indeed, nearly half (48.8%) of survey respondents report that management are now much more committed to managing supply chain risk and a further 27.4% are "somewhat" more committed. Just 1.2% claim management is less committed; a likely symptom of senior executives becoming consumed in ensuring their organization can weather the pandemic in other ways. There are already signs of management becoming involved in supply chain intricacies within their own organizations: online fashion firm retailer, Boohoo, recently asked its suppliers to bring all clothes-making work in house; cutting ties or buying out subcontractors — with no exception being offered to the new rule[25,26].

In the United States, the issue has gone beyond management: the incoming President, Joe Biden, has ordered a review of US critical supply chains because of disruptions during the pandemic and security threats from nations which pose national security threats[27].

One survey respondent highlighted how they developed a process during the pandemic which ensured management were engaged around supply chain developments. They cast a large net around supply chain disruptions and used dedicated teams to collect, analyse and synthesise information which was then provided quickly to top management. They were planning to continue this post-pandemic.

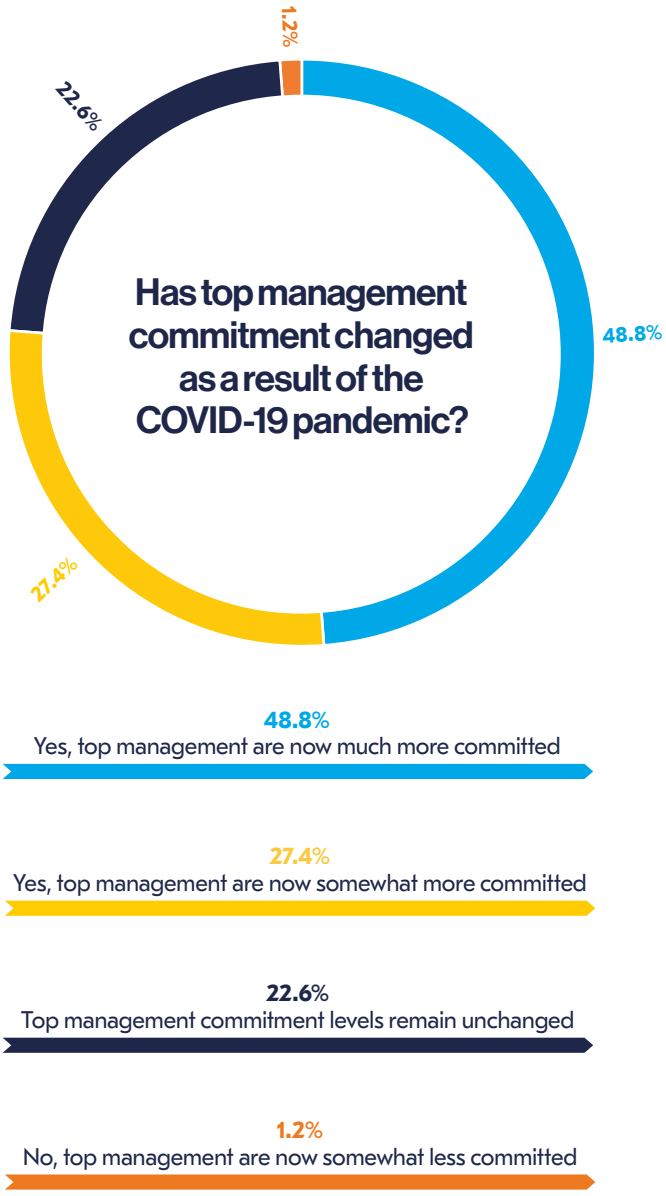



**Figure 18.** Has top management commitment changed as a result of the COVID-19 pandemic?

25. Mustoe, H (2021). Boohoo tells suppliers not to subcontract, raising job fears. BBC [online]. Available at: https://www.bbc.co.uk/news/business-55974075 [accessed 17 February 2021].
26. Nilsson, P (2021). Boohoo audits highlight Covid concerns at factories. Financial Times [online]. Available at: https://www.ft.com/content/f1e02db4-7471-4b15-bec0-b3c3a170d15d (subscription required) [accessed 17 February 2021].
27. Sevastopulo, D (2021). Biden to order review of critical US supply chains. Financial times [online]. Available at: https://www.ft.com/content/5610a5c9-d7c3-4dbb-afba-1680d54e8b9f (subscription required) [accessed 17 February 2021].

# More organizations have Business Continuity arrangements in place specifically to deal with supply chain disruption

As a result of a greater interest in their organizations' supply chains, more organizations than ever are now reporting they have business continuity arrangements in place to deal with supply chain riskwith four in five organizations (79.8%) have such arrangements in place. For large organizations, the figure rises to 89.1%. Last year, just 70.9% of respondents reported having specific arrangements in place. The notion that Business Continuity Management (BCM) planning is an important risk mitigation technique and should underpin any decision to extend, alter or optimise supply chains has been promoted for many years as good practice by supply chain consultants[28]. With the exceptional disruption in 2020 however, practicing such management techniques will be key to survival for many organizations. Business Continuity should be brought in to provide cover for decisions made regarding supply chains, particularly if the organization is choosing a new strategic direction requiring an entirely different landscape of suppliers.

**Figure 19.** Does your organization have its own business continuity arrangements in place to deal with supply chain disruption?

28. Caddick, M; Buchanan, T (2011). Business continuity and supply chain risk. PWC [online]. Available at: https://www.pwc.co.uk/assets/pdf/business-continuity-and-suppy-chain-risk-april-2011.pdf [accessed 17 February 2021].

# COVID-19 has highlighted the importance of good due diligence processes

Organizations have also made improvements in terms of supply chain due diligence: last year, two-thirds of organizations (66.8%) reported they asked key suppliers whether they had Business Continuity arrangements in place. This year, the figure has risen to more than two-thirds (75.2%). The findings vary substantially by sector: 90.9% of financial services organizations question key suppliers about BC arrangements, declining to just 40.0% for public administration/defence. Literature published during the pandemic hailed the importance of carrying out supplier due diligence. PWC highlights the importance of not just checking a supplier has BC arrangements in place, but proactively identify any challenges key suppliers may have by leveraging data, reviewing risk assessments across all tiers of suppliers and conducting scenario planning exercises[29].

Some organizations are now going to a much greater length to ensure risk is reduced in their supplier network. One interviewee commented how they had recently set up a supplier resiliency working group which helped to vet new suppliers from procurement stage and also aided in identifying key suppliers on an ongoing basis.

**Figure 20.** Do you or your organization ask key suppliers (new/existing) whether they have business continuity arrangements in place?

29. PWC (2020). Supply chain and third party resilience during COVID-19 disruption. PWC [online]. Available at: https://www.pwc.com/jg/en/issues/covid-19/pwc-supply-chain-resilience.pdf [accessed 17 February 2021].

**"We created a supplier resiliency working group towards the end of 2018 which is comprised of Business Continuity and Technology Resilience leads from all of our businesses. We all got together and defined our resiliency terms and what we require our suppliers to comply with. We created criteria to assess all of our suppliers to determine who are our top critical suppliers. After that, we utilised a process in place to vet new suppliers coming in or at contract review stage. We also partnered with our global procurement team to have the discussions with suppliers, to amend contracts, to include the resiliency terms and emphasize which suppliers should be assessed as being in that top, most critical bucket.**

**The supplier must then comply with the resiliency terms that are in the contract. We put a lot of rigour in place from a governance perspective. We must have regular conversations, we must get validation from them; their capabilities, and then the contracts. We have to have all that contract information and make sure the global procurement team has copies of all the contracts. After that, we ensure we have regular supplier relationship meetings between the business and the supplier to keep that relationship active and valid. As part of doing this, we also created the critical supplier registry. This identifies which vendors or service providers are the top, most critical suppliers. We've also identified those suppliers that are shared amongst more than one of the businesses."**

Global Technical Resilience Leader, Information Technology, United States

# Now more organizations are asking about BC arrangements in place, more holes are being discovered

However, despite this increased level of due diligence carried out, fewer organizations than last year report their key suppliers have BC arrangements in place: 57.8% reported key suppliers had BC arrangements in place to address their own needs, compared to 60.0% in 2019. The slight decline however, is likely to be due to the fact more organizations are asking suppliers if arrangements are in place which, in turn, will lead to more organizations being aware of suppliers without plans in place. Regardless of the statistical variance, the importance of suppliers having BC arrangements which map against your organization's own risk profile is vital: how can you assure sound BC arrangements are in place if you are unsure whether your critical suppliers will be able to continue to operate if the pandemic continues? And what if a supplier reports having sound arrangements in place, but has not considered the threat of a secondary impact to their business? Risk tolerances will be different between organizations, and it is vital your own tolerances match those of your suppliers.

An interviewee explained how their business had more than 3,000 suppliers and, of those, around 5% were critical suppliers. Many of the non-critical suppliers did not represent a significant risk to the organization's customer base and advanced levels of due diligence were essentially not cost effective.

> **"There are thousands of suppliers across the business. From that, we have whittled down our top, most critical suppliers so the list is now at about 130 across the five businesses. So giving you a perspective: those non-critical suppliers are important, but it's not a deal breaker. There might be an impact to the business, but are certainly not going to cost us customers."**
>
> Global Technical Resilience Leader, Information Technology, United States

## Considering your key suppliers, what percentage of them would you say have business continuity arrangements in place to address their own needs?

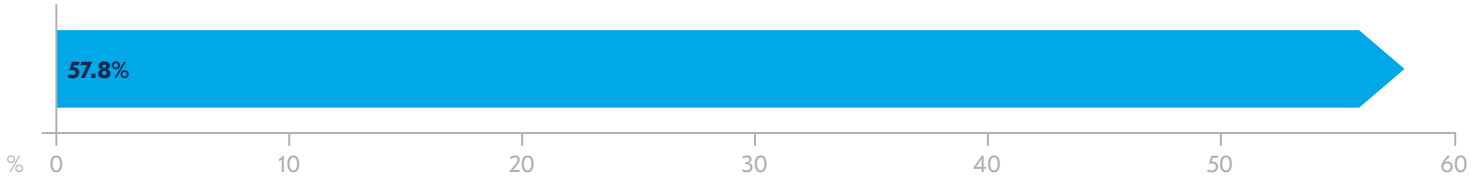



**Figure 21.** Considering your key suppliers, what percentage of them would you say have business continuity arrangements in place to address their own needs?

The PWC report highlighted above emphasises the importance of conducting scenario planning exercises, and this best practice does appear to be one which many organizations are adhering to. 56.5% of organizations seek evidence of plans being exercised, first place on the list of checks organizations make to ensure supplier BC plans are robust. Verifying whether an organization certifies or aligns to a recognised standard (such as ISO 22301, in the case of Business Continuity) also attracted the same high number of responses. This tallies with interviews carried out for the report: many expressed how they had been asked for evidence of alignment or certification to a standard more than ever before during 2020.

# Seeking to understand the plan should not be a tick box exercise

Organizations use a variety of different methods to help understand the Business Continuity arrangements of key suppliers. In last year's report, the answer "[we seek to see if the supplier has] a Business Continuity plan and who holds responsibility for it" was the top answer, whilst those who sought evidence that a BCM programme was in place was second from bottom of the table with 35.5% admitting this was something they did to better understand the arrangements. The report questioned the viability of merely checking a plan was in place with the process as it became a tick box exercise for some organizations. This year, however, the tables have been turned: seeking information about a supplier's Business Continuity programme has risen to third place this year, with those asking whether a plan is merely in place has slipped to fourth place. COVID-19 may have caused significant disruption to global supply chains, but it has also served as a tool to showcase the importance of Business Continuity in ensuring resilience in organizations' supply chains.

## What information do you seek in order to better understand the Business Continuity arrangements of key suppliers?

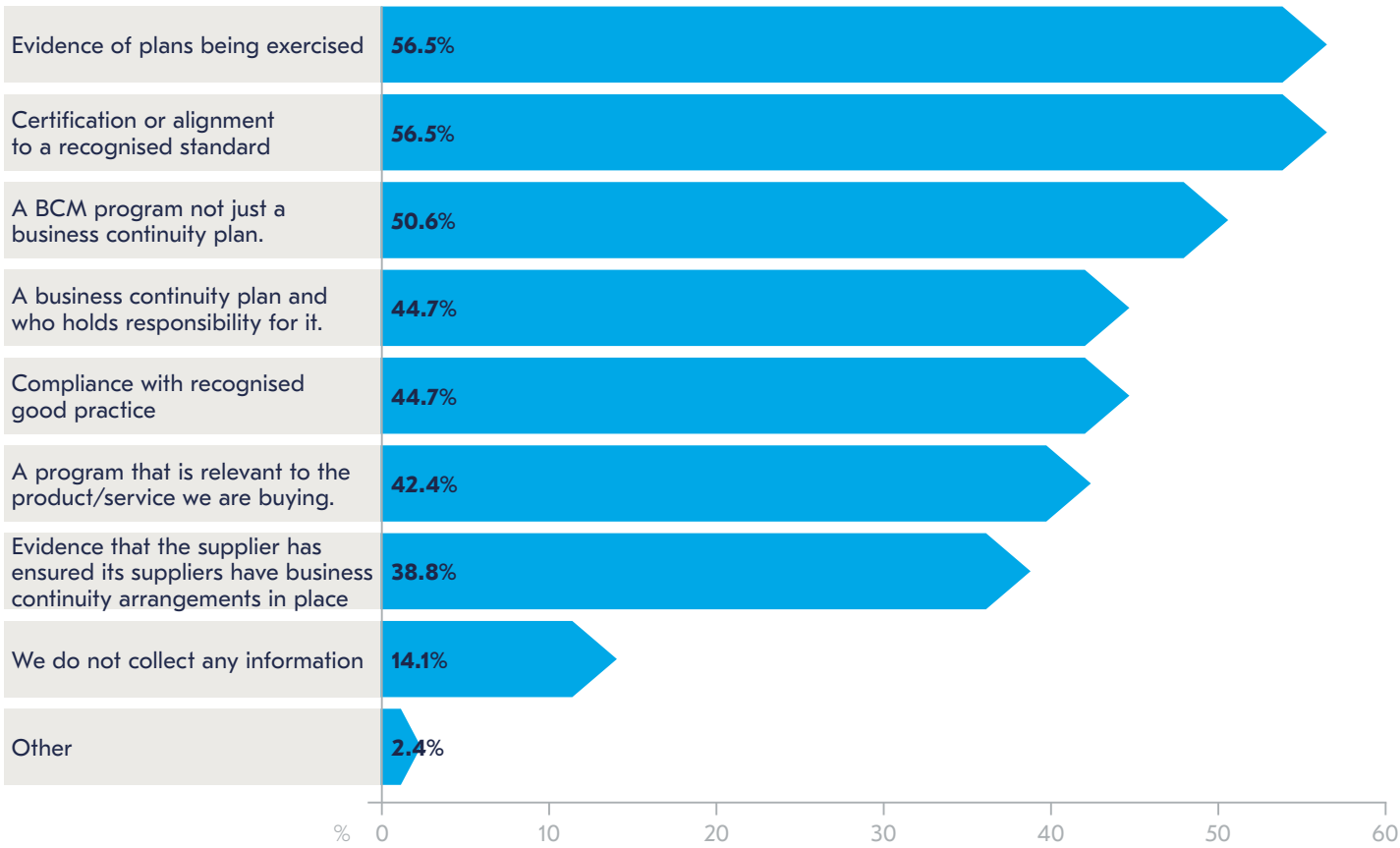



**Figure 22.** What information do you seek in order to better understand the Business Continuity arrangements of key suppliers?

When analysing how organizations acquire the necessary information, there is little change from last year: 56.0% provide suppliers with a self-assessment questionnaire, 46.4% ask for copies of supplier documentation and 10.7% request an independent audit. The only major change this year is the number of organizations who carry out their own audit on suppliers: some 44.1% of organizations say they collect information by carrying out their own audit compared to just 31.6% in the previous year. Again, this is evidence of the greater levels of due diligence that organizations are now carrying out in the face of intensifying threats to the supply chain.

## How do you collect this information?

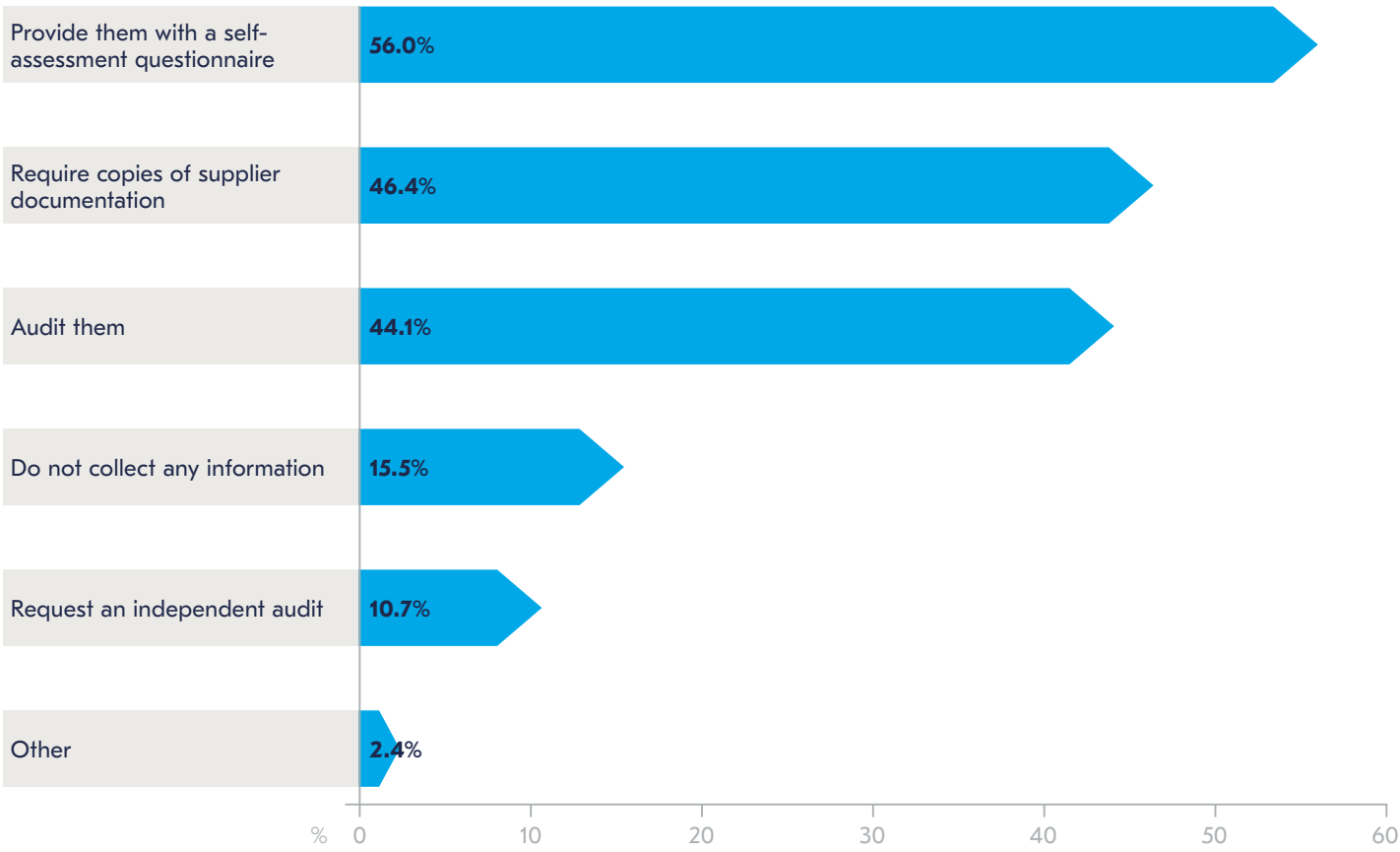


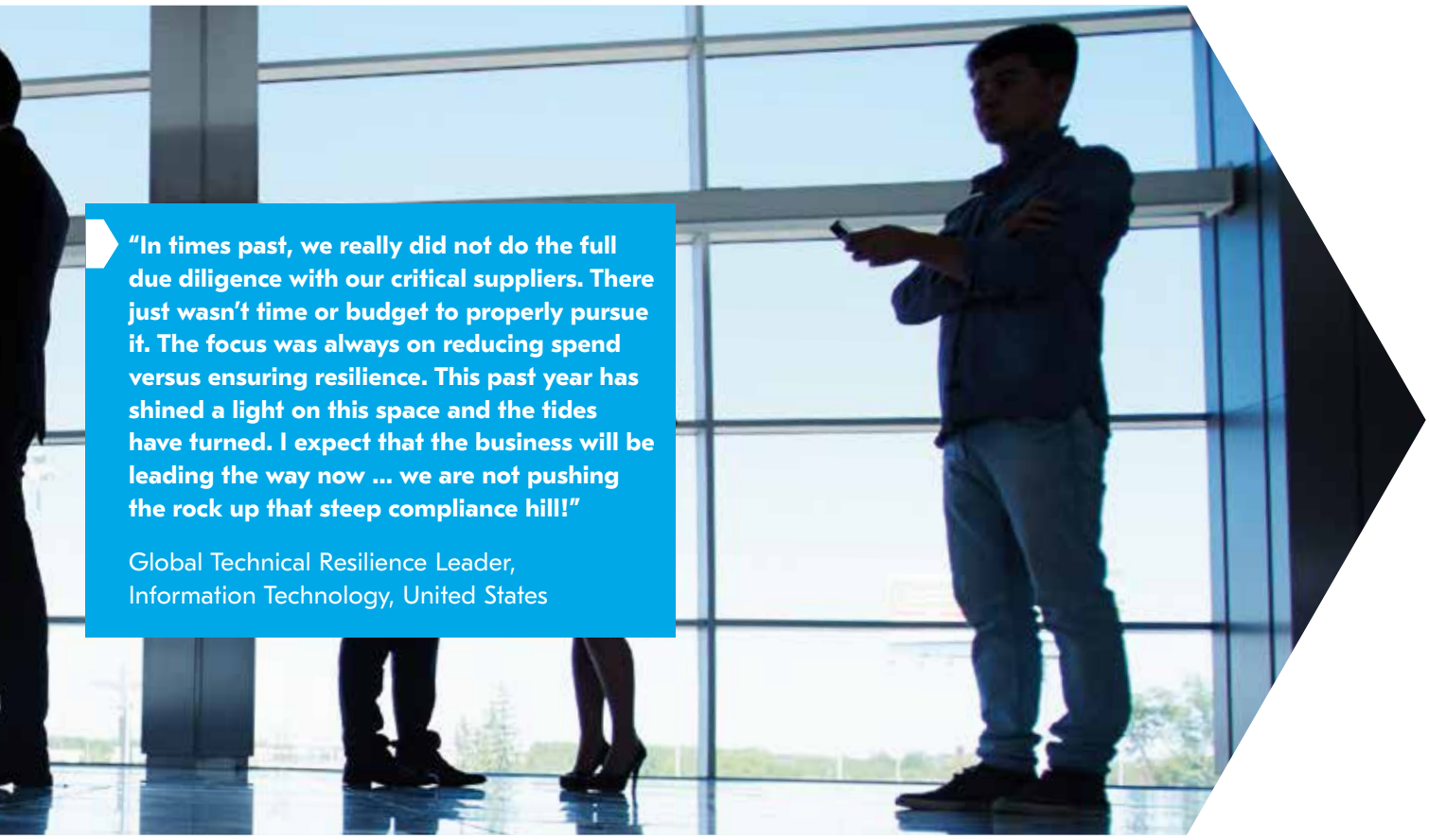

**Figure 23.** How do you collect this information?

# Ensuring robustness of plans at the procurement stage is critical to reducing supplier risk once contracts have been signed

A method of ensuring the robustness of suppliers' Business Continuity plans is to ensure Business Continuity features as part of supplier contractual discussions right at the start of a supplier relationship. Although most organizations do ensure Business Continuity is mentioned in discussions, 30.1% only carry it out when contract risk is deemed high, and a further 17.9% do it only after the purchasing decision has already been made. The number who report it is an integral part of their procurement process has risen this year to 38.1% (2019: 31.3%) but carrying out relevant Business Continuity checks before entering a relationship are still far from the normal procedure for all organizations. There is also the question of the level of detail that organizations should go to when performing due diligence pre-contract stage: figure 29 shows that nearly half of organizations only carry out a tick box check when it comes to verifying the robustness of suppliers' plans which was backed up by interviews. For a new supplier, the risk is arguably higher, and merely fulfilling a tick box exercise for verifying whether a supplier has robust BC plans in place, would be inadequate, particularly in the current environment. An interviewee explained how they had recently removed several key suppliers from their list as their Business Continuity arrangements were deemed not adequate enough.

**"There has been movement on the printing side of the business as we are concerned about reputational impact. I've seen this in a critical supplier registry as we've gone through this week. We've weeded out some of the critical suppliers we've chosen. We discovered in our deep dive of information and through our assessment process that 'oh, they're not really meeting them up, they're not meeting our criteria. Let's move our business elsewhere. They're not robust enough.' They're basically refining what suppliers we're using."**

Global Technical Resilience Leader, Information Technology, United States



**"In times past, we really did not do the full due diligence with our critical suppliers. There just wasn't time or budget to properly pursue it. The focus was always on reducing spend versus ensuring resilience. This past year has shined a light on this space and the tides have turned. I expect that the business will be leading the way now ... we are not pushing the rock up that steep compliance hill!"**

Global Technical Resilience Leader,
Information Technology, United States

**38.1%**
Yes, it is an integral part of our procurement process from the start.

**31.0%**
Yes, but only where the contract risk is deemed high.

**17.9%**
Yes, but after the purchase decisions have essentially been taken.

**13.1%**
No

**Figure 24.** Does Business Continuity feature as part of your supplier contractual discussions?

# Expert Opinion

## Supply chain resilience begins at procurement

The topic of supply chain resilience has risen in prominence during the pandemic. However, organizations who believe that they have undertaken sufficient due diligence regarding their supply chains have still been found wanting, so why is that the case?

Those organizations that believe they include Business Continuity Management in their supply chain process may need to reassess their approach.

Current international standards state that supply chain issues need to be dealt with through contracts which need to include Service Level Agreements (SLAs) and specific BC elements. Good practice for these types of contracts is to have flexible SLAs which can be deployed during an incident.

However, international standards - such as ISO TS 22318 (currently under review) - have concentrated too heavily on post-contract award response mitigations by using a BC plan to mitigate impacts.

Is there an alternative to simply asking for a copy of the supplier's policy, plan, and the last exercise they have carried out? I believe there is, and I believe organizations can only achieve true supply chain resilience when this alternative method is used.

## The Process

'Good' supply chain resilience starts when the results of your Business Impact Analysis and the 'Business Continuity Requirements' are used by procurement professionals — just like they are used by business continuity professionals. This would provide a holistic approach, as advocated in the Good Practice Guidelines (GPG) 2018.

In the 'Design'stage, organizations work to find business continuity solutions to put in place during an incident. In the case of supply chain, these solutions are contracted for and rely on the organization's "Priority suppliers" and their supply chains — which are identified in the analysis phase of the lifecycle.

So, what is the alternative to asking suppliers for documents that are often created simply to fulfill a need in the process? The first thing - prior to starting the process of creating a tender document or request for quotation - is to create a forum that brings together procurement professionals, BC professionals and the organization's "end user" community.

Procurement professionals provide knowledge around the known or perceived risks in the supply chain, whilst BC professionals provide the BC requirements derived from the analysis phase. Lastly, it is normally the "end user" representative who defines what is required in contract. With this collaborative process, the end user needs to understand the preventative risk mitigations proposed and the response mitigations proposed; ultimately aligning with the 'Design' stage.

Supply chain resilience (Supply Chain Risk and BC) needs to also be embedded in the process of seeking competitive quotes or tenders. This should involve including Supply Chain Resilience weightings in award criteria to ensure resilience is be taken into consideration during the award analysis.

If you have deemed a supplier a priority during your Business Impact Analysis (BIA), that supplier will be integral to your organization's response solution. The BC requirements should be embedded into the contract's SLAs, including Recovery Time Objectives (RTOs), Minimum Business Continuity Objectives (MBCOs) and flexible service levels. Anything left open to interpretation may be a variation to the contract or, at worst, may cause suppliers to invoke "Force Majeure" clauses and not their BC plan.

Asking for a supplier's plan and policy proves very little whereas asking them to offer 1) RTOs; 2) a flexible MBCO in contract and 3) asking to better understand their BC solution is a far stronger strategy. Does your organization really have the will, capacity, and resources to review their whole programme as promoted in good practice? I doubt it. However, those that claim to "have thousands of suppliers" suggests not all of them are a priority. When using this alternative method, it is crucial to identify priority suppliers and not all suppliers in the whole supply chain.

## Tips for creating a resilient supply chain from procurement stage onwards:

1. When prequalifying suppliers to reach a shortlist, ask for their standard RTOs and minimum promise on service during an incident (having a view to offer suggests they are undertaking BCM). This needs to match your BC requirements as a minimum.
2. Weight a score for resilience in your contract analysis process.
3. Embed the BC requirements from your analyses and solution design into the contractual arrangements of priority suppliers along with their supply chains' RTO and MBCO.
4. Use resilience as a distinguisher in your contact award analysis using the weighted scoring system and including resilience in your contract negotiations.
5. Undertake a due diligence visit to better understand the supplier's solution (the details is often not available in the plan) and see their response capability.
6. Post-contract award, undertake "Supplier Relationship Management" (SRM) for the period of the contractual arrangements.

David J Window,
Director, Continuity Shop.

When it comes to fully understanding the Business Continuity arrangements of suppliers at the procurement stage, just 15.9% of respondents admitted to doing this for every single supplier, with a further 28.1% for the "majority" of contracts equating to 44.0% in total. 28.1% only do it "sometimes", and 11.0% "rarely". This is the first time the question has been asked in this report, so comparable data is not available for previous years, but it does again highlight that more attention should be given to suppliers' Business Continuity arrangements at the start of a supplier relationship.

When the tables are turned, the figures are more negative but still represent an improvement on 2019: respondents were asked how often they were asked to provide assurance to clients that their Business Continuity arrangements were sufficient. Just 36.6% reported that they were asked for "every tender/proposal" or for the "majority of tenders/proposals" (2019: 33.5%). Furthermore, last year 8.5% admitted they were never asked to provide assurance and this year the percentage has nearly halved to 4.9%. However, as a point to reinforce, merely providing assurance a plan exists does not form the basis of a client understanding Business Continuity plans in depth. Indeed, an interviewee told us they were regularly asked for evidence that plans were in place, but clients rarely went beyond this.

**"We got asked a lot more during COVID-19 about our Business Continuity arrangements, but I can't really remember being asked for more information. It was just a question of them asking us 'Do you have a Business Continuity programme?' and maybe asking if we aligned to an ISO standard, but that was it. It surprises me because we go into much more detail ourselves."**

Senior BC Manager, Manufacturing, Germany

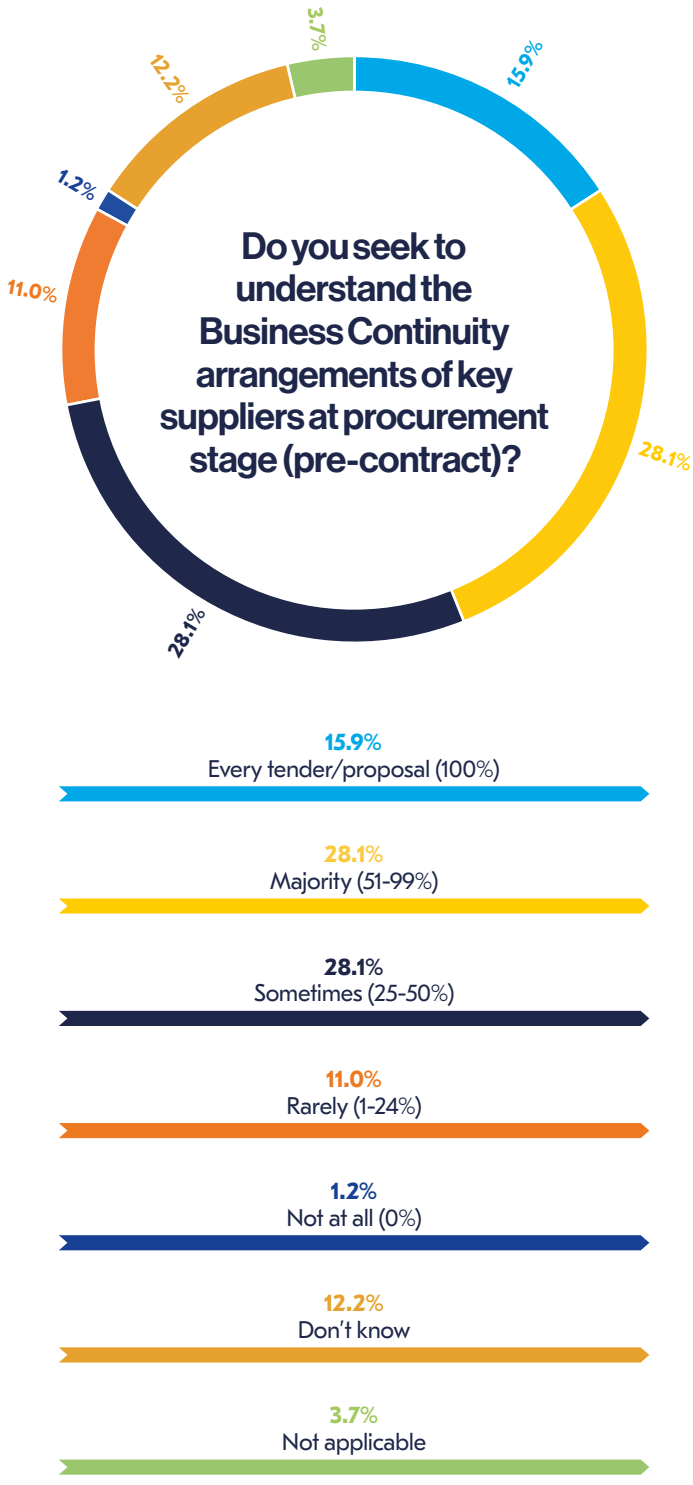



**Figure 25.** Do you seek to understand the Business Continuity arrangements of key suppliers at procurement stage (pre-contract)?

**Figure 26.** When tendering for new business clients over the past 12 months, how often have you had to provide assurance to clients that your own business continuity arrangements are sufficient?

There is further evidence that organizations are now carrying out good practice and seeking to perform due diligence deeper into the supply chain. Nearly half (49.4%) of organizations carry out due diligence on their tier 1 suppliers, rising to 81.9% when those who perform due diligence only on key suppliers. This report has already noted that there has been a fall in the number of disruptions amongst tier 2 suppliers this year: 18.6% reported disruptions in this tier compared to 22.0% last year. The fall is particularly impressive when set against this year's backdrop of major global supply chain disruption. Whilst some of this will be down to some organizations not performing deep analysis and assuming a disruption happened in tier 1 when it actually occurred deeper into the supply chain, the figures do suggest that organizations are now delving into greater depth and greater detail beyond the first tier.

**"I'll firstly make a comment about those statistics. What I've found is absolutely one of the biggest concerns of the more advanced companies in resilience has been about their due diligence. They've been very good at tier one and understanding what's going on there. But once it gets to tier two and three, even though they may have made some efforts, that's where they were getting hit. Very few organizations were prepared for the impact of COVID-19 on supply chains; hardly any had a pandemic plan. Most would say the risk was too remote and we just wouldn't have a one in a hundred-year event. So they hadn't considered the supply chain resilience implications of COVID-19."**

Consultant, Supply Chain, United Kingdom

**"We have very good relationships with our tier 1 suppliers; my failures are all in my tier two and that's because we depend on passenger flights. So, it's a matter of, okay, do I start talking to my tier two, or do I just set up different metrics with my tier one so that I'm more monitoring closely my tier two? I have that situation in the air industry as well as in the truck industry. But what I'm seeing is that my failures are typically not my direct partners, but their partner's partner or even deeper down the chain. So the measuring of those is much more important than we would have realized — we hadn't done it in our previous journey working with suppliers. So, that's one of the things that we do now. We started those changes last year, monitoring at the lower levels and we've seen some benefits this year, but we've also seen quite a few failures at that tier two and some at the tier-three level. But things should improve."**

Logistics Leader, Engineering, United States

Furthermore, the number of organizations who now admit to not analysing their supply chain to identify the cause of disruption has fallen to just over half (26.5%) from 32.6% in 2019. Although there is still work to do in putting measures in place to minimise disruptions deeper into the supply chain, it is clear that organizations have made a concerted effort this year to carry out more in-depth analysis.

In addition, with Governments carving out new legislation to protect the human rights of workers within an organization's supply chain, many organizations will now be seeking to ensure full mapping of their supply chains not only to ensure they can continue to meet customer requirements but also to meet the requirements of new regulations. Up to now, the US's Dodd-Frank Act (the Conflict Minerals Act) has shown poor compliance[30], and there are high hopes that the newly elected Government Administration will help to turn this around. With new laws on the verge of being introduced in Europe, many will be watching to see what effect it has on both the depth of supply chain due diligence carried out, but also how many suppliers seek to do what clothing retailer BooHoo has done and effectively move tier 2 suppliers into tier 1[31].

## To what depth to you seek to understand the Business Continuity arrangements of your critical suppliers?

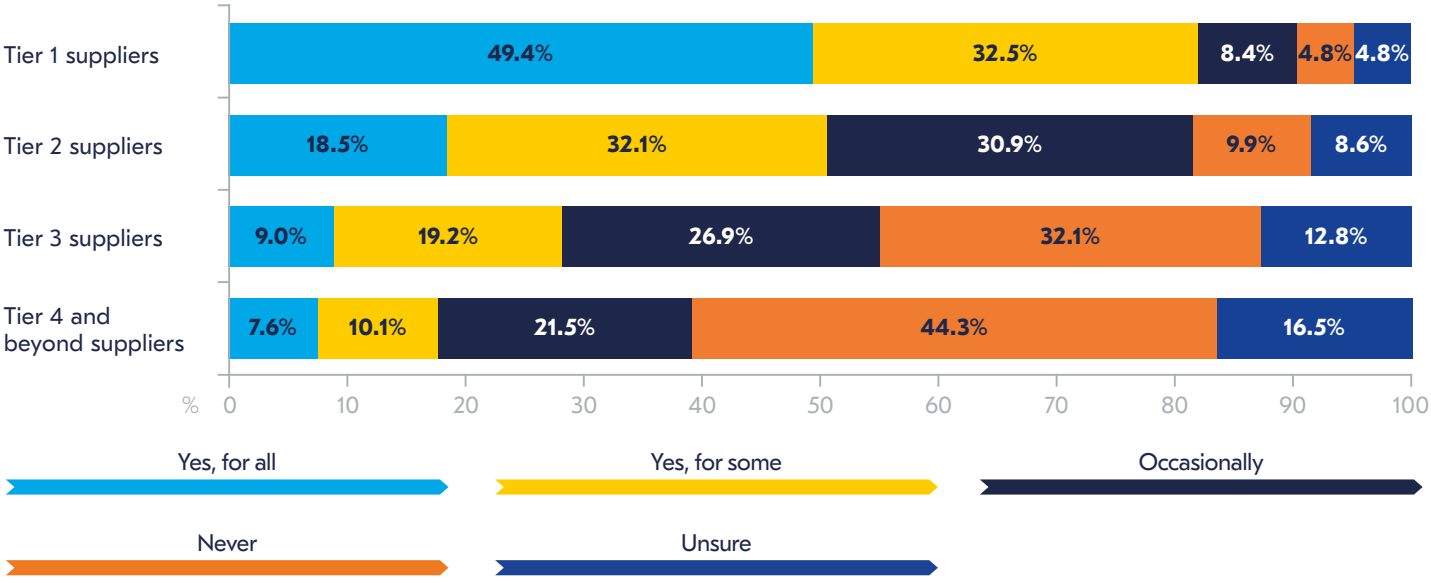



**Figure 27.** To what depth to you seek to understand the Business Continuity arrangements of your critical suppliers?

30. Deberdt, R; Jurewicz, P; Frechette, S (2019). Mining the Disclosures 2019. Responsible Sourcing Network [online]. Available at: https://static1.squarespace.com/static/594cbfa3440243aef3dfa1c4/t/5dee7d1b9d16d153cba70a04/1575911082732/Mining+the+Disclosures+2019.pdf [accessed 17 February 2021].
31. Triponel Consulting (2020). Weekly Update: 5 October 2020. Triponel Consulting [online]. Available at: https://triponelconsulting.com/2020/10/05/clothing-retailer-boohoos-directors-knew-for-a-fact-that-there-were-very-serious-issues-about-the-treatment-of-factory-workers-in-leicester/ [accessed 17 February 2021].

# Nearly half of organizations admit not checking or validating a supplier's Business Continuity plans

In terms of verifying the effectiveness of suppliers' Business Continuity Plans, very few have actually checked or verified plans to ensure they will work in practice. Although nearly half (48.1%) report they have documented outcome reports and actions plans, a further 43.4% admit to never checking or validating plans in the first place. Again, unless these checks are routinely carried out, it is likely that suppliers' own Business Continuity requirements will not match those of the organization asking about them. Nevertheless, nearly a third of organizations (30.1%) go as far as running exercises with their suppliers to check for the efficacy of plans, and a further 20.5% have held workshops or awareness campaigns with their suppliers.

The figures are moving in the right direction however, representing a significant improvement on 2019. In last year's report, 54.3% admitted to not checking and/or validating plans, and just 35.0% documented outcome reports and actions plans. The number holding exercises and running workshops also increased by six and eight percentage points respectively.

## How have you checked/validated that key suppliers' Business Continuity arrangements might work in practice? We...

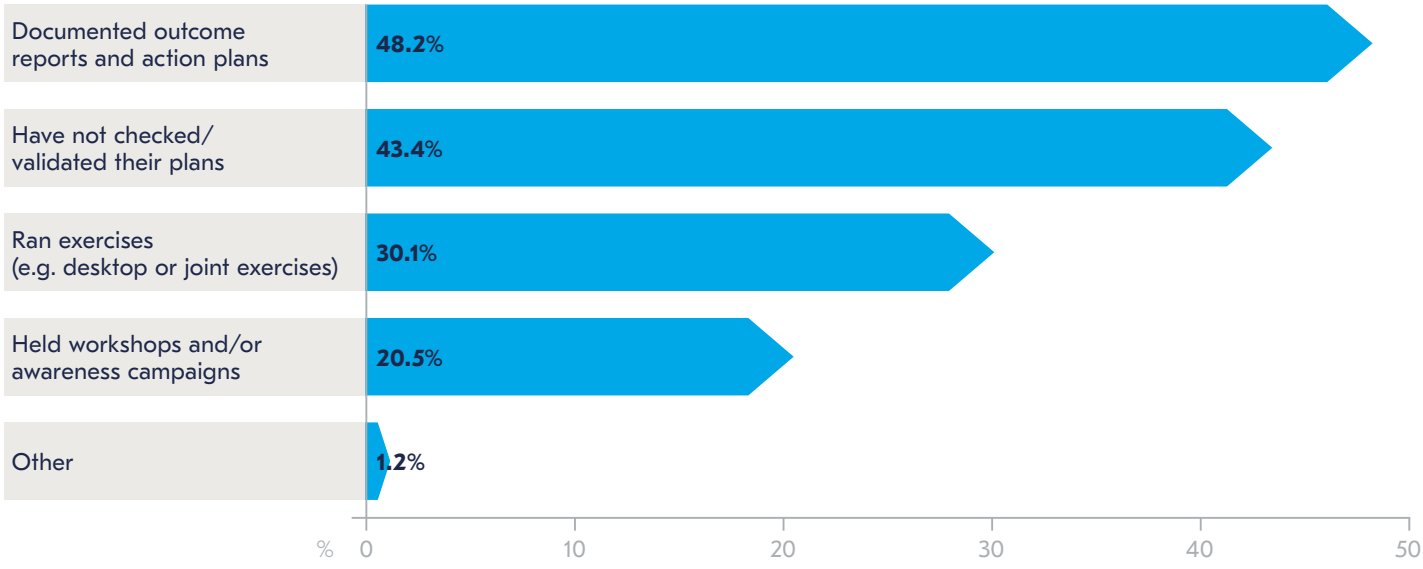



**Figure 28.** How have you checked/validated that key suppliers' Business Continuity arrangements might work in practice?

# COVID-19-related disruptions have prompted organizations to perform more regular review meetings with suppliers

The BCI's *Future of Supply Chain Post-COVID-19* report revealed that, for the upstream supply chain, 57.2% of organizations were communicating with critical suppliers once a week or more[32]. This enhanced level of communication is further evidenced by the figures for this report: last year, the highest rated answer when respondents were asked how often Business Continuity arrangements were reviewed with key suppliers was "at contract renewal" (41.7%). This year, the figure has declined slightly to 36.6% but this is for good reason: review meetings are happening very regularly, so only discussing at contract renewal time is deemed too risky for many. Indeed, as evidence of this, some 42.7% of respondents reported that Business Continuity arrangements were reviewed in "scheduled meetings with key suppliers", up from 28.6% last year. Figures for other options remain on a par with the previous year, but the increasing number of regular meetings instigated during COVID-19 is positive. Furthermore, many respondents are working to ensure these meetings continue to happen even after the threat of COVID-19 has waned.

**"We had a security breach with one of our suppliers just before COVID-19 hit. This provoked us to do an in-depth view of suppliers and what they could do and what their capabilities are each week; promoting regular contact with these suppliers. As COVID-19 hit, that report that was coming out weekly went to biweekly, and now it's coming out once a month. But it has stayed there, and now there's a whole section of how are the suppliers managing through COVID.**

**Because our suppliers are critical to our business operations, we take it seriously. So while we were putting a lot of the structure in place before COVID-19, the global pandemic crisis emphasized that it is very important to be looking at this on an ongoing basis. We had started the foundation and now we're actually leveraging that foundation. And I know this level of diligence is going to continue going forward as global procurement chairs our working [supply chain resiliency] group, and this is really driving towards efficiency in the business as well."**

Global Technical Resilience Leader, Information Technology, United States

**"So when we talk about supplier resilience, I think it is initially in the sourcing process, it's then in the ongoing supplier management, and then investing in that relationship. If they are a key supplier of yours you should be collaborating with them and convincing them of the mutuality, because it's also their revenue and profitability at the end of the day. So there should be a mutuality beneficial relationship. And that adds value in lots of other ways, not just in terms of resilience. In terms of potential supplier innovation and revenue enhancement. But it requires some kind of investment. And it requires a kind of relationship model that isn't just about win/lose."**

Consultant, Supply Chain, United Kingdom

32. BCI, The (2020). COVID-19: The Future of Supply Chain. The BCI. Available at: https://www.thebci.org/resource/covid19--the-future-of-supply-chain.html [accessed 17 February 2021].

## How often do you review your Business Continuity requirements with key suppliers and their capability to meet them?

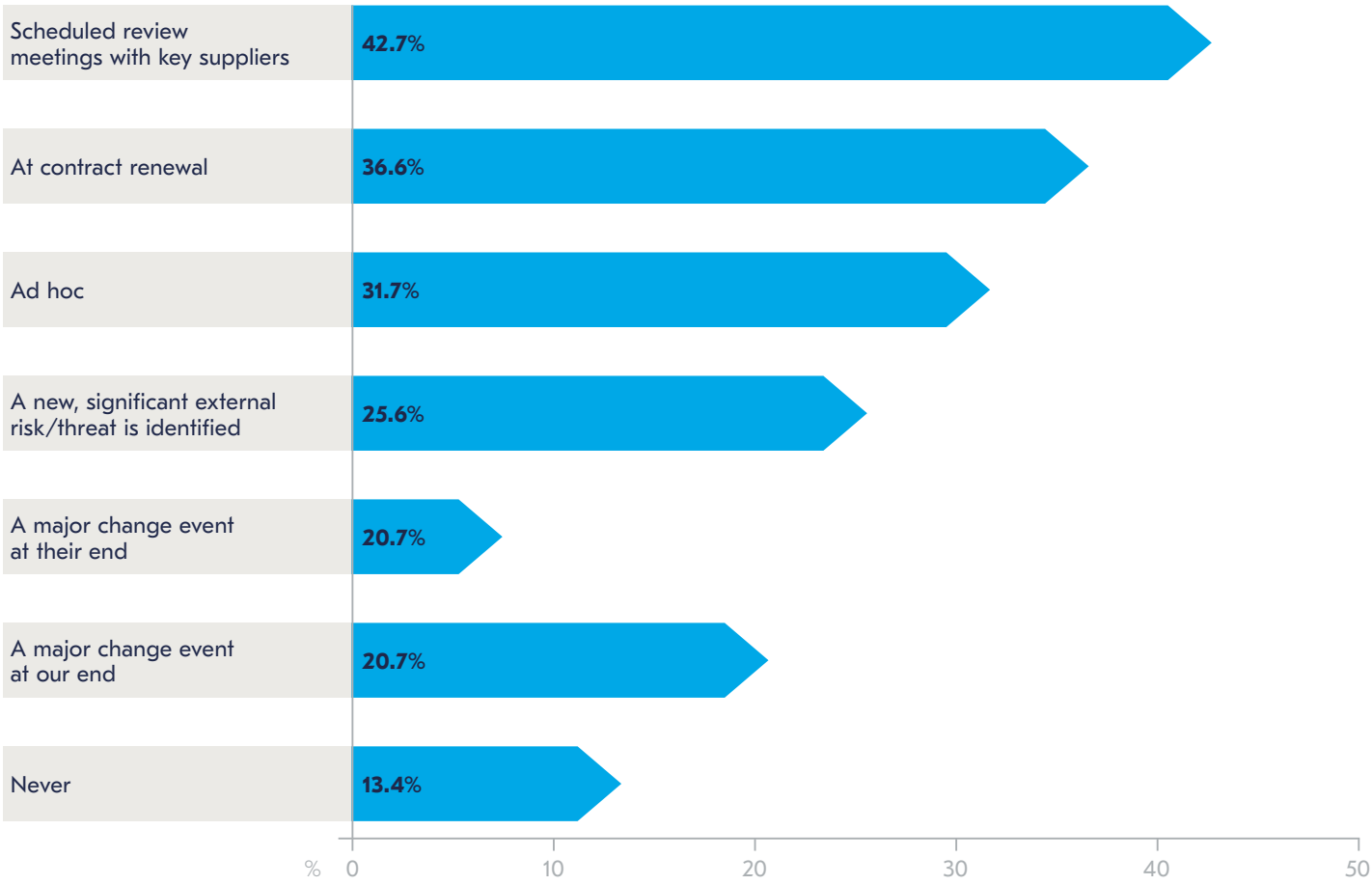



**Figure 29.** How often do you review your Business Continuity requirements with key suppliers and their capability to meet them?

It should also be mentioned that whilst pursuing best practice in terms of supplier relationships results in early warning of potential disruptions and even potential cost benefits, similar relationships should be pursued within individual organizations as well. An interviewee explained inter-company communications were so poor that the logistics team were not informed of shipping delays — until the customer complains directly to the logistics team. Going forward, this is the type of situation that organizations should look to rectify, particularly with supply chain headwinds likely to remain for the foreseeable future.

**"We started this journey about three years ago; looking at different partners on the track and trace modules as well as on the risk modules because the thing I dislike the most about logistics is the only time that I hear from anybody is when it's a complaint! I currently don't even know a shipment's late or delayed or damaged until a customer calls me and, to me, that's terrible. My partners should be sharing this information with me, but they don't. In some cases, they don't even know themselves. So, that's one of the reasons that we've gone down this path of looking at our risks around the world as well as the track and trace pieces to try to be proactive in our approach to logistics."**

Logistics Leader, Engineering, United States

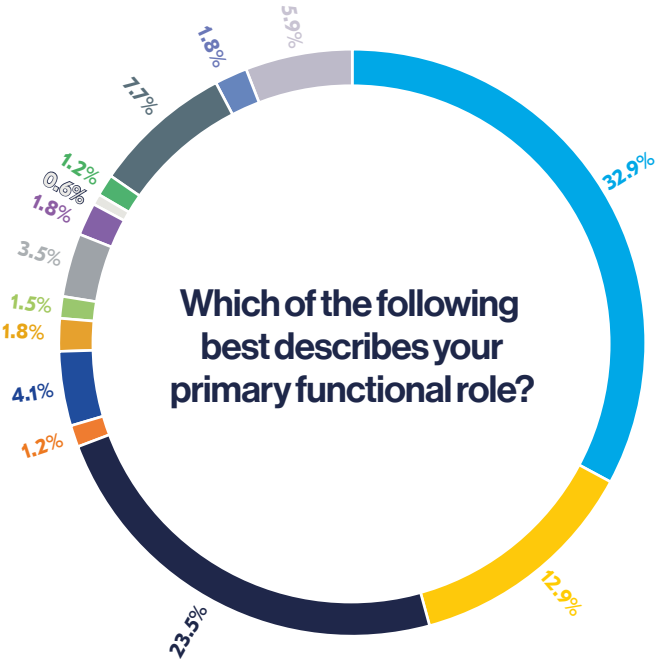
# Annex

**173**
**Respondents**

**62**
**Countries**

**15**
**Sectors**

**7**
**Respondent Interviews**




**32.9%** Business Continuity

**12.9%** Risk management

**23.5%** Supply chain and logistics

**1.2%** Crisis management

**4.1%** IT disaster recovery/ IT service continuity

**1.8%** Health and safety management

**1.2%** Quality/Business improvement

**3.5%** Physical security

**1.8%** Information security

**0.6%** Emergency planning

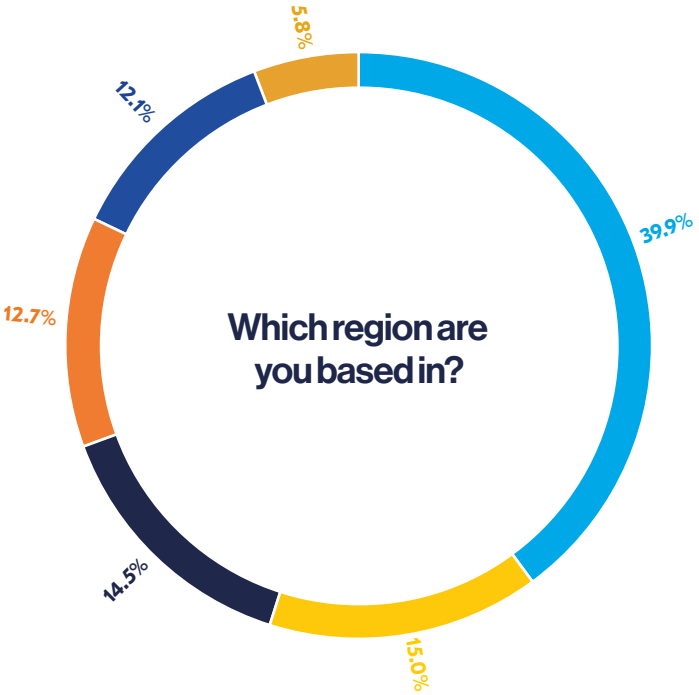
**1.2%** Line of business or service directorate

**7.7%** Top management

**1.8%** Communications

**5.9%** Other

**Figure 30.** Which of the following best describes your primary functional role?




39.9%
Europe

15.0%
North America

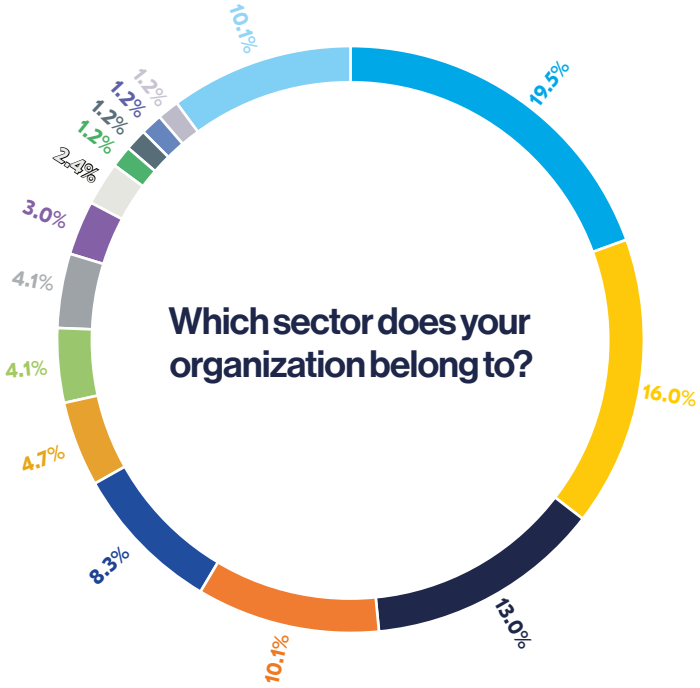
14.5%
Asia

12.7%
Middle East & Africa

12.1%
Latin America

5.8%
Australasia

**Figure 31.** Which region are you based in?




19.5%
Professional Services

16.0%
Manufacturing

13.0%
Financial & Insurance Services

10.1%
Transport & Storage

8.3%
IT & Communications

4.7%
Retail & Wholesale

4.1%
Public Administration & Defence

4.1%
Energy & Utility Services

3.0%
Health & Social Care

2.4%
Education

1.2%
Engineering & Construction

1.2%
Media & Entertainment

1.2%
Support Services

1.2%
Agriculture, Forestry & Fishing

10.1%
Other

**Figure 32.** Which sector does your organization belong to?

**10.0%**
1-10

**4.1%**
11-20

**4.7%**
21-50

**1.2%**
51-100

**6.5%**
101-250

**4.7%**
251 - 500

**5.9%**
501 - 1,000

**17.7%**
1,001 - 5,000

**8.2%**
5,001 - 10,000

**18.2%**
10,001 - 50,000

**2.9%**
50,001 - 100,000

**15.9%**
More than 100,000

**Figure 33.** Approximately how many employees work at your organization?

# About the Author

**Rachael Elliott (Head of Thought Leadership)**

Rachael has twenty years' experience leading commercial research within organizations such as HSBC, BDO LLP, Marakon Associates, CBRE and BCMS. She has particular expertise in the technology & telecoms, retail, manufacturing and real estate sectors. Her research has been used in Parliament to help develop government industrial strategy and the BDO High Street Sales Tracker, which Rachael was instrumental in developing, is still the UK's primary barometer for tracking high street sales performance. She maintains a keen interest in competitive intelligence and investigative research techniques.

**She can be contacted at rachael.elliott@thebci.org**

# About the BCI

Founded in 1994 with the aim of promoting a more resilient world, the Business Continuity Institute BCI has established itself as the world's leading Institute for Business Continuity and Resilience. The BCI has become the membership and certifying organization of choice for Business Continuity and Resilience professionals globally with over 9,000 members in more than 100 countries, working in an estimated 3,000 organizations in the private, public and third sectors. The vast experience of the Institute's broad membership and partner network is built into its world class education, continuing professional development and networking activities. Every year, more than 1,500 people choose BCI training, with options ranging from short awareness raising tools to a full academic qualification, available online and in a classroom. The Institute stands for excellence in the Resilience profession and its globally recognised Certified grades provide assurance of technical and professional competency. The BCI offers a wide range of resources for professionals seeking to raise their organization's level of Resilience, and its extensive thought leadership and research programme helps drive the industry forward. With approximately 120 Partners worldwide, the BCI Partnership offers organizations the opportunity to work with the BCI in promoting best practice in Business Continuity and Resilience.

The BCI welcomes everyone with an interest in building resilient organizations from newcomers, experienced professionals and organizations. Further information about the BCI is available at **www.thebci.org**.

### Contact the BCI

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# About Everstream Analytics

Everstream Analytics is a supply chain risk analytics company that delivers actionable insights to increase the resilience and agility of our clients' supply chains, protecting revenue and reputation.

Our solution integrates with our clients' Procurement, Logistics and Business Continuity platforms to deliver global, end-to-end visibility to supply chain risk to enable our clients to Think Bigger.

We employ a unique combination of human expertise, artificial intelligence and proprietary data to deliver predictive insights to enable our clients to See Further.

We combine data science, proprietary intelligence and multilingual specialists to monitor global risk and events in real-time to enable our clients to Act Sooner.

We embed risk analytics into decision making during planning and execution across all functions and phases of our clients' supply chains to help them Get in Front of What's Ahead and turn risk into a competitive advantage. More information can be found at **www.everstream.ai**

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