



Transforming Supply Chain Risk
Management with

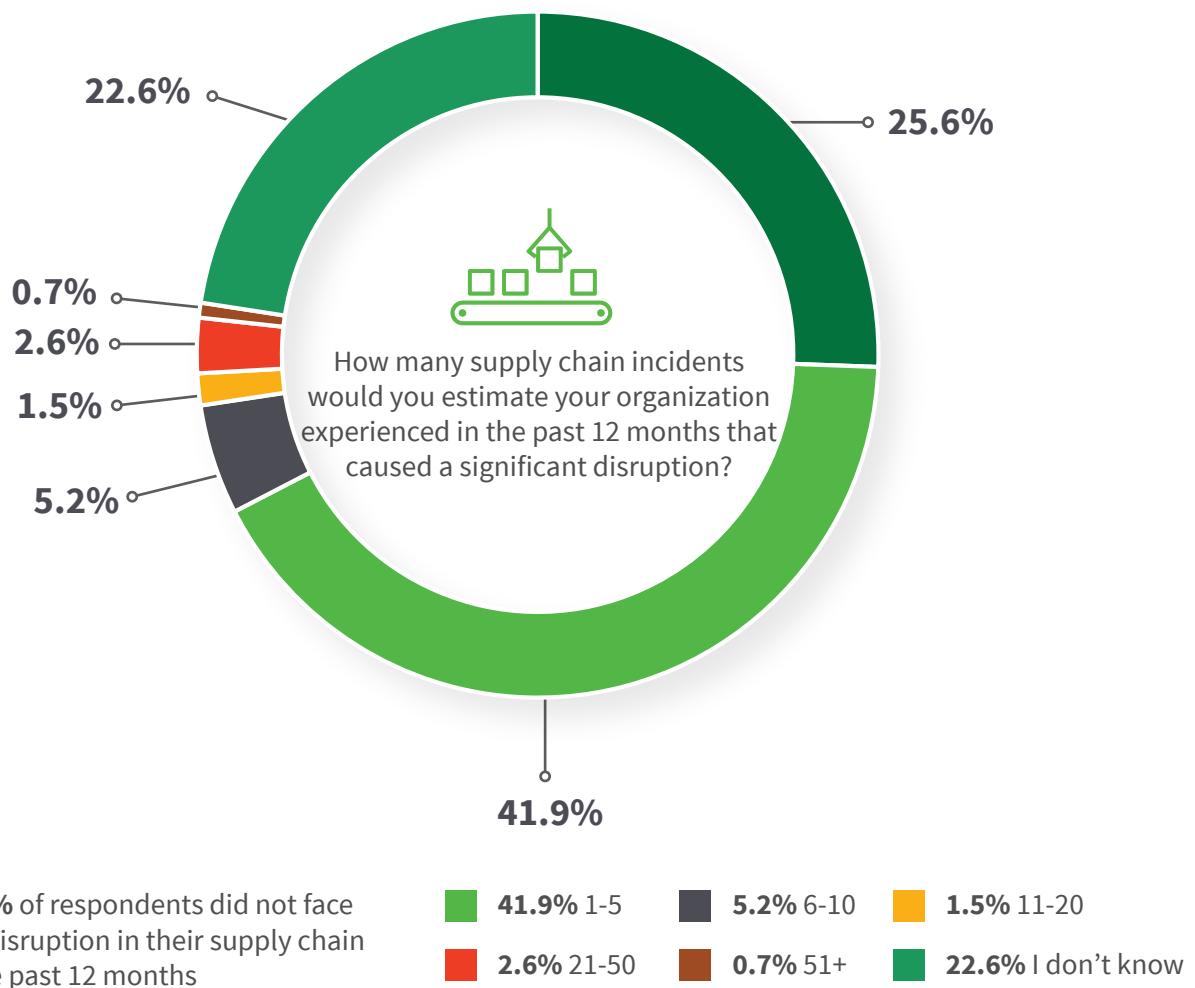
Mobility

Understanding Supply Chain Risk Exposure

A recent research report from Business Continuity Institute stated that 41.9% of organizations experienced one to five supply chain disruptions in 2019. While supply chain disruptions are alarming enough on their own, this report revealed that 32.6% of cases occurred with the organization unable to identify or analyze the original source of conflict.¹

The liability of supply chain disruption has become a fundamental risk plaguing organizations across all sectors. As companies venture into newer markets while pushing operations to remote far-off locations, even more significant risks may come to the fore. Remote supply chains demand strict control, planning, and analysis. If not managed well, it affects visibility and causes disruption. This is particularly true for sectors such as oil & gas, mining, manufacturing, and logistics, where financial, regulatory, operational, and geopolitical factors constantly challenge supply chain continuity.

Fewer organizations experienced disruptions in 2019, and the number of organizations experiencing five or more disruptions fell to 10% from 15% in 2018.



The proportion of incidents occurring with immediate suppliers fell below 50% for the first time since 2016, but disruptions in tier 2 and beyond are rising.

48.9%

of Disruptions
occurred in tier 1

24.9%

of Disruptions
occurred in tier 2

12.2%

of Disruptions
occurred in tier 3

32.6%

of the respondents
do not analyze the
full supply chain to
identify the
original source of
disruption

Fig 1: Frequency and Origin of Supply Chain Disruptions; Source: BCI Supply Chain Resiliency Report



Given this scenario, it's critical for companies to not only enhance the visibility of their in-house operations but also their supplier and contractor network. The ability to rightly map and understand supply chain interdependencies across the primary, secondary and tertiary levels of suppliers can help an organization maintain profitability while upholding safe and sustainable business practices.

Visibility is an issue from a supplier/contractor standpoint as well. For contractors and subcontractors, it often becomes difficult to know the kind of work that will be arriving for a given week, the location of the jobs, the numbers of workers needed for a site, specific skills required and so on. Contractors may receive unpredictable work orders causing them to scale or lower their workforce at short notice to match their client's needs.

Both hiring organizations and suppliers are facing the same challenge – how to achieve visibility into the other side. In order to strike the right balance, hiring organizations need to have total control and insight into the resources available and a real-time view of the work being done by third parties. The contractors, on the other hand, need visibility on the kind of work being allocated and specific compliance requirements associated with a particular job.

Additionally, organizations need to invest the adequate time and resources in training their employees and contractors to do a particular job at the worksite. In a dynamic business environment, this becomes more important because lack of training and awareness can result in low worker performance, high-risk exposure, rising costs, and lower productivity, which eventually leads to diminishing margins.

It's clear that there is a greater need to address the factors causing supply chain disruptions. Some of the pertinent questions that need to be asked are:



How can a company achieve maximum visibility of its supply chain network?



How can a company navigate the intricate nature of optimizing and streamlining supply chain processes?



How can a company foster collaboration with downstream supply chain partners and work towards mutual safety and compliance goals?

Answers to these questions lie in making the switch to technology and embracing it as a solution to cope with the increasing complexity of global supplier networks, more intense regulatory scrutiny and the increasing uncertainty surrounding global trade policies.

Bringing Supply Chain Risk Management to the Fingertips

According to research, 19.4% of organizations do not ask their suppliers and contractors if they are prepared for business continuity. Another 23.3% do not record, measure, or report supplier and contractor performances affecting supply chains. On the use of digital technology, the Supply Chain Resiliency Report 2019 states that a staggering 57.3% of organizations do not use technology to predict, monitor, record, measure, and report performance affecting supply chain disruptions.ⁱⁱ

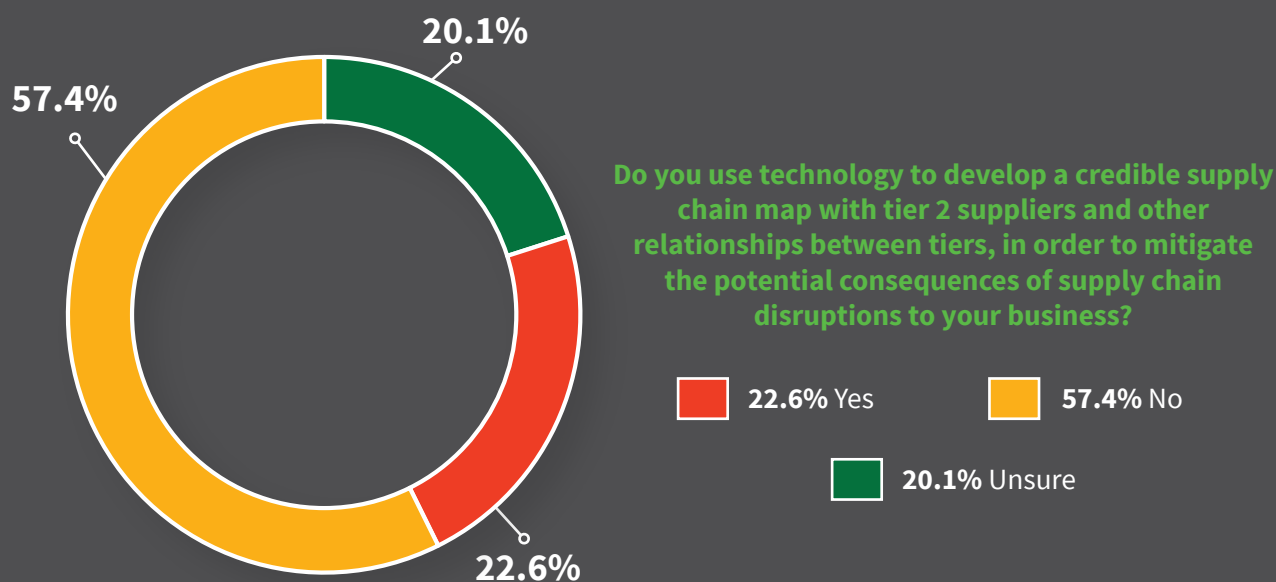


Fig 2: Use of technology to define a supply chain map with tier 2 suppliers;
 Source: **BCI Supply Chain Resiliency Report**

Enhancing the effectiveness of risk management across supply chains requires risk exposures to be better quantified and made more visible. Organizations often struggle to quantify the risk exposure due to lack of thorough understanding, standardized key performance indicators (KPIs) and metrics for suppliers and real-time data on supply chain risk and performance. In short, without a platform that facilitates seamless data and information sharing between relevant supply chain stakeholders, assessing the level of risk exposure becomes extremely difficult.

With so many challenges involved, any technology that helps companies stay immune to supply chain disruptions is well worth the investment. And, as far as mobility is concerned, the addition of a mobile interface in Supply Chain Risk Management (SCRM) has facilitated quick data access and accelerated response to risk management – something unimaginable even a decade ago.

Over the past few years, mobility has transformed how companies approach risk management in their supply chains. The technology has not only helped extend application user interface onto hand-held devices but it has also created newer opportunities for worker management, onsite contractor training, worksite monitoring and so on.

Mobility has a transformative impact on SCRM due to the immediate need of time-sensitive information, which includes actionable data on suppliers, their safety standards and compliance reporting. For example, contractors equipped with mobile devices can upload their worker training certifications, safety documents and insurance documents on an application portal which can be verified by the hiring organization in at any time.

Moreover, the technology allows key decision-makers to collaborate and take immediate action when it comes to assessing and mitigating risk factors threatening supply chains globally. Apart from this, some of the other benefits that companies can reap by implementing mobile SCRM include:





Seamless management of remote supply chains

The proliferation of mobile solutions has a large impact on the flow of supplier information to both internal and external stakeholders. Seamless management of remote supply chains depends heavily on accurate information shared between the hiring organization and the contractors or suppliers working onsite. In order to ensure continuity of operations, organizations need to be constantly aware of supplier performance, their safety standards, and their compliance reporting structures. Apart from this, companies need to also verify whether a particular worker is suited for the work assigned, whether he or she has the right training to do a task and so on.

Advanced mobility solutions like managed mobile devices often come embedded with smart applications that provide up-to-date visibility of contractors working on a remote location. It helps decision makers assess supplier performance and keep track of their safety and compliance standards anywhere, anytime. For instance, a mobile device embedded with a GPS application can allow an operator to directly communicate with workers on site, monitor their activities, review their documentation and address their challenges more proactively. It can enable organizations to monitor activities of on-site contractors through:



GPS location tracking: Accurate updates on who's working on what tasks and where



Real-time collaboration: GPS provides notification on the workers who are closest to a particular work site so they can be assigned task within a designated timeframe



Convenient time tracking for employees



App log: Real-time update on the location of a worker



Real-time task scheduling and training curriculum deployment

How does mobility transforms supply chain management?

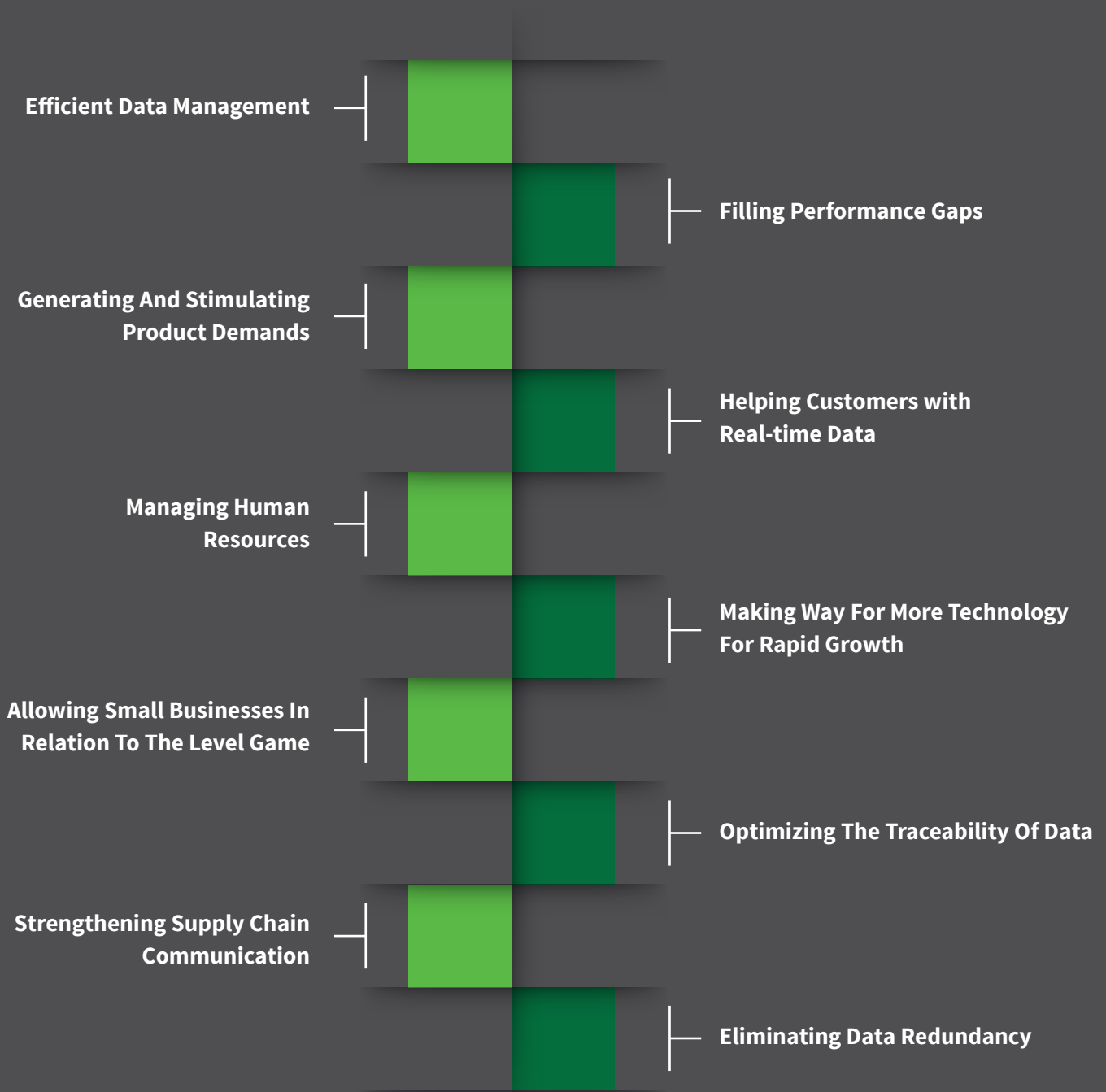


Fig 3: How mobility transforms supply chain management?

Source: <https://mobisoftinfotech.com/resources/blog/mobility-solutions-in-supply-chain-and-logistics/>



Complete elimination of paperwork

A well-rounded supply chain risk management strategy depends on proper documentation. A supply chain manager or an operator needs to be aware of the documentation requirements proposed by the hiring organization to be able to design effective documentation control processes. It's unfortunate that even today, a major chunk of supply chain documentation such as contractor training logs, certificates of insurance (COI) and workflows are largely paper-based. This not only complicates internal supplier management processes like supplier prequalification and audits but also makes data management significantly challenging.

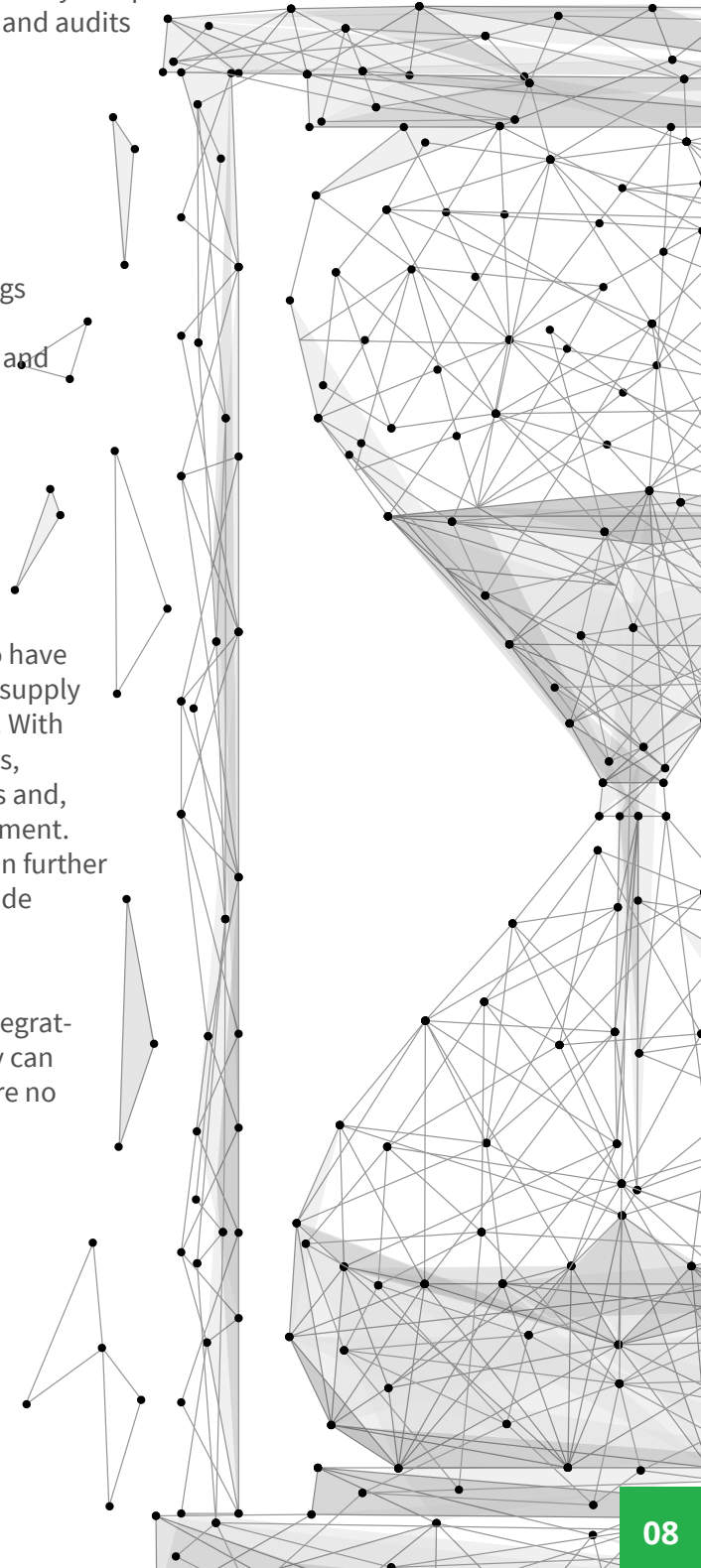
It is here where high-end mobile devices with automatic identification and data capture (AIDC) tools such as barcode scanners, mPOS, RFID tags, and wearables can make the difference. These tools allow workers to feed information on applications and update digital records of tasks such as trainings and insurance documentations on a real-time basis. This information can be stored in a centralized database repository and accessed by relevant decision makers as and when required.



Address performance and productivity challenges

Besides effectively managing resources, operators also need to have complete visibility of the people and processes involved in the supply chain. And, mobile applications can make this possible as well. With the availability of critical supplier information at their fingertips, operators and hiring organizations can identify gaps, loopholes and errors in supplier training, work allocation and overall management. Mobile dashboards with advanced data analytic capabilities can further help operators quickly review supplier performances and provide appropriate training programs on safety and compliance.

Another key area where mobility fosters endless possibilities is on-site workplace safety supervision and monitoring. When integrated with Unmanned Aerial Vehicles (UAVs) and sensors, mobility can ensure that day-to-day supply chain risks and vulnerabilities are no longer out of sight.



Case in Point – How Avetta’s Mobile Worker Management Solution Transformed UPI

Universal Pegasus International (UPI), one of the foremost engineering, procurement, and construction management firms, encountered challenges accurately examining the credentials of their contractors. They were unsure if their employees and workers followed the gold standard practice in safety and compliance. This left the company’s procurement team in a lot of doubt.

Although UPI enjoyed a legacy of serving oil and gas clients for decades, their internal processes were not foolproof, leading to increased man-hours and operational costs. The company also maintained contractor records manually, which meant that they spent too much time on paperwork rather than on thinking and implementing ideas for business growth.

The constant rise in operational costs was a major concern as pricing was one of the determining factors behind the success or failure of a business proposal.

In addition to this, the training process UPI followed was raising operational costs. The process was cumbersome with time increasingly being spent on repetitive training processes, the entire exercise was counterproductive.

UPI required an overhaul not only in the supplier management function but also in their training process. Its leadership team realized that attempting to build their own solution to address these gaps would be an enormous job. After much discussion and careful evaluation of several vendor capabilities, UPI partnered with Avetta.



Prequalifying Suppliers and Contractors

With Avetta, suppliers were asked to complete a prequalification evaluation with information on safety records. Better reporting ensured that qualified contractors were easily identified and ready to perform the job for which they were hired. For effective worker management, Avetta used barcodes in mobile devices for employees and subcontractors, making sure that only the compliant workers were given entry at the worksite. The prequalification of contractors entailed document verification, skill-sets evaluation, and a validation of their safety and compliance record.

Worker Management Training Module

Avetta conducted online training programs using their Worker Management Training platform which helped UPI employees and contractors understand the core of risk management and safety at the worksite. The training module, unified the training process, offered customized training, and helped create an integrated training database for contractors, workers, and employees across markets.

UPI saw a 300% increase in training participation from across locations, and beyond that it was all tracked and accessible online.

Democratizing Supply Chain Decision-making with Mobility

Due to intrinsic ease of use, mobile SCRM attracts a new class of decision makers, namely on-site operators and executives who seldom log into enterprise applications on their desktops or laptops. Mobility fosters direct operator engagement which in turn, transforms the contractor management process overall by eliminating escalations and simplifying decision-making. The mobile application of Avetta, for instance can help operators and hiring organizations to:



Instantly identify contractors or workers who aren't qualified enough to perform a particular task



Identify contractors or workers with inadequate safety and compliance training



Access and validate relevant performance indicators for every contractor and worker



Monitor supplier's certificate of insurance and other documentation related to audits and prequalification



Deploy training curriculums across the worker base

Avetta's unique mobile technology solutions are designed to increase visibility, save cost and enhance worker performance. With real-time supply chain intelligence at your fingertip, day-to-day supplier risks and vulnerabilities will no longer be out of your radar.

When conversations onsite are led by the technology in your hands, real change is implemented among your suppliers. Best of all, the solution is device agnostic, so you can be rest assured that supplier safety and compliance will always be taken care of, whether you carry a tablet or cell phone.

With its myriad benefits, Avetta's mobile supply chain risk management technology has the ability to transform your business. If there was ever a time to implement mobility solutions in your supply chain operations, it is now.

References

ⁱ **Source: Supply Chain Resilience Report 2019;** <https://insider.zurich.co.uk/app/uploads/2019/11/BCISupply-ChainResilienceReportOctober2019SingleLow1.pdf>

ⁱⁱ **Ibid**



About Avetta

Avetta connects leading global organisations with more than 100,000 qualified suppliers, contractors and vendors across 100+ countries. We support the sustainable growth of supply chains through our trusted contractor prequalification, supplier audits, insurance monitoring, robust analytics and more. With real results in helping companies reduce TRIR, our highly configurable solutions elevate safety and sustainability in workplaces around the world – helping workers get home to their families each night.

Let's connect at [avetta.com](https://www.avetta.com)