Avetta

Digital Solutions

Revolutionize Contractor Management

Firms depend on contractors to access specialist skills, address spikes in resourcing requirements and to keep worker costs off their books. While using contractors can solve certain operational challenges, it also introduces a whole new set of potential issues. These include coordinating multiple contractors, consistency in safety practices between contractors and permanent staff, and ownership of contractor safety responsibility. Should these challenges not be properly addressed, the firm is at increased risk of operational shutdowns, fines and penalties as well as brand reputation damage.

The requirement to address these contractor management challenges, and mitigate the associated risks, is not going away. Our interviews with 161 executives in EHS, procurement and operations roles within heavy industrial firms across the world showed only 9% expect contractor numbers to fall over the next two years.

As well as pinpointing the specific challenges and risks around contractor management, this study explores the variety of tools and techniques which firms are using to address these challenges. In particular, it examines the use of digital solutions, the drivers for implementing these applications and their effectiveness versus more traditional methods and approaches. This study concludes by analyzing the costs of contractor management and provides a step-by-step guide to building a business case for investing in a digital contractor management solution.

Research Methodology

To gain an in-depth understanding of the challenges and approaches to contractor management, we commissioned independent research firm Verdantix to undertake independent, anonymized phone interviews with 161 executives in environment, health and safety (EHS), operations and procurement roles, located in Australia, Canada, France, Germany, United Kingdom and the United States. Respondents spanned nine industry sectors and came primarily from firms with more than $500 million in annual revenue (see Figure 1). Verdantix asked these respondents about the challenges and risks associated with using contractors, the tools they currently deploy to manage contractors, their spending plans to purchase software for contractor management processes and the top barriers for investment in commercial software for contractor management.

Revenue Split Of Respondents

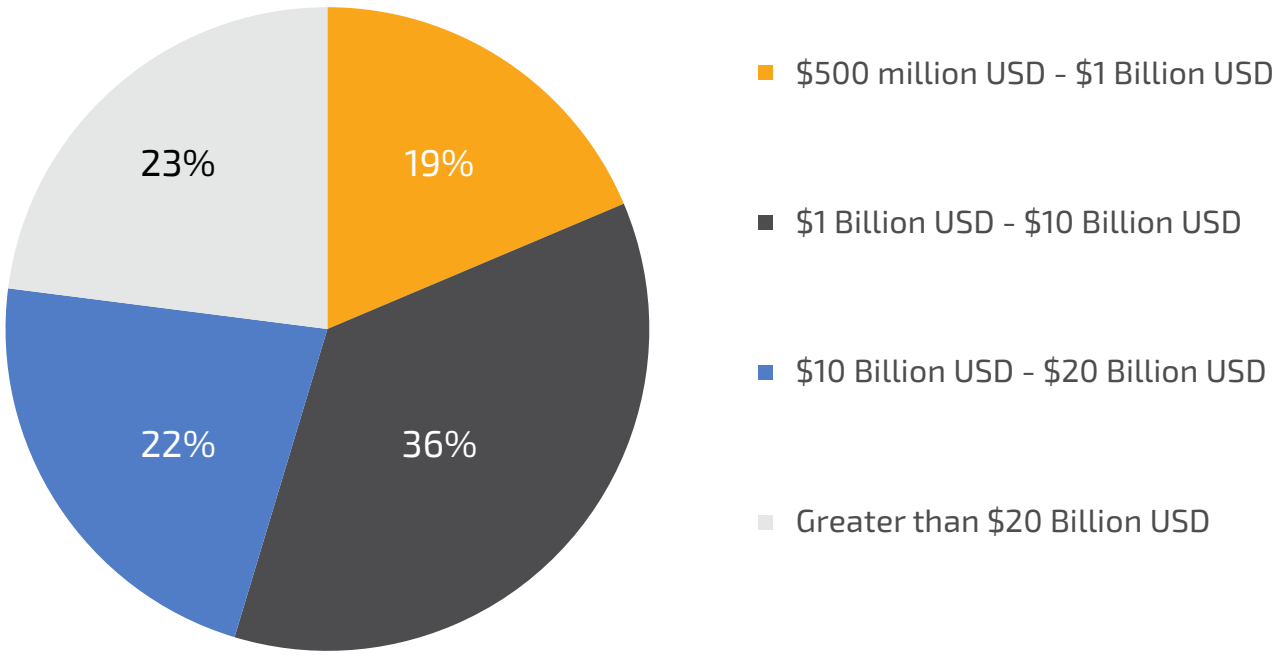


Figure: 1

Contractor Management Is A Major Challenge Across Many Industries

Industrial firms – driven by a multitude of factors, such as minimizing permanent employee hiring costs, plugging labor shortages and accessing specialist skills – increasingly use contractors. Looking at the interview data in detail, only 9% of firms expect contractor numbers to fall over the next two years. Thirty-eight per cent of respondents expect the number of contractors hired over the next two years to increase, with 18% expecting percentage increases of more than 10% (see Figure 2). The interviews with executives revealed that many factors create challenges for managing contractors safely, such as (see Figure 3):

Change In Number Of Contractors Employed Over The Next 2 Years

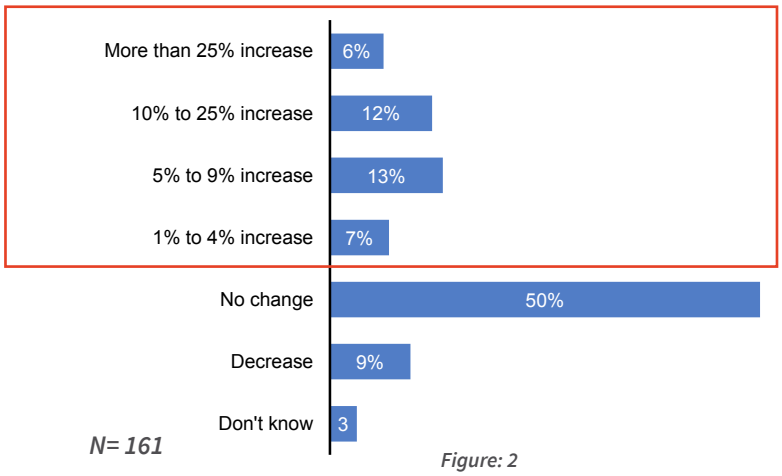


Figure: 2

Multiple contractors performing simultaneous operations.

Multiple contractors could end up performing conflicting activities that could increase health, safety and environmental risks. Eighty-two per cent of 161 respondents consider this to be a 'very significant' or 'significant' challenge to effectively manage contractors. For instance, if one contractor firm is engaged in gas purging activities for an oil tank and another is conducting a welding task in the same area, a fire risk is created. Lack of visibility and standardized communication between contractors exacerbates this risk.

Challenges To Contractor Management

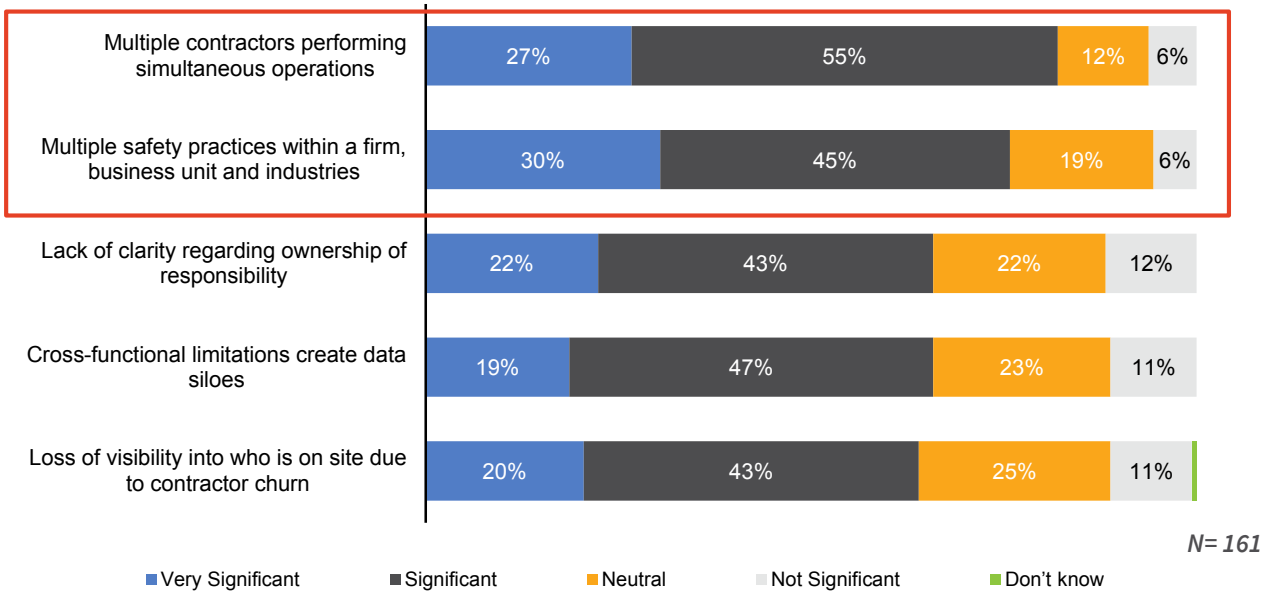


Figure: 3

Myriad safety practices within a firm or industry.

Lack of standard safety practices or a standard set of safety rules across sites or business units within a firm or within an industry creates confusion for contractors with respect to adhering to rules. Moreover, contractors hired by one firm might concurrently be working for five other firms. To learn and follow multiple safety procedures as well as adapt to the safety culture of every organization is a key challenge. Thirty per cent of contractor management executives consider this challenge to be 'very significant', while a further 45% see this as a 'significant' challenge.

Lack of clarity on ownership of contractor safety responsibility.

Lack of a clear chain of command surrounding who is responsible for contractor safety on-site and risk mitigation is a significant challenge for 65% of respondents. According to US OSHA regulations, a hiring client is liable if they fulfil the following: controlling, exposing, creating and/or correcting activities of contractors. Similarly, WorkSafeBC states that in multi-employer worksites, the prime contractor is responsible for the health and safety of contractors. According to HSE Australia, it is the responsibility of employers to ensure the safety and well-being of their contractors. However, in actual practice, the clarity of who oversees decisions is hard to verify.

Involvement of multiple business units.

Multiple business units within a firm are usually involved in hiring contractors. For instance, the procurement team at the corporate level makes the hiring decision after conducting the required prequalification checks, while training and onboarding is provided by the health and safety team and actual work activities are overseen by operations. In an ideal scenario, there would be complete visibility and involvement of the heads of health and safety and operations departments into the contractor hiring process. However, this is not always the case. According to the survey, 19% of contractor management executives consider contractor data becoming siloed due to cross-functional limitations as a 'very significant' challenge, while a further 47% consider this a 'significant' challenge for contractor management.

High contractor churn rate.

Sixty-three per cent of contractor management executives consider loss of visibility into who is onsite due to contractor churn a 'significant' challenge for contractor management. High churn rate of temporary workers and sub-contractors implies poor visibility into their skills and qualifications for the task, what training or onboarding they have received, the level of security clearance they have and who they are reporting to.

Traditional Approaches To Contractor Management Are No Longer Fit For Purpose

Multiple contractors performing simultaneous operations and lack of standardization of safety practices internally are the top two challenges for effectively managing contractors. While firms realize the importance of contractor management and understand the complexities involved, many are using ineffective and outdated tools to support this activity. Our research finds that:

Excel is the most commonly used tool for contractor management.

Spreadsheets are, on average, the most widely used tool across the different contractor management processes, covering: prequalification checks, insurance and monitoring, training and onboarding, job hazard analysis (JHA), auditing, document management and reporting and analysis. Specifically, nearly half (49%) of respondents use spreadsheets for reporting and analysis, followed by 45% for JHA. Not surprisingly, 45% of the executives consider spreadsheets to be only moderately or slightly effective or not effective at all in managing contractors (see Figure 4). As firms increasingly invest in digital technologies across the contractor management life cycle, using tools such as Google Sheets or Microsoft Excel will become increasingly insufficient and inefficient for managing high volume of data to gain deeper insights.

'We lack centralization of the contractor data, that makes quantifying cost tough. Some use spreadsheets, some use databases. There is no central place for the data that we get.' (Oil and gas firm)

How do you rate the overall effectiveness of the following tools for contractor management?

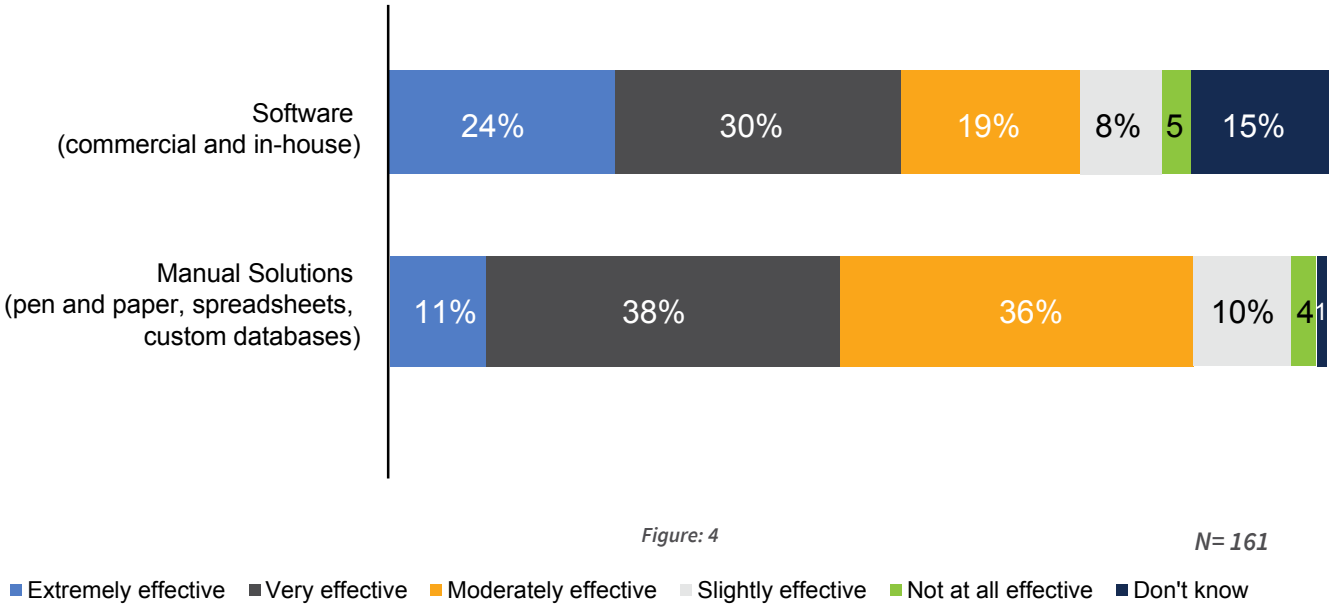


Figure: 4

N= 161

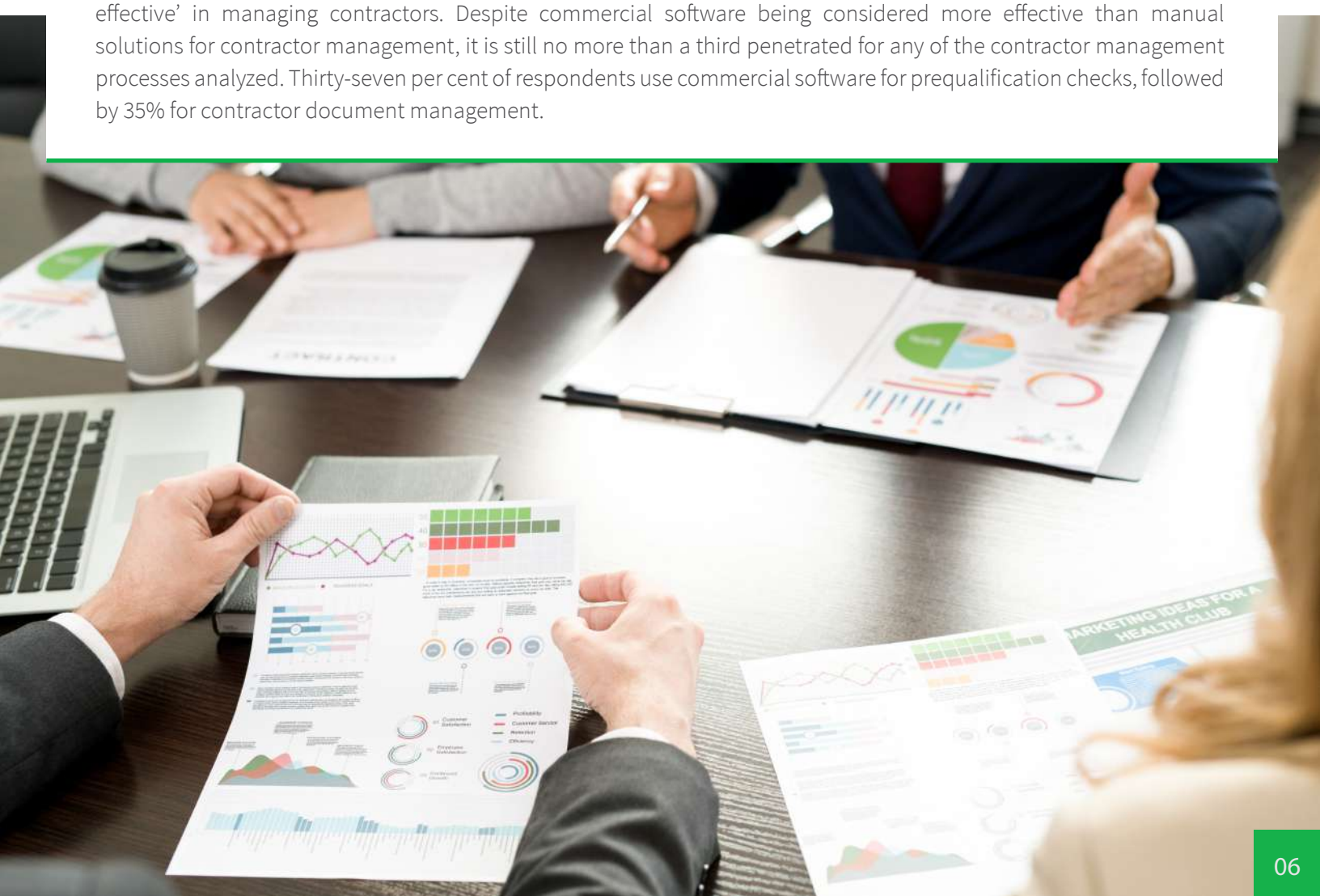
Pen and paper is still used by almost 20% of firms for job hazard analysis.

Nineteen per cent of respondents still use pen and paper for job hazard analysis (JHA), 14% for contractor training and onboarding and 12% for prequalification checks and contractor auditing. Overall, only 27% of the executives consider pen and paper to be more than moderately effective in in managing contractors (see Figure 3). Information captured using paper-based systems is more likely to get lost or misplaced, is not standardized and is often incomplete. Moreover, a lot of time and resources need to be spent to bring all the data together if firms wish to undertake integrated analysis of all the information captured.

'We established the soft scorecard system to measure and track different metrics of individual contractors. But these were paper-based and consolidating every individual scorecard became a massive administrative burden. This meant we were not able to identify the top three or four behaviors we wanted to change to help contractors execute their job better. Paper systems don't work.' (Construction firm)

Software is considered the most effective tool for managing contractors

Commercial EHS software was mentioned by 55% of respondents to be very effective for contractor management while 34% mentioned software from contractor management service providers to be either 'extremely effective' or 'very effective' in managing contractors. Despite commercial software being considered more effective than manual solutions for contractor management, it is still no more than a third penetrated for any of the contractor management processes analyzed. Thirty-seven per cent of respondents use commercial software for prequalification checks, followed by 35% for contractor document management.



Technology-Driven Solutions Deliver Major Efficiencies Versus Traditional Tools

Tools such as pen and paper, spreadsheets and custom databases are unable to provide a complete picture of risks due to the inability to effectively integrate the information. In the interviews with contractor management executives, 41% consider digital technology to be valuable for contractor management and use it where appropriate, while 20% consider digital technology to be essential to the success of contractor management and use it widely in their organization (see Figure 5). Looking specifically at the customer propensity to implement and derive value from IT systems, 20% consider contractor management software to be either 'extremely effective' or 'very effective' in improving contractor management. The main drivers for investment in software include (see Figure 6):

View Of Respondents On The Role Of Digital Technology For Contractor Management

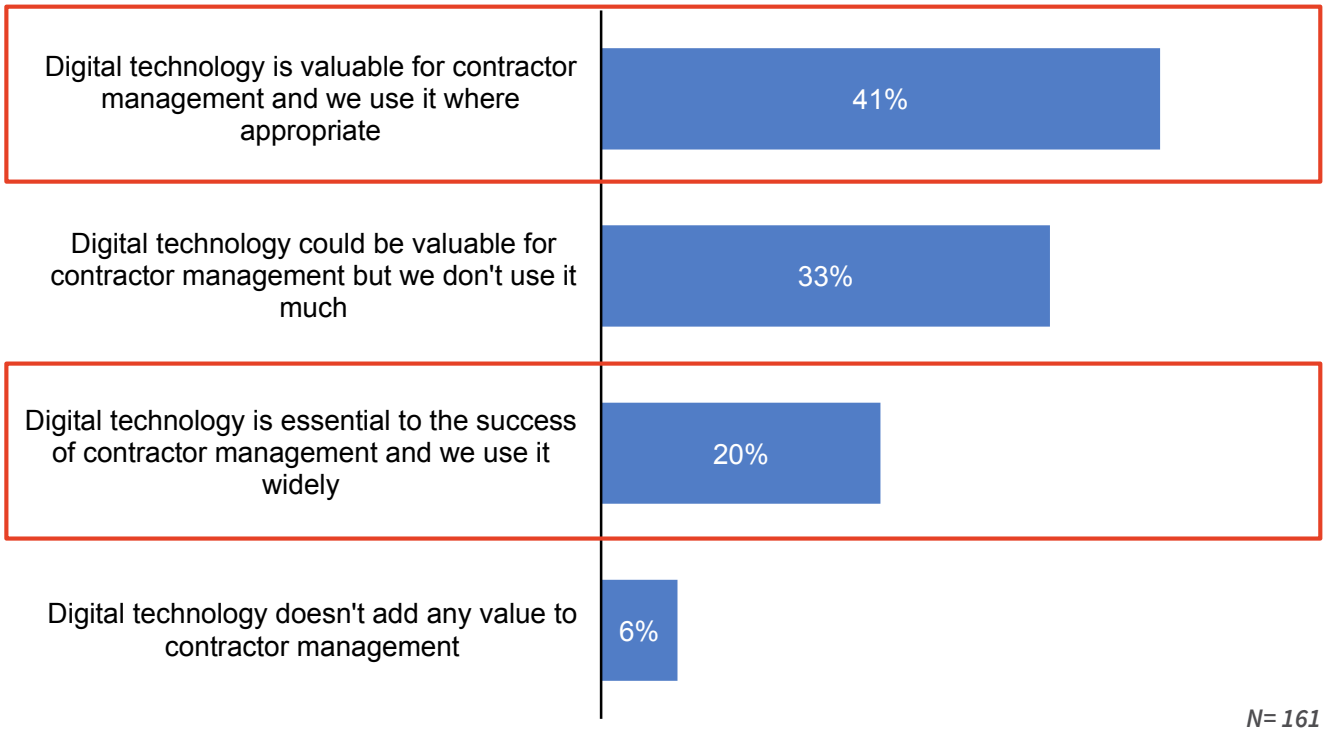


Figure: 5

Factors Triggering Contractor Management Software Implementation

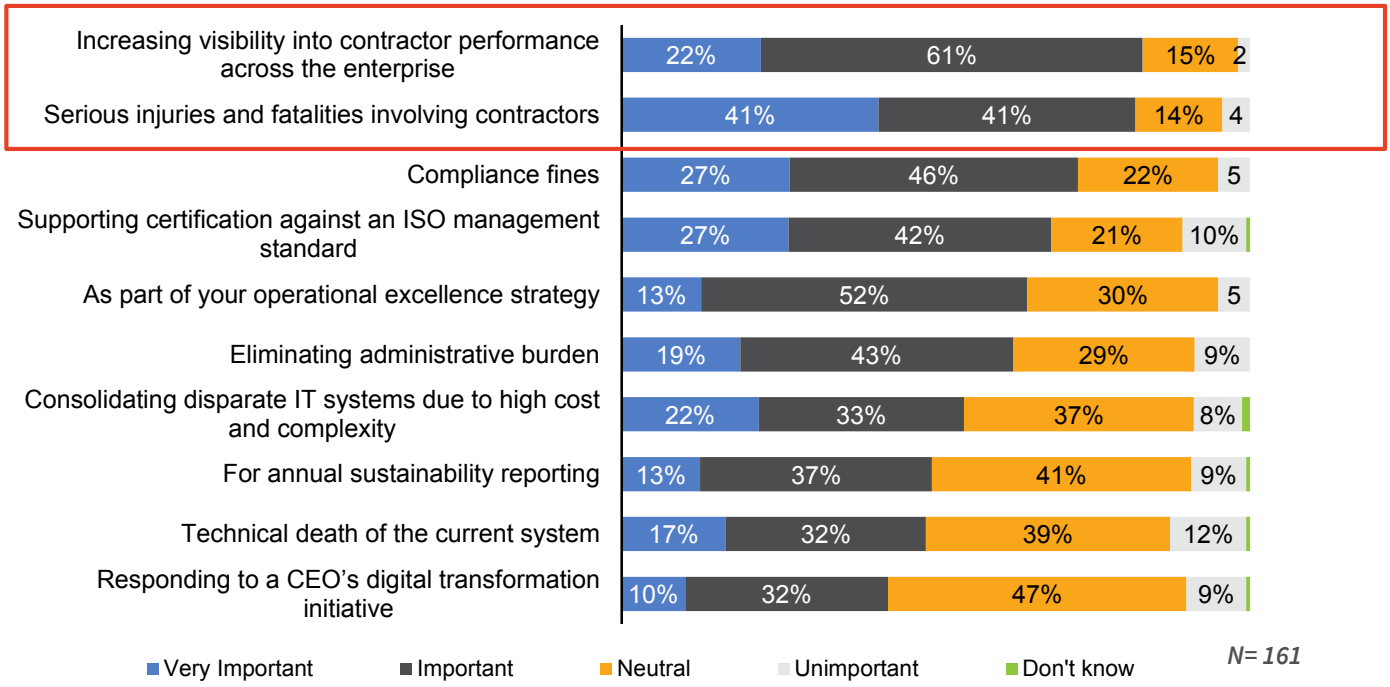
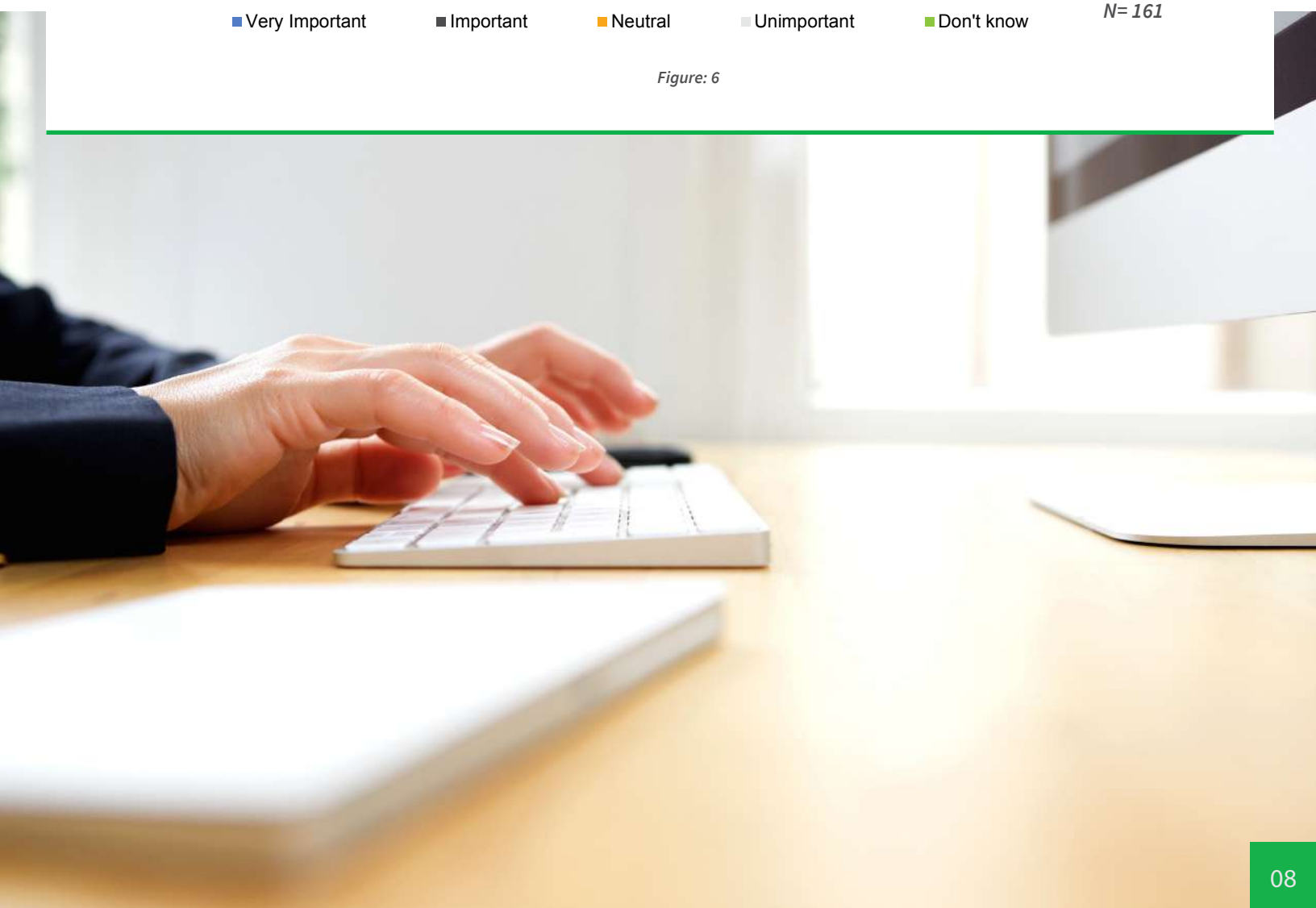


Figure: 6



Avoiding serious injuries and fatalities among contractors.

According to the US Bureau Of Labor Statistics report, 19% of contingent workers (or contractors) in construction reported that they suffered work-related injuries that required medical attention, as compared with a rate of 6% across the whole industry. Eighty-two per cent of executives believe implementing commercial software lowers the risk of accidents and injuries involving contractors. A study published by researchers from the University of New York, Louisiana Tech University and Rutgers University identified that organizations can expect to see a 1% decline in stock price following the announcement of a safety incident.

'Using commercial software, we can monitor all the activities in the field and also manage contractors in a standardized way. This has led to fewer contractor incidents and better management of overall risk.' (Power utility)

Tackling issues identified following compliance failures.

Accidents and injuries involving contractors or any non-compliance with regulations can result in significant pay-outs and compensation claims for the hiring client. For example, a principal contractor and subcontractor were fined £300,000 by the UK Health and Safety Executive (HSE) after their employee suffered severe injuries while dismantling an office building lift. The principal contractor failed to prequalify the subcontractor and verify if this worker had the right knowledge, skills and safety record to carry out the job. Using the Avetta Connect platform, hiring clients can view contractor firms in the database on a map and search for a firm by postcode, zip code or region. Clients can also filter the search by the type of job that needs to be performed, qualifications required and performance history.

'The benefit of commercial software is that we know all contractors are qualified to work in our plant, they meet our expectations for training and documentation. It solves the headache of doing the background check of contractors and helps in screening contractors.' (Mining firm)

Supporting certification against an ISO management standard.

ISO 45001, the occupational health and safety standard replacing OHSAS 18001, came into effect in March 2018. A key change in ISO 45001 is with regards to managing risk across the entire supply chain and expanding the definition of 'workers' to include 'contractors' and not just employees. So, firms must now treat employees and contractors equally and – in accordance with the OH&S standard – communicate, manage and mitigate risk to both parties. Supporting certification against an ISO management standard is thus an important driver to 69% of executives planning to implement contractor management software.

'Contractor safety is a key part of our company's operational excellence strategy and especially with the new ISO standard, we decided to implement commercial software to improve the entire process.' (Manufacturing firm)

Increasing visibility into contractor performance across the firm.

An important driver for investing in contractor management software, as mentioned by 83% of executives, is enhanced visibility not just into contractor performance but also their level of training, safety and insurance. For example, software from Avetta allocates each contractor firm in its database a risk score based on past performance. Depending on the project need and hiring client requirements, factors that calculate these scores can be modified. These can include screening out contractor firms that have had fatalities in the last three years or setting a baseline lost-time injury frequency rate, that if exceeded, highlights the contractor firm as high-risk.

'Using commercial software to manage contractors has provided us with a single source of truth. In our morning meetings we use dashboards and observations, or incidents captured the previous day by our employees and contractors alike, to discuss best practices, lessons learned, what could have been done better or what was done that was good behavior. Software has given us this insight.' (Transportation firm)

Consolidating disparate IT systems.

One of the leading benefits of implementing commercial software is with regards to standardization. It is not unusual for firms to deploy a multitude of technologies to manage contractors across their life cycle – from using document management databases to store contractor information prior to hiring, using homegrown solutions to provide training and onboarding, deploying mobile apps while on the field to collect and report incidents or near-misses, to finally using a third-party BI tool or spreadsheets for post-project reporting and analysis. Successful contractor management requires a hiring client to manage all these processes in an integrated way. Specialists contractor management software aims to integrate these disparate processes.

'Benefit of commercial software is that it allows you to automate and improve the data collection process. The software is a repository of all the different contractor information. We have better data now.' (Telecommunication firm)

Eliminating administrative burden.

Sixty-two per cent of contractor management executives mentioned an important driver for implementing contractor management software is the savings generated in terms of the time and resources spent on contractor paperwork. The Avetta Connect platform monitors documents and insurance certificates of all contractor firms. It then sends reminders to both parties (contractor firm and hiring organization) about timely renewals. This helps in reducing the administrative workload and realize operational savings for firms.

'The biggest benefit we have seen after implementing commercial software is less administrative work for the sites, like following up on paperwork, managing documents such as contractor insurance, their certifications.' (Chemicals firm)

Executives Face Hurdles in Securing Budget For Contractor Management Technology Solutions

Some of the main drivers for firms deciding to invest in contractor management software are improving visibility into contractor performance, avoiding serious injuries and fatalities and consolidating existing IT systems. However, many executives struggle to get the required investment for their software project due to (see Figure 7):

Barriers For Investment In Commercial Contractor Management Software

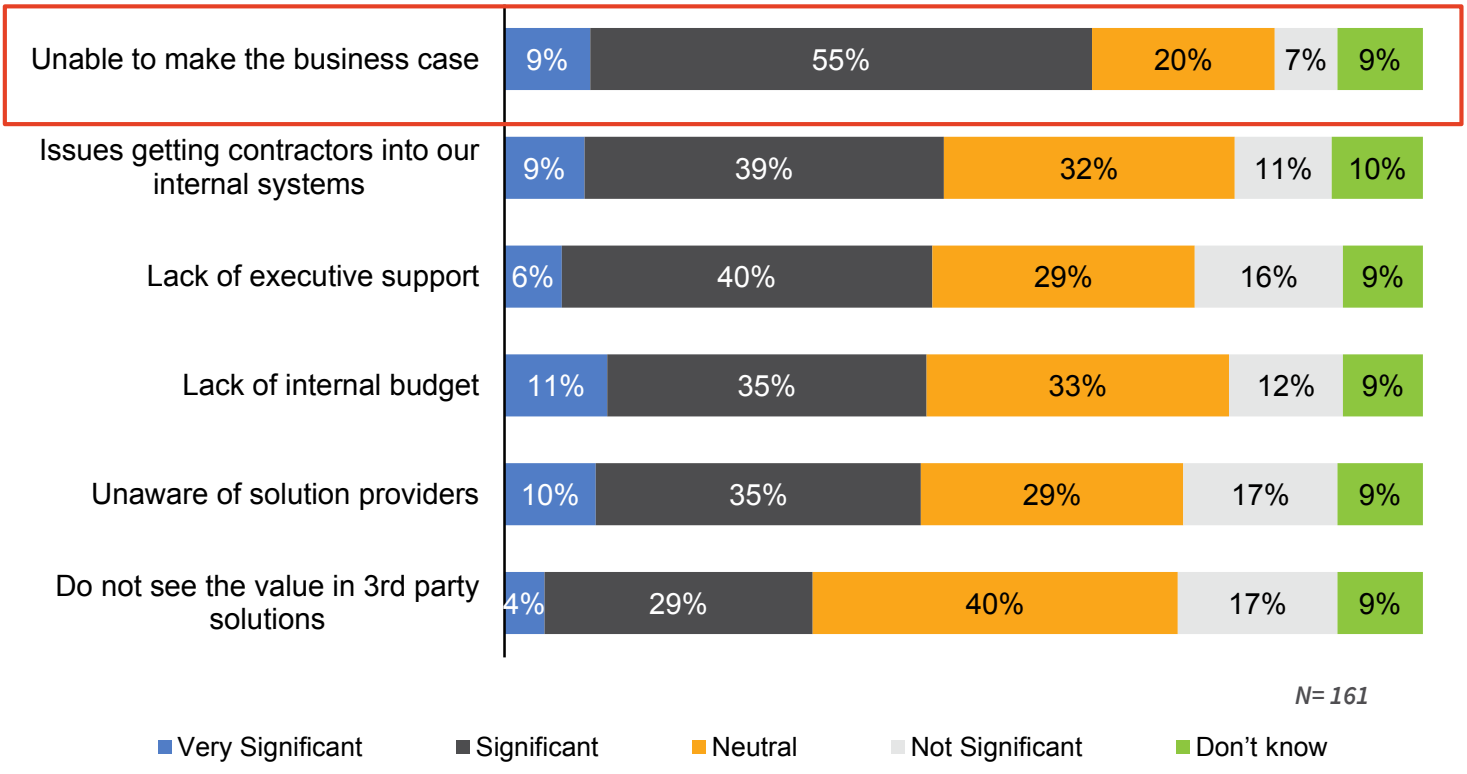


Figure: 7

Challenges with building an effective business case.

Sixty-four per cent of the 161 contractor management executives mentioned challenges with building a business case that highlights all the requisite costs and benefits as the number one barrier for investing in commercial software. The discussions also revealed that two-fifths of these executives have a fair, poor or very poor understanding of the costs involved with managing contractors in their firm. Hidden ROIs and difficulties with quantifying qualitative benefits such as increase in brand reputation or rise in productivity, make it tougher to get the financial commitment required from the C-suite.

Issues with contractors accessing internal systems.

In the interviews with 161 executives, nearly half (48%) mentioned contractors' use of internal systems as an important criterion in the debate for investment in commercial contractor management software. Some firms might not be comfortable providing complete access to their systems and sharing sensitive information with contractors. Additionally, getting contractors to use the system might result in additional training costs. This might discourage the top management from implementing such a system in the first place and result in their opting for the status quo.

Lack of executive support.

In terms of the CEO's priorities for assigning budget, contractor management might not be deemed as urgent as a new product launch that could boost market share by 10%, or investment in IoT sensors to relay real-time data about asset health, help plan maintenance and potentially save millions of dollars by averting system failures. Forty-six per cent of executives mention this as a 'very significant' or 'significant' barrier for securing budget to invest in commercial contractor management software.

Insufficient internal budget.

In many organizations, different departments and business units compete with one another for budget. This may mean that the budget requested for contractor management software is competing with budget requested for new asset tracking software or the purchase of new production equipment. Securing support for the contractor management software can be a challenge in these types of matchups. In the interviews, 11% of respondents mentioned lack of internal budget as a very important barrier for investment in contractor management software, while a further 35% consider this barrier to be 'important'.

Lack of awareness about different software providers.

In the survey, respondents' awareness about the different contractor management service providers fluctuated between 20% and 80%. Even if respondents had heard of these vendors, they were unaware of their software capabilities. Without more detailed insight into the specific offerings of potential vendors, the business case will lack credibility.

How To Structure The Business Case For Contractor Management Software

Executives at industrial firms do not have a good understanding of the costs involved with managing contractors nor full insight into the potential benefits linked to ROIs. This affects their ability to draw up a compelling business case to gain funding for their contractor management software investment project. To build a such a business case, the key criteria or parameters for consideration are:

Value of administrative time-savings from implementing software.

A major driver for implementing commercial software is the administrative costs savings and this is a critical component in any business case. From the study interviews, a $10 billion upstream oil and gas firm told us that implementing commercial contractor management software delivered significant cost savings by simplifying the document and record management process for contractors. Additionally, the time-savings realized had enabled operations managers and EHS executives to focus on more strategic aspects of the business.

Lost revenues or downtime caused by contractor management failures.

Contractor mismanagement can lead to expensive operational shutdowns, delays in project completion and added costs involved in orchestrating turnarounds. Contractor management software will typically improve contractor management performance and reduce these issues. The resulting financial benefit should also be modelled in a business case. For example, in May 2017 a power outage at the British Airways datacenter facility managed by CBRE, the real estate service provider, led to the cancellation of over 400 flights and stranded around 75,000 passengers, costing British Airways nearly £58 million.

Fines and penalties relating to contractor safety non-compliance.

In January 2019, the US Labor regulator OSHA (Occupational Safety and Health Administration) announced increases to the maximum penalty for serious and other than serious citations to $13,260. It also raised the maximum penalty for willful or repeat violation to $132,598, to keep in line with the Federal Penalties Inflation Adjustment Act Improvements Act of 2015. In February 2016 new health and safety regulations came into effect in the UK that consider factors such as the size of the business, previous offences and seriousness of offence when issuing fines and penalties for breaches. This has led to a huge increase in the size of fines over the years (148% increase in fines in 2016 as compared to 2015). Firms must analyze the size of penalties or fines they have incurred in the past or look at other firms in their industry who have been fined for non-compliance and consider this figure as part of the business case.

Contractor compensation claims and insurance due to workplace injuries and fatalities.

According to the US Bureau of Labor Statistics, workers' compensation insurance costs account for approximately 3% of total compensation of employees in natural resources, construction, and maintenance industries, and average out to about 1.5% across all industries. Similar to the methodology followed for quantifying fines and penalties related to non-compliance, firms should look at their history of compensation claims to. Implementing a contractor management software solution should improve contractor management and reduce the levels of compensation paid.

Benefits from improvements in brand reputation and productivity.

A rise in brand reputation, improvements in productivity and increases in contractor morale are benefits which are often realized from better contractor management. However, to quantify these benefits and include them in a business case is a challenge. While gains from rise in brand reputation and contractor morale are best mentioned in a qualitative manner, productivity improvements can be quantified by calculating the hands on tool time (HoTT) of contractors. Verdantix research finds that using commercial software could result in worker productivity improvements of two to seven per cent over a five-year period.

Cost of integrating contractor management software with existing systems.

In the discussions with executives, 37% mentioned the ability of the contractor management software to easily integrate with existing IT systems in their organization as 'very important' to their final purchasing decision, second only to user interface quality at 52%. With respect to a contractor management software solution, integrations to a whole range of systems should be considered. These include enterprise resource planning (ERP) systems, maintenance management systems or asset performance management software. Executives must include the cost of these integrations while drawing up their business plan.

Software deployment scale and associated implementation fees.

The cost of the software and its implementation must also form part of the business case. Executives will need to determine the software deployment model which fits them best (i.e. on-premise vs cloud) and understand the associated costs. They will need to consider the costs of implementation including any configurations or customizations they wish to make to the software. Executives will also need to check for any further costs such as maintenance fees or charging for deeper areas of functionality like business intelligence tools and mobile functionality.

About Avetta

Avetta connects leading global organizations with more than 85,000 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.

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