

Digital EHS&S 2020 survey:
**Industry trends
shaping the next
decade**

7 Key EHS&S Survey Takeaways & Trends

1. Strategic value is driving EHS&S spend.

Risk management, corporate/strategic initiatives and increased operational efficiency were noted as the top 3 driving forces for investing in EHS&S.

2. EHS&S is moving closer to the c-suite.

Thirty-five percent of the survey respondents say EHS&S are corporate-level functions that report directly to CEO or COO.

3. EHS leaders are shifting from decentralized and hybrid models to more centralized EHS&S functions.

Throughout different industries, more companies are adopting corporate-level digital EHS&S rather than at the facility level.

4. EHS&S spending was significantly lower in 2019 than 2016.

This trend likely aligns with the migration to centralized functions, as the large investments on the horizon three years ago accounted for the centralization journey.

5. Digital EHS&S remains heavily outsourced.

Fifty-nine percent of companies maintained their level of outsourcing digital EHS&S functions in the past year, with 23% increasing it.

6. Transparency is prompting sustainability investments.

Many organizations are seeing that transparent sustainability is becoming more important to investors and responding in kind. Whereas most sustainability staffs had five members or less in 2017, we are seeing a greater percentage of larger sustainability teams in 2020.

7. Incident management is evolving.

Solutions like predictive analytics can help organizations with the greatest opportunity for improving EHS&S – using incident management data differently. By putting predictive EHS&S into practice, leaders can filter the wealth of data captured around incidents through a forward-looking lens that results in safer operations.

In 2017, many companies were considering enterprise-level environment, health, safety and sustainability management information systems (digital EHS&S) for the first time. Now that plans to centralize, digitize and elevate EHS&S are coming to fruition, we wanted to examine the effects on spending dynamics, strategic priorities and staff responsibilities.

We chose to compare our 2020 EHS benchmarking survey results to a similar 2017 survey because, as the old adage goes, big ships turn slowly. Enterprise digital EHS&S implementations are multiyear endeavors, and the three years of planning and execution allows more room for developing trends to take shape.

With more companies achieving a high level of centralization, EHS&S is a more important factor in corporate-level strategies. Leaders are embracing digital EHS&S's potential to provide risk assurance and satisfy investors' surging interest in sustainability. These trends, as well as the others discussed in our findings, provide a first look at what the next decade might look like for global EHS&S leaders.

Who we surveyed

Companies surveyed by sector

Aerospace & Defense

Airline

Automotive

Chemicals

Consumer products

Food & Beverage

General manufacturing

Transportation & Logistics

Mining

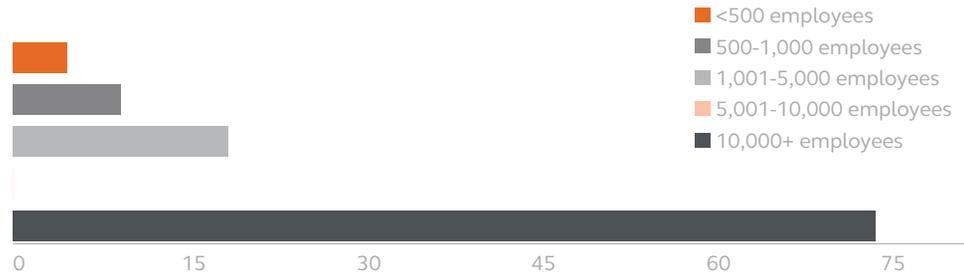
Oil & Gas

Pharma

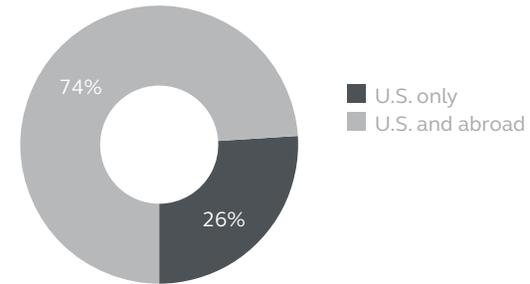
Telecommunications

Utilities

Company size by total employees



Where participating companies operate



A note about COVID-19

Our survey was completed in early 2020, before the COVID-19 pandemic began unfolding. However, most of the effects on our clients and in the marketplace indicate an acceleration of ongoing trends in EHS&S.

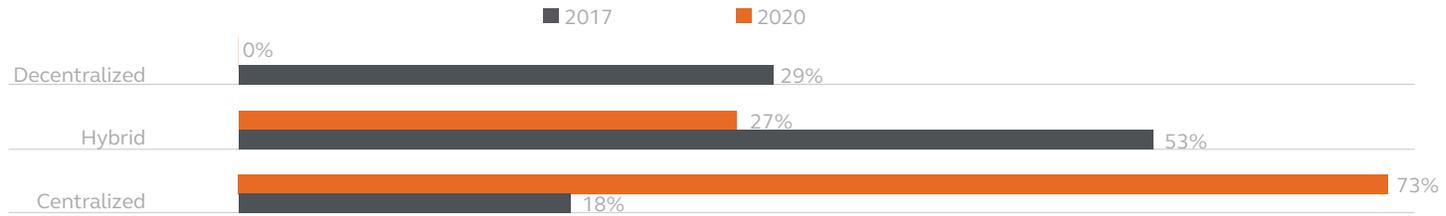
Revenue impacts are putting pressure on operating budgets, and EHS&S teams are being asked to do more with less. This was already happening over the past few years — survey responses from 2017 and 2020 show that while numerous companies spent upwards of \$300 million on EHS&S in 2016, none spent more than \$150 million in 2019. Now, the pandemic is stretching EHS&S even thinner as teams manage additional compliance drivers, return to work plans and increased expectations around digitization.

Demographics could change as well. Experienced leaders are receiving early retirement opportunities amidst the economic uncertainty, heightening the importance of knowledge transfer as well as attracting and retaining younger talent.

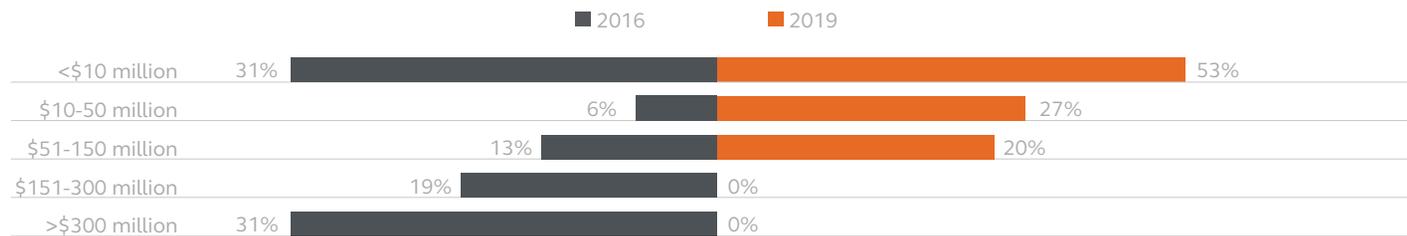
All these issues underscore an existing need for corporate-level risk assurance, data-driven EHS&S and cost-effective operations. Companies must push further into the digital EHS&S era. For some organizations, that will mean adjusting plans to pick up the pace.

2017-2020: The grand migration to centralization

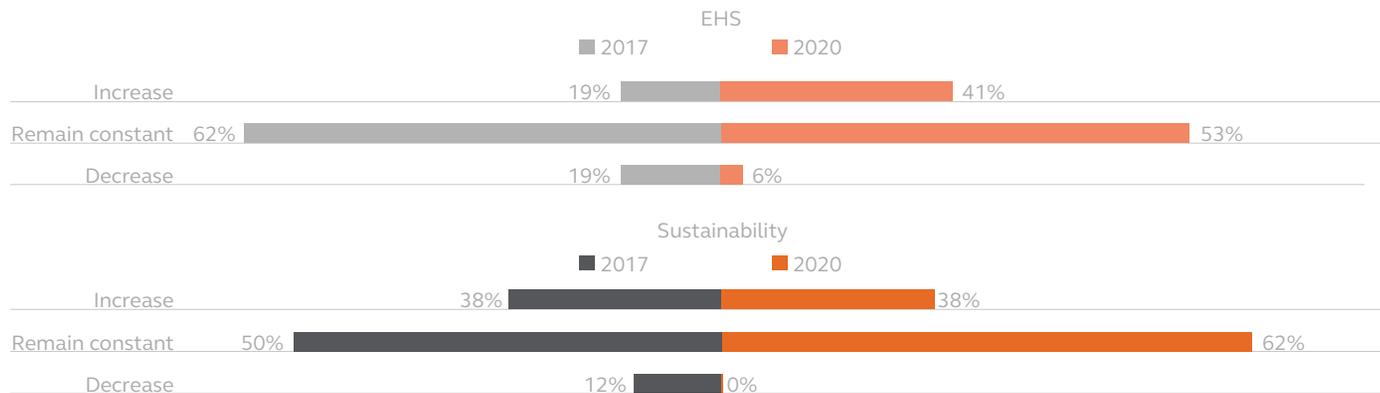
EHS&S leaders are achieving centralization



Dollar value of EHS spending



EHS&S three-year spending plan



2017-2020: The grand migration to centralization

Comparing 2017 and 2020 numbers reflects the shift to centralized digital EHS&S functions. The hybrid model was most popular in 2017, but in the three years since, widespread centralization has left decentralized structures far behind.

We know that these changes do not happen overnight. To see so many companies pivot to centralization over a relatively short time frame indicates that multiyear journeys were well underway in 2017. With the new standard in place, it will open opportunities to implement innovative technologies and techniques for leveraging data.

The 27% of respondents with hybrid models are not necessarily lagging behind. There will likely be some functions that never centralize, and hybrid models will endure. However, the days of

business units or regions of facilities owning their EHS&S destinies may be long gone. This is not just something we are seeing in the survey, either. More of our clients are adopting corporate-level digital EHS&S rather than at the facility level.

The migration could help explain 3-year spending expectations; companies expecting to decrease spending between 2017 and 2020 might have been closer to centralization. It could also be the reason overall EHS&S spending in 2019 looks significantly lower compared to 2016.

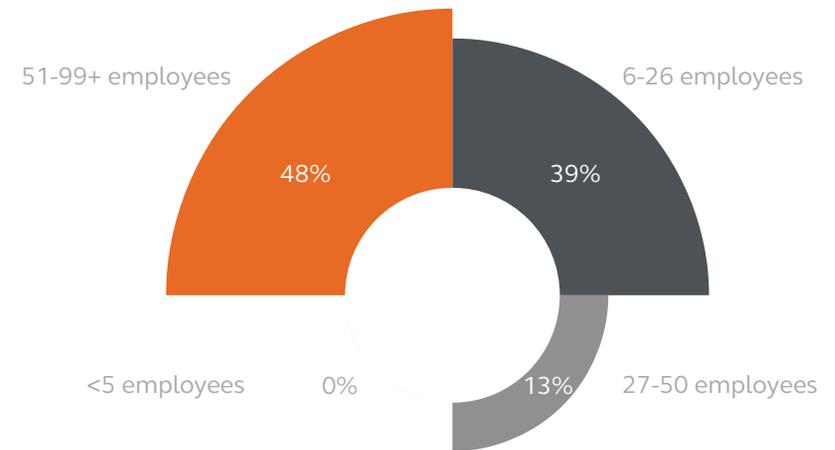
EHS&S sits closer to the c-suite

Centralized EHS&S thrives by combining digital EHS&S data streams with experts that can identify and implement actionable insights. Robust enterprise-level EHS&S teams are required to manage responsibilities formerly handled by business units, regional leads, or on-site personnel, so it is understandable that 48% of corporate EHS&S teams sit in the 51-99+ employee range.

The amount of smaller teams (39% of corporate EHS&S staffs sit between 6-26 employees) is where it gets interesting. Seeing as none of the 2020 respondents use a decentralized model, it might be a byproduct of centralization. Smaller, corporate-level teams empowered with enterprise risk controls could become more common as industry leaders achieve centralization.

Team size aside, EHS&S as a function is moving up the corporate ladder. Thirty-five percent of respondents say EHS&S are corporate-level functions that report directly to the CEO or COO, nearly ten percentage points ahead of operations leadership. Other responses include supply chain, quality control, and regulatory leadership.

Size of corporate EHS staff



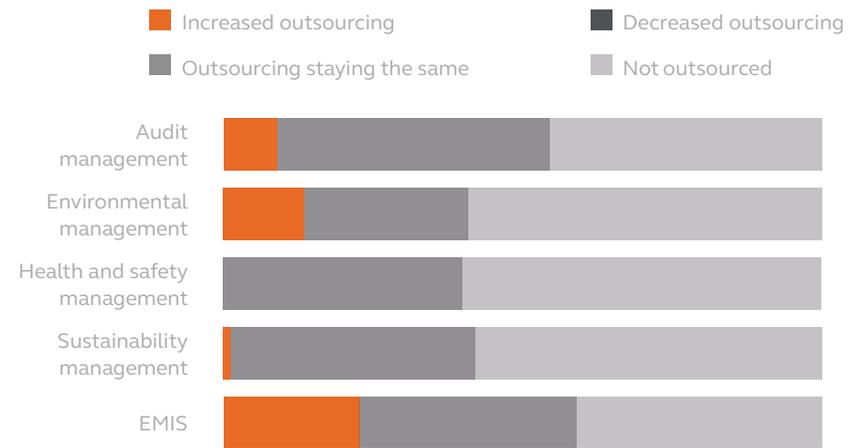
Despite doing more in-house, need for digital EHS&S 3rd party support remains

Centralization could also be changing how companies decide which EHS&S functions to perform in-house. When asked whether they have increased or decreased outsourcing for certain EHS&S functions over the past year, not outsourced was the top response in each category (except for audit management, where not outsourced tied with outsourcing stayed the same).

The one function that is still heavily outsourced is digital EHS&S. Fifty-nine percent of companies maintained their level of outsourcing digital EHS&S functions in the past year, with 23% increasing it.

It takes experience to maximize digital EHS&S adoption and apply it in ways that best support an organization's unique needs and goals. Using outside experts to achieve data-driven risk management propels organizations toward the business benefits of centralization — lower costs, enhanced performance, improved system controls, consistent standards and more — quicker than working alone. Hence the need for digital EHS&S outsourcing remains despite an overall desire to handle more EHS&S duties in-house.

Changes in outsourcing of EHS functions over the past 12 months



Top 6 digital EHS&S gaps

Respondents' leading challenges using EMIS span from technology capabilities to user buy-in.

1. Difficult or non-helpful reporting
2. Poor integration
3. Cumbersome data entry
4. Outdated software (tied)
5. User adoption (tied)
6. Lack of realistic mobility option (tied)

Transparency is prompting sustainability investments

From 2017 to 2020, we noticed a marked shift in companies' perceived benefits from digital EHS&S spend. Over three years, reduced liability and risk exposure and enhanced regulatory compliance and transparency jumped from the bottom to the top of the rankings.

Enhanced regulatory compliance and transparency's rise reflects changing investor attitudes around environment, social and governance factors. In his 2020 letter to CEOs, BlackRock CEO Larry Fink said "evidence on climate risk is compelling investors to reassess core assumptions about modern finance," and the company's letter to clients stated "sustainability should be our new standard for investing."

Coupled with the fact that federal regulations are arguably less rigorous than they were in 2017, companies are clearly not prioritizing EHS&S because of compliance. They are seeing that transparent sustainability is becoming more important to investors and responding in kind. Whereas most sustainability staffs had five members or less in 2017, we are seeing a greater percentage of larger sustainability teams in 2020.

Benefits gained from EHS&S investments

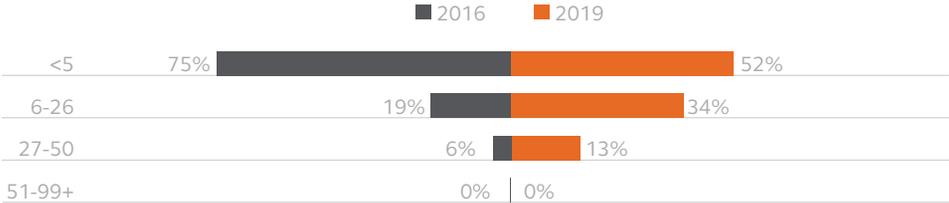
2017:

1. Increased value and sales of products
2. Reduced operational costs
3. Enhanced reputation and stronger brand
4. Enhanced regulatory compliance and transparency
5. Reduced liability and risk exposure

2020:

1. Reduced liability and risk exposure
2. Enhanced regulatory compliance and transparency
3. Reduced operational costs
4. Enhanced reputation and stronger brand
5. Increased value and sales of products

What is the size of your sustainability staff?



Strategic value is driving EHS&S spend

We still run into organizations that treat EHS&S as overhead. However, it is encouraging to see more companies recognize EHS&S's potential to protect and enhance their business.

Organizations are realizing the strategic value add digital EHS&S provides to risk management, corporate/strategic advantage and increased operational efficiency. Data-driven insights are helping companies avoid operational shutdowns and maximize cost-effectiveness. Seizing on these opportunities stretches the value of investments while still satisfying traditional compliance needs. It is not just household brand names, either. Multi-billion-dollar non-consumer conglomerates that historically left EHS&S to individual business units and prioritized compliance above all are spending millions to elevate EHS&S.

Another trend to look for is where companies that are committed to investing in EHS&S are planning to focus on next. Here, we see that adding mobile tools to the digital EHS&S technology solution is gaining strong momentum, especially for programs with a formal strategy for incorporating new and emerging technologies.

Allowing staff to access and input data on location using a phone or tablet can expedite the time it takes to turn inputs into insights. It also improves user adoption of the system overall. Further, wearable sensors and monitors reduce the need for manual data entry, leaving less room for user error.

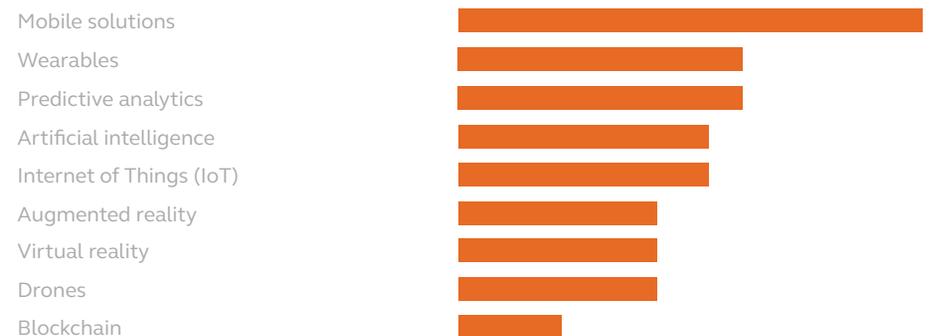
The enriched data streams open the door to other desired functions such as predictive analytics, the Internet of Things and artificial intelligence.

Driving forces for investing in EHS&S



**Respondents were able to select multiple responses to this question, and results are based on response ratios.*

Technologies that are or will be incorporated into EHS&S functions



**Respondents were able to select multiple responses to this question, and results are based on response ratios.*

Room to improve: Rethinking incident management

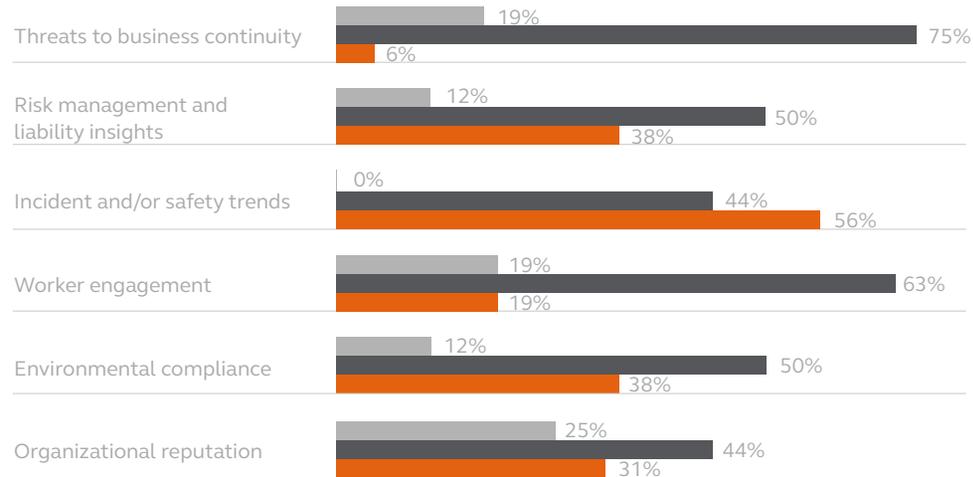
Largest EHS&S risks and liabilities



*Respondents were asked to rank risk/liability areas from highest to lowest in terms of importance, and results are based on how the areas scored.

Where EHS&S data drives organizational strategies

- **Not driving strategy:** We struggle to analyze and manage this data
- **Somewhat driving:** We are able to pull some useful insights to help guide strategy determination
- **Driving strategy:** We are able to analyze and manage this data to help guide strategy determination



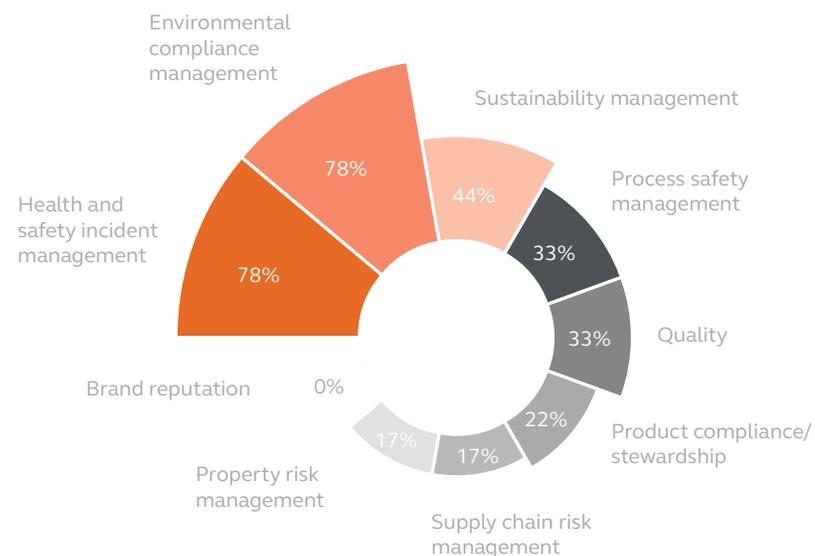
Room to improve: Rethinking incident management

Solutions like predictive analytics can help organizations with the greatest opportunity for improving EHS&S: rethinking how to apply incident management data. Many companies talk about wanting to become predictive, yet they still focus on indicative drivers. This limits the scope of using digital EHS&S insights to create lasting benefits.

Even for companies using enterprise-level digital EHS&S, health and safety incident management was one of only two functions most respondents are focusing on. So long as leaders treat incidents as a leading performance metric, they will prevent their organization from making the most of EHS&S insights.

However, it is encouraging to see 33% of digital EHS&S users applying enterprise-level functions to process safety management. We hope this is a sign of things to come, and that more leaders put plans for predictive EHS&S into practice. Filtering the wealth of data captured around incidents through a forward-looking lens can fuel safer, more efficient, and cost-effective operations.

Areas where companies leverage enterprise-level digital EHS&S functions



**Respondents were able to select multiple responses to this question, and results are based on response ratios.*

What's next?

The past few years have seen digital EHS&S become a more strategic tool for business leaders looking to improve performance and sustainability. With the journey to centralization complete, the next decade is ripe with opportunities to continue to

enhance operations and reduce risk. As companies become more adept at leveraging digital EHS&S insights, EHS&S will move even closer to the core of overall business planning.

Redefining what is possible in digital EHS&S and operational excellence

Integrating EHS&S and risk increases efficiency, reduces operational risk and creates safer working environments for our clients.

For the past three years, an independent research firm has recognized Arcadis as a leading global digital EHS&S services provider. Find out why.

Contact



Ian Achterkirch

Vice President, Strategic Environmental Consulting

E ian.achterkirch@arcadis.com



Mark Weitner

Vice President, Digital EHS&S

E mark.weitner@arcadis.com

About Arcadis

Arcadis is the leading global design and consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are a public company with 27,000 people, active in over 70 countries that generate \$3.9 billion in revenues.

Arcadis.
Improving quality of life.

