

WHITEPAPER



how to choose the right EHS software

A guide to digitalizing your environment,
health and safety activities



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starting the EHS software selection process

Establish your goals

Any EHS manager will be aware of the broad scope and multiple activities the role includes. Every day you find yourself collecting, documenting, evaluating and distributing all kinds of information. Most days you're in some sort of collaboration with colleagues from specialist departments, and in consultation with management. You're constantly busy and usually under pressure.

Deploying EHS software is about easing the pressure and the procedural workload. Once that happens you gain more time to look forward, to focus on strategic issues and tasks that can add value to your company's EHS practices rather than simply monitoring and reporting on them.

Finding the right EHS software is not just a matter of calling on software providers and asking them to demonstrate their solutions. If you go that route, you'll spend a lot of time listening to sales pitches, and they might all sound equally impressive. The more time this process takes, the more your daily pressures will accumulate.

This AMCS whitepaper will show you how to move faster through the selection process by asking the right questions at the start of your search; helping you to identify the right solution by establishing the right criteria.

Before you can find the right EHS software to suit your individual requirements, you need to identify exactly which aspects of your company's operations you want the software to support. Make an overview of the objectives you want to achieve with the new software and which processes and employees should benefit. Consult with others within your organization too, asking departments about the functions they require to make their roles easier. This consultative approach will help you make sure that the EHS software you finally decide upon will meet the needs of its future users. You'll also create a community of advocates who, because you involved them in the early discovery stages, will show greater support and enthusiasm for the solution when it comes into the company.

If you're already aware of your company-specific requirements, you can use this guide to answer your questions about how best to select a suitable EHS software solution. What functions would make your day-to-day work easier? What certifications will you need to consider?

This whitepaper breaks the process down into steps, and will help you to identify selection criteria. In addition, you'll gain valuable tips you can use to convince your company's management, budget administrators and other relevant stakeholders about the importance of the investment you're about to recommend the company makes.

linking data + connecting stakeholders with the help of EHS software

Identifying challenges and requirements in your company

The use of paper-based documentation and spreadsheets to manage EHS processes and procedures is rapidly being replaced by digital solutions. Finding files, sharing information, producing reports all take time, often with false starts along the way. While the desired results are achieved, they could have been achieved in a fraction of the time had they been digitalized.

It's becoming increasingly apparent to companies, in all functions, across all types of businesses, that digitalization is about working smarter, faster, and more accurately. Barriers to productivity that came along with manual processes are being removed. Collaboration is becoming easier, audit trails are automated, costs are reduced, and risks of human error are eliminated. As all this happens, it becomes easier to obtain certifications of growing value in the global business world.

EHS software adds value by providing a framework for decentralized data storage feeding into centralized data processing; that means that everybody works with the most up to date information all the time. One person makes a change and everyone accesses the same changed information. Documents are structured and always up to date, tasks are more transparent, and people collaborate more easily. EHS software also provides personalized overviews that show users—from specialists, to line managers, to executives—exactly what they need to know, and saves time by conducting evaluations, compiling reports and forwarding them through the system.

By keeping regulations up to date and deriving appropriate and structured measures, EHS software reduces user liability to a minimum. A decisive advantage of integrated EHS software solutions over isolated, standalone solutions is their ability to support and promote an exchange of information across departments and locations.

Good to know

The EHS software market offers varying solutions choices. Some solutions focus on individual areas, such as environmental management or health and safety. Others cover the entire EHS spectrum. Many functions help EHS specialists to document, evaluate and control company processes. Some solutions provide a holistic approach, enabling users to combine individual software modules with different focuses. This allows users to build a solution precisely tailored to their individual requirements and pay only for the services they actually need.

Examine the status quo of your work processes

At the start of your search for a suitable EHS software solution, establish an overview of what works well in your company and where improvements are needed. Take a look at different departments and their respective work processes, and invite suggestions. This way, you learn about what they expect from an EHS software solution. Since these are the departments that will use the EHS software you select, integrating them from the outset will boost engagement and foster trust in the process.

You should also give thought to how you collaborate with decision-makers. Employees often need specific software functions in order to carry out individual work steps. In contrast, managers are often more focused on getting a clear overview of resulting KPIs so that they can see the big picture. Speak to different stakeholders and ask them about their needs. Identify where procedures could be simplified, synergies could be generated, and communication could be improved. Determine which applications the solution could replace and where interfaces with other systems (e.g. SAP) will have to be created and managed.

linking data + connecting stakeholders with the help of EHS software

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Identify the points where time is wasted at present. You might have seen chaos ensue more than once simply because a file was accidentally edited by more than one person. Information gaps, and the lack of systematic documentation, can soon lead to administrative tasks expanding for no other reason than to compensate for errors and confusion earlier in the task.

Establish connections between processes

In this first step, it often becomes clear that many of the challenges a company faces are linked. Find out which teams collaborate on which projects and what information they exchange. Focus on key questions:

- What does our team do?
- How do we do it?
- What do we need to do it?
- How can we improve our processes?

Once you identify where improvements can be made, you will have reached an important milestone in the development and optimization of your processes.

Simplifying processes with EHS software: Example risk assessment

Conducting risk assessments is a fundamental part of an EHS manager's remit. They entail two major challenges:

1. A risk assessment is composed of various interconnected steps. The seven steps of a risk assessment:
 - Defining areas of work and activities
 - Identifying risks
 - Assessing risks
 - Defining measures
 - Implementing measures
 - Reviewing efficacy
 - Updating and documenting the risk assessment
2. It involves various specialists who need to coordinate their efforts and exchange information.

In many countries, legislative regulations define and govern employers' responsibilities regarding how risks are assessed and documented, along with which safety measures must be put in place as a result of the findings. However, each company must ultimately decide for itself how it will conduct risk assessments, as exact procedures are not laid out in the law. All assessments should include a consultation with legal compliance specialists regarding current standards to ensure that companies are always up to date with ever-changing statutory requirements. Planning and conducting the risk assessment in a standardized manner is important for defining a company-specific process and improving transparency. If your company has operations across several sites, you will need to take this into account and ensure that the process is managed centrally.

EHS software can assist in this regard by providing standardized forms and document templates. Companies operating from a single location also benefit from an efficient exchange of information between different departments and hierarchical levels; and companies of any size are able to grant large numbers of users permission to access relevant tables, documents and forms. But who are these users, and how can they be made aware of the benefits?

Those responsible for identifying specific user requirements do so by conducting risk assessments, with health and safety officers advising them as needed. Other departments might also be involved in risk assessments depending on the subject matter. If, for example, a hazardous substance is used at a given facility, then the employees who work with the hazardous chemicals register must be involved.

linking data + connecting stakeholders with the help of EHS software

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An EHS software solution can ensure that everyone involved has fast access to the inventory, wherever they're based, whatever department they work in, and regardless of their specific role.

If you identify a technical defect, you will likely have to call on employees from your Maintenance or Facility Management department, in addition to your action team. You could document and store work instructions for the repair work in the software solution. This could also lead to additional measures such as training sessions or specialized instruction. You can arrange these events in the EHS software directly and link them to the risk assessment.

How to convince and effectively integrate employees

Once you have identified the areas of your company and the processes you hope to improve by introducing a new EHS solution, as well as tools currently in use, you'll have taken the first step.

The next task is to derive insights from this and consider which employees should be included in the decision-making process for the new EHS software. The solution you choose will likely entail significant changes to familiar processes and working methods.

A common misassumption is that the new software will be broadly accepted and used successfully. In some cases, however, the people who will use the EHS software in their daily work are not sufficiently included in the decision-making process – and therefore might not be convinced of its benefits from the outset.

Determine exactly who will use the software. It is often possible to divide the software's future users into specialists, professional users and occasional users. Their needs can vary – and a broader circle of users makes it all the more important that the solution be intuitive to use. If the prospective users are only likely to be specialists, however, you can focus on attention to detail and flexibility.

Tip **Communicate with different departments at an early stage.**

Ask yourself the following questions:

- Who do I need to convince of the need to make an investment?
- How will different stakeholders benefit from the new solution?
- Which colleagues could help me to get the ultimate decision-makers on board?

Use the insights you gained from examining the status quo at your company to show your colleagues which areas stand to benefit most from a new EHS solution. You might persuade them by referencing its ability to lighten their workload, simplify processes, improve communication and facilitate more reliable data and information management.

Keep employee co-determination rights in mind

EHS software solutions also process personal data, making co-determination during the selection process essential to safeguarding employee interests. Some countries require employers to obtain the approval of employee representatives before introducing a new software.

You should try to get employee representatives on board from the very beginning to ensure that the decision-making process is smooth and efficient. Communicate transparently to keep representatives up to date. This will also increase acceptance of your chosen solution and avoid time-consuming presentation and coordination phases.

Tip

Which departments should be included in the software selection process?

- Employee representation
- Environmental management
- Legal compliance
- Health and safety
- Hazardous chemicals
- Data protection
- Finance
- IT

selecting a suitable EHS software solution

Software as a Service subscription vs. on-premise

Most companies today opt for the Software as a Service (SaaS) model. However, in order to provide a complete overview, we will also look at the on-premise option.

The SaaS model: flexible and location-independent

SaaS applications are delivered online as a subscription-based solution and are therefore usually quick and easy to set up and use via a browser. Operating SaaS solutions avoids complex installation work in your company's computing center and does not require any additional hardware. The SaaS model usually involves an ongoing fee.

With an SaaS solution, your users will be able to access the service from wherever they are, with any compatible end device. This means there are no major initial investments or additional costs for administration or system specialists. The SaaS provider updates the system directly. If the EHS software features a modular design, you can scale the application to your specific needs and tailor it to your circumstances.

On-premise solution: one-off investment costs, but less agility

With on-premise solutions, the software is installed on your company's servers. Unlike SaaS solutions, on-premise solutions are usually associated with higher costs and less flexibility. The majority of the budget for the solution is spent on maintaining internal systems. You therefore need to bear in mind lifecycle costs for servicing and maintenance when making your decision.

Overview of selection criteria

Once you have asked key stakeholders and representatives about their requirements and selected a preferred licensing model, the next step is evaluate the different options.

For the majority of companies, a cloud-based, modular solution is the best way to take advantage of the features of modern EHS software.

This also ensures you retain flexibility and always stay up to date. Furthermore, you can adjust the software in response to changing requirements at short notice.



selecting a suitable EHS software solution

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Considering the following criteria will help you to make your decision:

Information security

Make sure that the EHS software provider is ISO/ IEC 27001-certified. This standard is a framework to help organizations establish, implement, operate, maintain and continually improve a documented information security management system. In addition, ISO/IEC 27017 specifically addresses the security of data transmission and features key implementation controls and guidelines for providers of SaaS solutions.

User-friendly interface

Depending on your identified user group, the future users of the software solution may have different needs and varying levels of experience in using software. If you expect there to be numerous occasional users of the software, you will need a solution with a particularly user-friendly interface. Instead of having to think carefully about everything they do, all users need to be able to use the system intuitively. It is therefore important that your chosen EHS solution clearly displays all key functions at first glance. The software's help section should provide useful explanations of all software functions to clear up any uncertainty. Ultimately, the new EHS software solution will only be successful if your employees prefer it to their previous tools and methods.

Multilingual interface

If your company operates internationally it would be advisable to select an EHS software solution that provides a multilingual user interface and documentation system to meet the needs of international teams and specialists. You will then be able to manage your international EHS activities digitally.

Mobile usage and online/offline functionality

Any high-quality, customer-oriented service offering includes mobile solutions. If your new EHS software allows for location-independent usage, you will be able to carry out audits and inspections immediately and record information on-site. This means you avoid the additional effort of dealing with workarounds and benefit from a reduced risk of data loss. As a result, app-based solutions should provide ready-made forms, image and offline functionalities and thus cover different use cases – from incident reports to inspection logs. In addition, the ability to add electronic signatures allows you to act quickly and issue urgent approvals as required.

Centrally controlled and transparent exchange of information

Your EHS software will need to bring together numerous EHS stakeholders. As a result, the software needs to be able to connect employees from different departments and locations as well as external specialists on a project-by-project basis. Ultimately, you'll want the new software to improve communication and information sharing across all levels. Looking at the current situation in your company, what functionalities will the software need to achieve this?

The new solution should allow all users to access the areas of work, datasets and documents they need. Granting different employees and stakeholders permissions that line up with their duties makes this possible. An integrated authorization concept allows you to ensure that only certain persons or groups of people are able to view and edit data relevant to them. It is also important that all users have their own unique username and password. This means that, when datasets are edited, you can pinpoint when certain changes were made. This supports quality management and data security.

selecting a suitable EHS software solution

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Connection to existing systems

An EHS software solution will yield greater benefits if it can be connected to other software solutions and databases. This means you can seamlessly integrate existing, general company data and relate it to your EHS benchmarks and standards. This includes information on locations, employees, inventory, qualifications and responsibilities, which can be carried over quickly and automatically and permanently synchronized. This degree of integration avoids redundancy, keeps information up to date throughout your organization, improves data quality and avoids unnecessary manual work. And, if the EHS solution can interface with external content providers, it can offer further benefits, such as regular updates to all legislation-related content.

Data analysis and business intelligence

Do you already use a business intelligence solution you would like to continue to use for EHS-related data evaluation? If so, it's important that your preferred EHS software can link with it. This will ensure that your analysis and reporting processes are fundamentally integrated. Sophisticated EHS solutions also tend to feature built-in analysis tools, statistical functions and dashboards.

Whichever method you choose, you'll benefit from having your EHS KPIs clearly visualized, providing a sound decision-making basis for company management.

Extended range of services and partner network

It is important to consider not only the range of functionalities that each EHS software solution offers, but the overall service portfolio of the software provider. Maintaining a high-quality partner network can generate further added value. For instance, some partners also offer independent consultancy services on country-specific legal issues. A high-quality service offering should usually include extensive consultancy services to help you integrate and use the software.

A team of consultants with various specializations and experience on a wide range of projects can provide real benefits. Workshops, training sessions and training systems can help make the process of introducing the EHS software a smooth one. In addition, some software providers offer ready-to-use content packages, such as sample risk assessments, training content and catalogs of questions for use in audits.



EHS software can bring EHS stakeholders together

selecting a suitable EHS software solution

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Checklist

Below is a comprehensive checklist of criteria that you should bear in mind when electing a suitable software solution.

CHECK	CRITERIA REGARDING THE EHS SOFTWARE:
<input type="radio"/>	Is the user interface intuitive enough to enable even occasional users of the software to use it effectively?
<input type="radio"/>	Are there different ways to use the software – such as desktop, mobile or offline versions?
<input type="radio"/>	Can the software be used and applied both locally and internationally? Is the interface available in a wide variety of languages?
<input type="radio"/>	Does it offer an integrated authorization concept for company employees and external specialists?
<input type="radio"/>	What interfaces does the EHS software feature? Is it compatible with the solutions you already use (e.g. SAP, BI systems, Tableau, etc.)?
<input type="radio"/>	Does the software feature integrated, standardized reporting?

CHECK	CRITERIA REGARDING THE EHS SOFTWARE PROVIDER:
<input type="radio"/>	Does the provider have ISO 9001 and ISO 27001 certification?
<input type="radio"/>	Does the software provider have testimonials or recommendations from your sector or related industries? Does it have experience working with companies of various sizes?
<input type="radio"/>	Does the provider have project experience? Does it have the resources to support implementation of your project?
<input type="radio"/>	Does the provider offer services such as training, consultancy and IT support?
<input type="radio"/>	Does the EHS software provider offer an extensive partner network, e.g. for content and compliance?

selecting a suitable EHS software solution

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How the right EHS software can save you time and money

You should research extensively and consider your options carefully when investing in an EHS software solution, just as you would for any other software. Along with the up-front and licensing costs, you should also be clear about the long-term implications and added value of each solution.

What benefits do you expect to gain?

An EHS software solution should allow employees to focus more on their core duties – so the more employees it can support, the better. This improves the overall efficiency in your company.

What processes could the new EHS software optimize?

The more processes you can map and manage in the new software, the more effectively you'll be able to structure your work-flows. Look at your assessments of each department to see if the software could help you to make necessary improvements.

How extensively could the new software be used in your company?

Examine all of the functionalities of the new EHS software. Which related departments could reap knock-on benefits from the introduction of a new solution? Could the costs be shared across several departments?

Will the new solution allow you to cut costs or increase savings?

Conduct a target/actual comparison. Check whether any work steps could be simplified or eliminated completely.

How much time could the solution save you? How much value would that add?

Put the costs into context. What would your costs be with and without the new EHS software? Working this out might be tricky and take some time, but it will give you a realistic overview of the status quo. You can then present your findings in an investment case.

Will support from the software provider enable you to save resources?

Take a look at the software provider's entire service portfolio. You might consider, for example, how much time and human resources you could save if the software provider helps to implement the solution, e.g. by overseeing data migration.

Does the provider offer employee training as standard?

We recommend holding introductory events and training sessions to offer employees a chance to learn about the new software. Software providers who offer training can often do so online, which enables employees across multiple locations to benefit. If employees have had the opportunity to familiarize themselves with the solution before it is fully introduced and are able to complete their tasks intuitively, this will save you valuable time and resources.

By taking the time to conduct detailed calculations and develop reasonable arguments, you can illustrate the added value of EHS software in a structured manner and outline future savings. This will make the next step – convincing management and other stakeholders of the need to invest in new software and getting them excited about the idea – much easier.

convincing management + stakeholders

Managers of companies often look for ways and means to streamline processes and improve efficiency. The right software will make it possible to perform tasks with ease and will also support monitoring, control and general management. The ultimate decision of whether to purchase and use a new software solution is often made by management directly, possibly with sign-offs from managers at different levels. With this in mind, it is important that you consider both employees and management-level staff. What benefits and positive effects will the software deliver for people across your company? You need to make it clear that there are plausible, quantifiable benefits for all users.

Safety, responsibility, liability and sustainable business are key priorities for managers and executives, who contrast them with the costs involved. It is therefore important that you clearly demonstrate the cost-effectiveness of the new EHS software and highlight the extent to which it can contribute to the company's overall success.

EHS software makes compliance activities easier

One of the most effective arguments you can use to persuade employee representatives of the need to purchase a new EHS software solution is compliance. This is because EHS software can maintain an overview of the various processes in place in your company and ensure that standards, regulations and customer requirements are all met. By using an EHS software solution, you can ensure that your processes conform to legal requirements. For management, this eliminates the risk of organizational and administrative faults and negligence.

Why building a business case is the right strategy

When you've found the right product for your company you will want to present it to management. When you do, set out your arguments and facts clearly and transparently. You should also offer a choice between your preferred solution and other EHS software providers so that management can compare the options directly.

A business case is an effective tool in a presentation. It allows you to explore aspects important to you in further detail. It also gives you the chance to reinforce your expertise in the eyes of managers and budget administrators and show that you have examined the issue in detail and analyzed the company's long-term objectives. In addition, you can provide a condensed overview of your solution's functionality and cost effectiveness. A business case allows you to compile the best arguments in favor of investment in one place, outlining how it could lead to improvements in your company. Make sure to include hard, transparent and quantifiable facts, supplemented with further benefits of a new software solution.

The following is a selection of points you should touch on:

Crunch the numbers for your business case

Use the documentation for your business case to outline your calculations, transparently showing where potential savings could be made and how much. Contrast this against the status quo in your company to demonstrate how expensive your current processes are in comparison and how much a new software solution could save you over time. Make sure to consider both human resources and time resources.

convincing management + stakeholders

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Certifications

Indicate which providers have certifications in relevant areas (e.g. ISO 9001, ISO 14001, ISO 45001, ISO 50001 and ISO/IEC 27001).

Interfaces and business intelligence

Present technical aspects, solutions and integrations, such as data analyses and the ability to link with BI solutions such as Tableau, Qlik and Power BI.

Highlight the added value

Address the pain points that the software could eliminate or reduce to a minimum. This includes accidents, illness and property damage that can occur during operations. The issue of liability in particular is important for management and must be addressed.

Integrate employees and get them excited about the new software

List the departments and people who have been integrated in the decision (e.g. employee representatives and the IT department) and outline the benefits of using an EHS software solution for these areas and individuals.



summary

Selecting the right EHS software requires an initial time investment and a thorough analysis of your company's current situation. Over the long term, however, you will benefit from the ability to interlink processes and identify hidden potential in your company.

Involve your colleagues and employee representatives in the search for the right software at an early stage. This will allow you to identify all relevant requirements and secure the approval of the workforce as well.

Putting together a business case will help you present the (financial) benefits in a clear and analytical manner, and is a vital tool for convincing your company's management of the need for a new EHS management software – so you can rest easy knowing you are ideally equipped for future endeavors and able to devote full attention to protecting everyone involved.



about amcs

AMCS is the market leader in Performance Sustainability, enabling resource-intensive industries to boost sustainability and profitability at the same time. With AMCS, companies achieve sustainable growth and transparent social responsibility while also safeguarding the environment and reducing operational risks.

The AMCS Performance Sustainability Suite is an operating system for business executives, managers, and frontline employees that provides end-to-end value, powers strategic decision making, and delivers customer-centric innovation.

Built on two decades of experience, AMCS software solutions are purpose-built and designed by people who understand your business. Providing practical technology solutions for municipalities, EHS, ESG, and the resources, waste, recycling, transportation, manufacturing, and utilities industries.



