

5 Advantages of Off-The-Shelf vs. Custom EHS Systems

Whitepaper

OVERVIEW

Many companies with tight IT budgets have been forced to build home-grown EHS solutions. These solutions have one advantage – they are highly customized to the specific needs of the organization. However, these home-grown solutions have serious flaws, including reporting inflexibility, no mobile capabilities, poor performance and scalability, high maintenance costs and security flaws. Modern cloud-based solutions are simplified and more affordable, rapidly replacing these rigid, custom home-grown systems.

Modern cloud-based and standardized EHS systems enable at least five (5) key advantages:

1. Simplified Reporting
2. Offline Mobile Data Capture
3. Scalability and Performance
4. Administration and Managing Employee Turnover
5. Data Security



THE 5 ADVANTAGES

1 | SIMPLIFIED REPORTING




A key issue with custom home-grown systems is getting data out of the system efficiently. Typically, home-grown systems require specialized, scarce IT resources to create complex reports, exported to spreadsheets for further manipulation. It is a very manual and time-consuming process and output reports typically contain static and outdated information.

Perhaps the most important enabler with standardized EHS systems is how easy it is to get data out of the system for reporting and proactive decision-making. New cloud-based solutions include dynamic dashboards enabling drill-down insights into deeper questions, providing instant awareness for all employees across the enterprise, including real-time management visibility. EHS staff have more self-configurable reporting options—including dashboards, ad hoc reporting and data warehouse tools-- without needing to burden IT staff with specialized report requests.

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2 | OFFLINE MOBILE DATA CAPTURE

 The EHS group relies on inputs from workers across the entire company, but many of these employees are reluctant to log on to a computer. User-input screens of home-grown systems are often too complex to navigate for the casual non-EHS user and require in-depth training. User adoption is typically limited to the EHS group. Many custom home-grown systems do not offer real automation of business processes, but rather create a central, static electronic repository of information—a step in the right direction, but not really achieving efficiency gains. For example, daily inspection/walk-through information collected by technicians is often captured on paper and re-entered into the system, creating risk of data errors, lost data, and inefficiencies. Consequently, management information is hard to roll-up into dynamic reports and the data becomes stale and outdated.

Today, you can empower employees with the convenience of mobility and watch your enterprise efficiency skyrocket. In just a few touches and swipes, valuable data is captured and sent to the central database within seconds, providing immediate awareness and visibility for need-to-know stakeholders. Envision hundreds of employees across every level of your company connected and aware, increasing overall productivity substantially. Moreover, virtually no training is required for implementation of these mobile solutions. Mobile apps are intuitive and user-friendly. Even while offline, you can conduct an inspection based on a common template, answer questions by speaking into the smartphone, take a photo or video and add it to the record, then upload the information wirelessly to the central server in seconds. Within seconds, management can visualize current issues and respond immediately, enabling proactive prevention of unwanted events. This is just not possible with a home-grown system.

3 | SCALABILITY AND PERFORMANCE

 A key challenge with custom home-grown systems is that only a few people in the EHS organization (and IT support staff) – the ones who built the system—are the only people who truly understand the design and configuration of the system. It becomes a burdensome full-time job for the senior EHS professional, diluting his/her attention from more pressing every day EHS concerns. Changes to the system – new features, new fields, new reports, etc. – add system complexity, impact performance and complicate output reports. Often, the development and implementation of a home-grown system is due to a

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lack of IT budget initially, and deploying internal resources to build a system may be the only way to justify it. However, over time these systems drain resources and the total cost of ownership (opportunity cost) grows due to time invested in ongoing maintenance-- future upgrades are custom and time-consuming, and typically require significant IT resources.

Standardized solutions are built for hundreds—or even thousands—of users. These systems are extendable to a wider range of business processes, beyond EHS, including Operations, Quality, and Risk Management. These modern cloud-based, all-in-one systems can be activated module by module, according to need. Change management is much more efficient. System performance is typically not degraded over time, since cloud-based solutions consist of scalable federated infrastructure, including load balancing, that is continually updated. Adding features is more streamlined, leveraging standard technology to accelerate product development incorporating standard software design best practices. Also, a modern EHS software vendor has worked for years with leading industry thought leaders at major global corporations, continuously fueling new ideas injected into the software design – leveraging significant institutional knowledge across industries. The business justification for these new, modern cloud-based solutions is clear: typically, at least a 2X return on investment with a payback period of less than one year.

4 | ADMINISTRATION AND MANAGING EMPLOYEE TURNOVER



Modern cloud-based systems are easy to administer by EHS staff and do not need an IT resource to maintain. Custom home-grown systems are typically more complex to maintain and require IT resources to support. Knowledge is limited to a handful of power-users. When key people retire or change roles, it creates a knowledge gap and risk to the entire EHS program. When someone leaves, institutional knowledge goes with them, creating a huge risk of noncompliance or missed reports, tasks, and activities. It can take a significant amount of time to identify past practices, document known information and tools, and train others to replace vacant and open positions. In the process, valuable knowledge, key activities, and compliance programs suffer during the rebuilding process.

Home-grown systems are often built to match existing manual EHS processes, driven by one or a handful of experienced EHS specialists. This concentrated knowledge-base creates difficulty in adjusting to changing processes and requirements.

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5 | DATA SECURITY



Data security is increasingly becoming a key concern at corporations. Security includes efficiently managing which employees have access to specific information in the organization. If administratively it is too difficult to manage employee access, then there is risk that information is exposed to the wrong people without a need to know. To mitigate this risk, companies typically limit system access only to a few core EHS staff; report outputs are limited to management only. With modern cloud-based systems, administration is much easier. User groups with defined roles and permissions are easy to create and maintain by non-IT staff. It is easy to limit what employees can see at the organizational hierarchy level, or specific types of issues, for example. The goal of organizational transparency can be achieved more efficiently with a modern system while maintaining data security, foundational for fostering a risk reduction culture.