

Are you ready to see what the cloud can do for you?

Some business leaders are concerned about losing control by moving sophisticated on-premises enterprise asset management (EAM) solutions to a public cloud platform. Perhaps the real question these organizations should consider is what benefits they'll miss out on if they fail to adopt a modern software as a service (SaaS) solution.

By moving to the cloud, organizations can focus on improving asset management practices, rather than on implementing and maintaining an IT infrastructure. For example, they might concentrate on finding ways to reduce inventory carrying costs, boost production line effectiveness, or minimize unplanned downtime. At the same time, organizations gain a scalable, reliable, secure, and accessible solution that enables them to take advantage of modern data analytics and maintain compliance with changing regulations—all for a predictable monthly or annual cost.

This checklist details nine ways a cloud EAM solution can help improve ROI for any organization.

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What can the cloud do for maintenance organizations?

Instead of making large up-front investments to build an infrastructure from the ground up, organizations are leveraging the SaaS model to implement, configure, and maintain scalable, reliable, and secure solutions—all for a subscription fee based on usage. Organizations can now focus on improving maintenance processes with more innovative tools, and can manage big data sets to get the visibility they need to drive better decisions.

The stats shown here demonstrate the magnitude of the shift to the cloud and of its benefits. You'll find more detailed descriptions of nine essential cloud advantages on the following pages.

- 94% of enterprises today run some of their software applications in the cloud¹
- 87% of companies experience business acceleration from their use of cloud services.²
- 17% is the forecast growth rate for the worldwide public cloud services market in 2020³



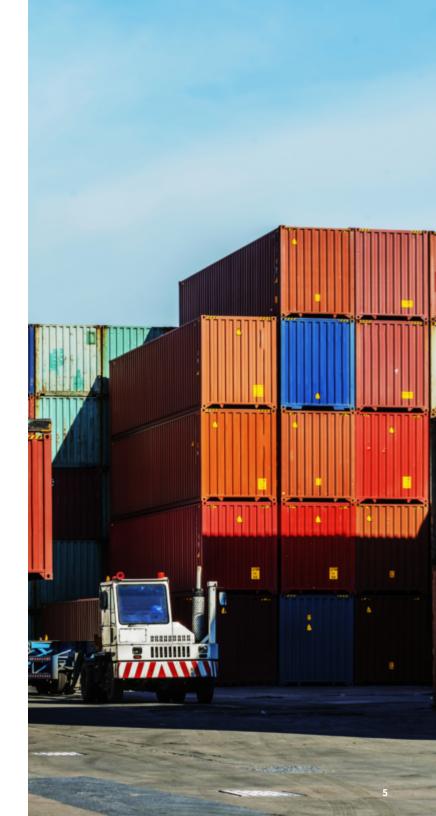
Benefit 1: Get back to what you do best

Any task a maintenance team performs that doesn't reduce costs or generate revenues is an overhead cost that should ideally be removed. On-premises EAM solutions force organizations to focus on tasks that are not related to asset management, such as creating, managing, and maintaining an IT infrastructure or installing, configuring and updating software.

With a cloud-based EAM solution, the service provider takes on all ongoing non-strategic tasks involved with managing software, servers, and other IT infrastructure. As a result, maintenance organizations can redirect their efforts to tasks that boost the bottom line and have a greater impact on the business while reducing risks.

For example, organizations have the opportunity to take their IT staff off routine software and hardware maintenance tasks and turn them into business analysts tasked with finding ways to:

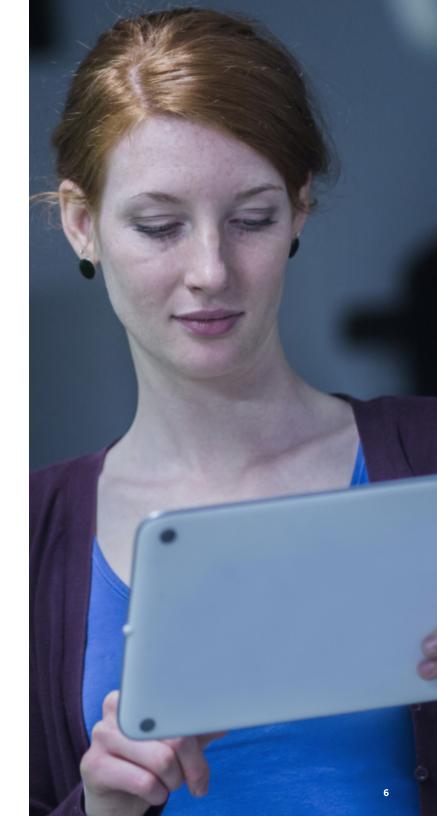
- Reduce inventory carrying costs
- Boost overall equipment effectiveness ratings for major production lines
- Improve asset monitoring to reduce unplanned downtime



Benefit 2: Minimize upfront investment with an opex model

On-premises applications typically demand substantial up-front capital investments in software licenses, hardware, and IT support. In contrast, SaaS uses a subscription-based model where organizations pay a monthly or annual fee based on consumption. This model offers more predictable ongoing operational expenses that are contractually guaranteed, allowing customers to optimize their budget and further invest to grow their business. Lower up-front costs also translate into faster time to value. And, by eliminating high startup costs that represent a significant barrier to entry, SaaS solutions enable small-to-mid sized businesses to afford the most sophisticated EAM solutions.

- 61% of IT leaders in a recent survey moved to SaaS to reduce costs⁴
- 82% of small businesses surveyed saw reduced costs as a result of using cloud technology⁵
- Up to 60% of organizations will use an external service provider's cloud managed service offering by 2022—double the percentage of organizations from 20186



Benefit 3: Improve agility

Experimenting with new applications can be difficult when data centers are entirely in-house. IT teams require considerable time to configure, test, build, and roll out new resources. With the cloud, organizations can add new EAM services on demand to:

- Expand into new regions
- Open new plants
- Add new application functionality
- Onboard new enterprise assets

Cloud vendors also automatically provide subscribers with monthly and quarterly updates that include releases of new capabilities, so customers can access these new features as soon as they're available. In contrast, when organizations with on-premises solutions wish to upgrade, they must wait for a major release, which typically comes out every 12-18 months, and then go through a time-consuming process of testing to put the update into production.



Benefit 4: Drive decisions with data

Organizations are increasingly looking to employ advanced analytics to improve their operations and increase profitability. Yet EAM solutions, which are transactional relational database management (RDBMS) systems, are unable to store all of the necessary data. Data sizes used in analytics are increasing into the petabyte range (one petabyte equals 1,024 terabytes). RDBMS systems are challenged to handle such huge data volumes; addressing the issue requires adding more CPUs or more memory to enable the database management system to scale up vertically.

In addition, a lot of data is in semi-structured or unstructured formats, including social media, audio, video, texts, and emails. RDBMS systems cannot categorize unstructured data. They can only manage structured data such as Internet of Things (IoT) sensor and financial data.

With cloud solutions, an organization can put all of its unstructured data into a data lake that's designed specifically to hold massive datasets and overlay this with other data from an EAM system. The organization can simply add the data lake as a service rather than having to implement a complex new infrastructure.

A data lake can deliver many tools for schema-on-read intelligence along with a fast, flexible data consumption framework to enable new ways of making key decisions. Leveraged access to your entire ecosystem will enable you to start capturing and delivering big data to power your analytics and machine-learning strategies.



Benefit 5: Leverage greater scalability

SaaS provides a shared infrastructure that can scale up when organizations need more capacity to meet demand or scale down during off-peak times. The infrastructure simply spins out new virtual servers, so organizations have more horsepower when they need it and spin down when they need less.

Organizations also have access to scalable storage that enables them to store vast amounts of data collected from equipment sensors and IoT applications as well as add storage as necessary.



Benefit 6: Enhance reliability, availability, and disaster recovery

Mission-critical EAM solutions must run 24/7/365. If the application is hosted on-premises and experiences a failure, the organization must rely on internal backup systems and an IT team that may or may not be in the office to get everything back online. In contrast, the highest performing SaaS platforms have staff available 24/7/365 to provide unparalleled protection and high uptime percentage—99.5% guaranteed server availability.

The right asset management software can help companies digitize and optimize their maintenance operations to reach new levels of efficiency.

Infor® has been running its EAM solution in a multi-tenant cloud environment since 2001 and has learned how to ensure business continuity. Copies of critical applications and data are backed up and mirrored around the world. Cloud services provide disaster recovery if the primary system goes down by automatically failing over to a secondary site should a disaster occur.

Additionally, because the Infor cloud platform offers zero-downtime for upgrades, customers don't have to worry about planned downtime.



Benefit 7: Keep your organization secure

Many organizations find that SaaS deployments provide better security than on-premises applications. Not only do EAM cloud providers have greater resources for providing more extensive security, they can also take on security-related tasks demanded by various regulations, eliminating the need for organizations to perform these activities themselves.

Employ more comprehensive security

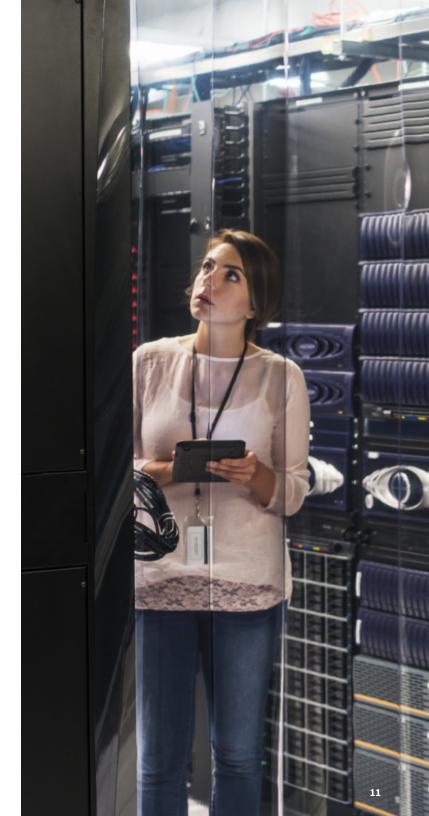
Cloud vendors benefit from economies of scale that enable them to provide enterprise security experts and capabilities beyond what most businesses can afford. They can ensure that data centers are physically well protected with security cameras, access cards, and more; have comprehensive identity management; utilize multi-layered data, network, and application security and access control policies; and monitor all of these resources on an ongoing basis.

Take on compliance tasks

Cloud EAM vendors also take on tasks that include security regulation compliance. For example, nearly all companies these days are required to perform PCI vulnerability scans on a regular basis when the EAM system stores payment card information. By allowing the cloud EAM service to take on this task for them, organizations can spend their time focusing on core business operations that reduce costs and drive revenues.

Ensure infrastructure meets regulatory standards

Some regulations also require organizations to keep secure infrastructure components up to date — for example by upgrading the presentation tier or hardening the SQL or Oracle database. The cloud service maintains the appropriate versions for all infrastructure components.



Benefit 8: Enjoy greater accessibility

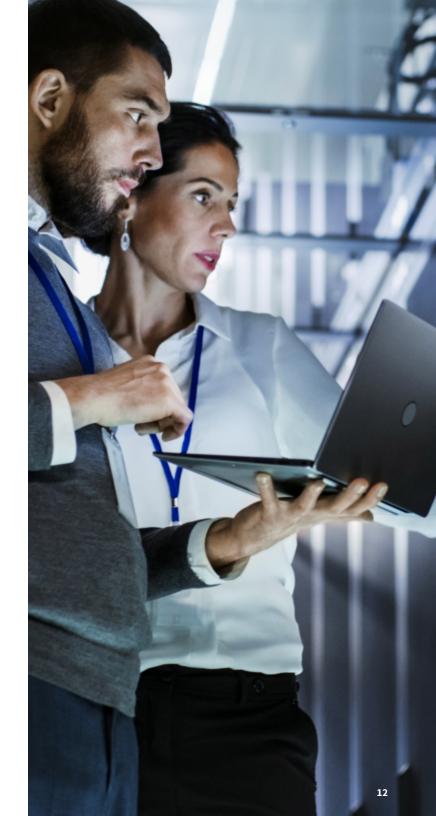
Managers and technicians need continuous access to EAM data as they go about their daily business. They also must easily exchange data between EAM and other enterprise applications. Cloud-based EAM provides both of these capabilities.

Mobility

Managers and field service workers responsible for installing, maintaining, and fixing assets must be able to assign, perform, and record activities and ad hoc work orders anytime, anywhere, from any device. Cloud-based EAM solutions enable workers to roam between connected and mobile environments without having to worry about losing application access and performance. Maintenance staff can retrieve relevant information wherever they're located. Managers can plan, schedule, and monitor maintenance activities from a web browser or smart device. Technicians and managers can be confident that processes are traceable by reviewing up-to-date manuals or logging on in real time.

Secure integration

EAM solutions often need to integrate with other enterprise applications. For example, an organization might want to integrate its EAM system with its human resources solution so that when managers are scheduling resources, they can see the availability of maintenance staff, as well as their qualifications and certifications, to perform a particular task. Rather than having to set up and maintain all these integrations in-house, the cloud enables organizations to perform that integration securely through a web services tier.



Benefit 9: Adapt and comply with regulatory demands and data sovereignty requirements

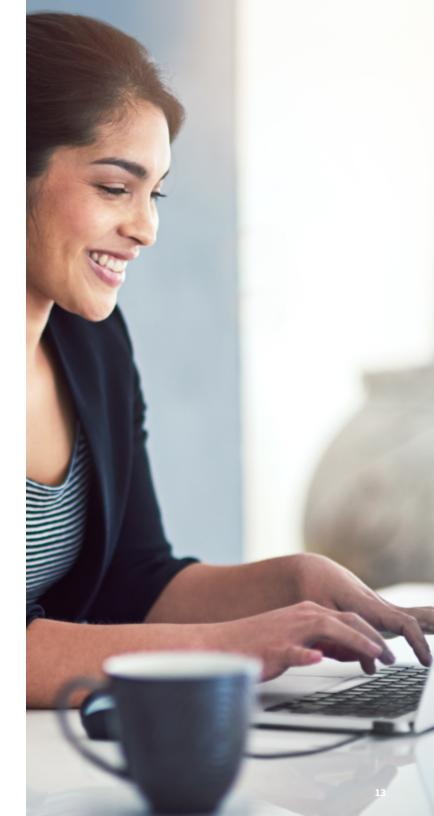
Cloud-based EAM solutions can put organizations in a better position to meet regulatory requirements in a timely manner.

Instantly adapt to new regulatory demands

All regulations that impact EAM—including FDA Title 21 CFR Part 11 for life sciences, the Joint Commission for healthcare, State of Good Repair for transportation, and others—are constantly evolving. Cloud-based EAM solutions are updated on a monthly or quarterly basis to accommodate the necessary changes. This means cloud customers can access compliant systems virtually as soon as changes occur. In contrast, users of on-premises EAM solutions must wait considerable periods of time for solutions that incorporate the latest regulatory changes. Updates are typically rolled out to on-premises customers every 12-18 months. Customers must then take additional time to test and implement the updated solutions.

Comply with data sovereignty requirements

Some regulations have data sovereignty requirements that subject data to the laws and governance structures of the nation where it is collected. More than 80 countries—including Russia, China, Germany, France, Indonesia, and Vietnam—have implemented data sovereignty regulations that require their citizens' data to be stored on physical servers within the country's borders. Infor partners with Amazon® Web Services (AWS®), which offers local, scalable data centers to meet data sovereignty demands.



Cloud-based asset management in action

Fleet operator optimizes asset performance through analytics

A fleet operator wanted to keep its vehicles in peak condition so it could continuously deliver products to its distribution channels. To do this, the company monitored its assets and captured telematics statistics on vehicle performance. These statistics provided billions of data points.

Using a cloud-based data lake, the company combined data from sensors, from their EAM system, and from other public information sources (such as weather and temperature data) to perform sophisticated analysis.

In one case, maintenance teams were blaming operators when they had to replace vehicle starters more frequently than necessary. The maintenance team claimed that the operators should have been keeping the engines running in the cold, rather than shutting them off. But they needed proof to convince operators to follow this procedure.

Using analytics, the maintenance team was able to track what happened when they kept an engine running over time and compare that to shutting off the engine in the cold.

Analysis revealed that there was indeed less propensity for starter failure when the engine was left running in frigid conditions. Having data helped the company understand how to run its assets more efficiently and get more life out of them.

Getting in tune with assets to make them run better

A company operating a fleet of vehicles in the Caribbean found that maintaining its equipment was difficult and expensive due to its remote location. The company initially relied on metrics provided by the original equipment manufacturer (OEM) as to when an asset would fail to determine when to provide maintenance. But the company wanted earlier notification of pending problems.

The company began by monitoring one of its vehicles to get condition-based data; then overlaid that information with historical data from the EAM system, with the OEM's recommendations, and with climate condition data. All this data gave the company a better perspective into what happens to an asset when temperatures fall, or humidity levels rise. This allowed the company to develop optimal maintenance schedules for their unique conditions.

Move your EAM solution to the cloud today

The cloud frees internal IT teams to perform more strategic functions that will impact the business and improve the bottom line. Organizations can also take advantage of the latest data analytics capabilities and remain up to date on compliance with ever-changing regulations, while benefitting from greater scalability, security, and availability. These benefits can be had for one contractually guaranteed monthly or annual fee based on usage.

Discover what a cloud-based EAM system can do for you.

LEARN MORE



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About Infor

Infor builds business software for specific industries in the cloud. With 17,000 employees and over 68,000 customers in more than 170 countries, infor software is designed for progress. To learn more, please visit www.infor.com.

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