# 10 Asset Management Software Trends that matter to Asset Intensive Industries

The convergence of Bring your Own Devices, a technology-savvy workforce and the influx of multiple data flows have made asset-intensive industries lean heavily on technology. As a result, asset-intensive industries are tackling asset management differently from before. Comparesoft studied ten key trends that are shaping Enterprise Asset Management in Asset Intensive Industries.

#1. Solution availability on every device (Mobile, Tablet and Desktops) to drive enterprise-wide connectivity

From asset design to asset deployment, assets have multiple touchpoints with various types of workforce—Field Technicians, Asset Owners, Asset Surveyors, and Production and Maintenance teams. The functionalities required by each of these teams are different yet connected. For example, asset
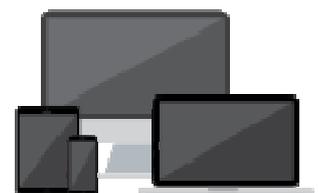
maintenance history is a vital piece of information for maintenance teams, whereas it is secondary information for production teams. Enterprise Asset Management Software providers are focused on addressing these requirements on different devices. In particular, the ability to update (relevant asset) fields and easy accessibility of software solutions on different devices have taken a major priority. As a result, we see a focus on responsive design and updates to the apps of major software providers.

#2. Match On-Demand Supply & Demand with On-Demand Planning & Scheduling

The loop from estimates to orders to delivery is getting shorter in almost every industry, influencing production possibility curves and putting consistent pressure on production assets. Tier one asset management software vendors are fully aware of this trend and are adopting machine learning technologies to better predict supply and demand dynamics. There is a growing agreement that machine learning can significantly influence inventory optimisation, supply chain network design, shipment planning, and scheduling maintenance. Most experts suggest that predictive analysis can play a vital part in predicting equipment failures which will significantly improve scheduling efficiencies.

#3. Information-ready, customised user experiences

Traditionally, most asset management solutions have been very strong at information architecture. i.e. on the database and informational hierarchy. With software solutions now requiring multi-device compatibility, providing a seamless user experience is a top priority for most software vendors. In particular, navigation and layout on all devices are a key focus. As a result, a number of tier one software vendors are now providing more options to customise layout and data views at user- and departmental levels. The fundamental premise that vendors are working on is designing applications that do not require users to look for information—Enterprise Asset Management Software vendors are now offering information-ready customised user

experiences.

#4.   Contemporary Asset Tracking with GIS and Geo-Mapping

This trend is very relevant for organisations with a large number of assets (typically energy and utilities companies) spread across a vast geographical area. GIS (Geospatial Information Systems) gives asset managers the capability to manage the lifecycle of spatial and non-spatial assets. For example, for utilities companies, from a maintenance perspective, information related to assets located underground is of paramount importance. Such information can be efficiently tracked with GIS systems. Accordingly, GIS integrations with Asset Management Solutions are becoming popular.
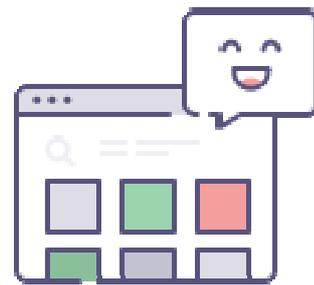
#5.   Business Intelligence via Asset Performance Analysis

Asset-intensive industries are taking a critical view of siloed systems and siloed culture. Enterprise-wide connectivity and collaboration is quite often driven by board room decision makers. In line with the connected culture, enterprise software vendors are providing options to blend asset performance reports with business intelligence reports, enabling decision makers not only to report on commercial activity but also to draw trends and synergies between the commercial and technical aspects of the asset lifecycle. A sub-trend here is that software vendors are really focused on providing information rather than access to data.

# #6.	Driving asset performance with Employee Training

Whilst online and on-demand technical education have been present for a while, proactive participation by product teams (of software vendors) is a mega trend. Software vendors are connecting with each user, understanding requirements at a granular level and driving product development from the ground up. Traditionally, employee- or user training was more adhoc and done after installing the system—now it's an ongoing and on-demand attribute.

# #7.	Address On-Demand Asset Requirements with Change Management

The rise of automation and the current rate of change requires asset-intensive industries to continuously evolve their operating model. For example, drones are making their way to inspect challenging facilities and assets. Companies like Shell have invested substantially in unmanned asset inspection equipment. Without the intention to depreciate human capital, companies are adopting flexible and automated workflows. Asset-intensive industries are fully aware of the effect of automation on their workforce, so they are investing heavily in change management.

#8.   Machine-to-Machine Connectivity with Internet of Things

Machine-to-machine connectivity is no longer a future, it is very much present across key asset-intensive industries. Companies have started to adopt it at a wider scale. For example, John Deere has deployed FarmSight, an IoT system that connects equipment, owners, operators, dealers and agricultural consultants using their existing wireless technology.
Another great example is Daimler Trucks. As a result of sensors and software that detect abnormalities in their trucks, Daimler's call centres get automatic alerts for the maintenance requirements of their trucks.

To address data flows from IoT, Enterprise Asset Management Software vendors are deploying solutions that can process a vast amount of data and produce actionable information.

#9.   Make Predictive Maintenance IoT and Big-Data ready

The World Economic Forum suggests that one of the opportunities and benefits from the Industrial Internet of Things has vastly improved operational efficiency through predictive maintenance and remote management.

For example, Sharper Shape, a Finnish company, have been using drones to map utility networks. They use machine learning to identify trees that are at risk of falling onto power lines. Whilst most operations with IoT and machine learning are more cost effective and efficient than humans, they are typically very data-heavy. The data-heavy aspect of IoT is a cultural as well as technical challenge for most asset-intensive

companies. Accordingly, Software vendors are focused on providing solutions that can process vast amounts of data and make them information friendly.

#10. From Protocols to Proactive - Governance, Safety & Risk Management

One of the major challenges for businesses is recording data related to compliance and risk. A lot of governance, safety and risk management is heavily reliant on frequently training the workforce. Rules-based data entry somewhat solves the problem but requires consistent system configuration, an area that tends to be dealt with reactively. Tier one asset management software vendors are now exploring ways to manage risk, compliance and governance proactively, from a systems perspective.

If you are a company looking to deploy an asset management solution, then consider the relevancy of the above trends for your organisation.

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