

The State of Enterprise Asset Management for SAP Customers



asUG

Executive Summary

Organizations rely on enterprise asset management (EAM) teams to maintain complex physical assets worth billions of dollars, located across distant geographies, and that are essential to their daily operations. EAM teams sit between multiple functions within these organizations, adding to the challenges of breaking down data silos and technology gaps to establish a complete picture of what's occurring within these assets in real time. In this year's research, we saw indications of the extreme pressures that are affecting these EAM teams, brought on by the challenges of running teams during a pandemic, as well as by major disruptions within key industries that rely on EAM approaches—for example, oil and gas.

Striving for Preventative and Predictive Tools

The key to surviving in challenging times is moving toward a predictive world. SAP EAM customers aspire to become more proactive with their approach to maintenance projects. Fewer than half of their maintenance projects, however, are classified as either preventative or predictive. These customers want to create environments focused on knowing where issues will occur in advance so they can identify them before they bring these critical operations to a standstill.

Connect, Integrate, and Transform

The good news is that technologies exist today with the potential to transform EAM processes. In this year's research, the Internet of Things (IoT) and mobility rose to the surface as technologies on the minds of SAP EAM customers who plan to use them for real-time asset visibility and monitoring. This year's participants in our study acknowledge the transformative benefits of these technologies to EAM processes and highlighted the role these technologies will have on their work in the future.

Figure 1: Where EAM Customers Need the Most Help in 2020



28%

Exploring new products



22%

Optimizing current products



19%

Training employees to use SAP products

Source: ASUG research, June 2020

Trends



Transitioning to predictive maintenance



Innovating via the Internet of Things (IoT) and integration



Expanding efficiencies and reach through mobility

Pressures



The rapid pace of technology changes



Resource, risk, and cost management



The change management required for SAP S/4HANA migrations

Key Technology Topics

Transitioning to Predictive Maintenance

SAP EAM customers across industries are motivated to shift their maintenance approach from reactive—or even preventative—to predictive. One respondent noted that “predictive maintenance is getting a lot of attention” within their job in the utilities sector. Organizations recognize they can maximize returns on their assets and reduce the risk of unexpected downtime if they can proactively identify, quantify, and predict potential risks. Despite these motivations, participants shared that, on average, 40% of their maintenance projects still are reactive, while 41% are preventative, and 19% are predictive.

“We would like to move away from reactive maintenance to more predictive maintenance so we can increase our reliability with tighter budgets.”

— SAP EAM customer

A lot of work that goes into developing maintenance strategies and technology can reinforce those efforts, especially for those that are preventative and predictive. SAP EAM customers will benefit from relying on technologies that can automatically identify risks and the most meaningful data to assess risk. But even with well-defined strategies and protocols in place, EAM teams must remain nimble in their processes to mitigate unexpected issues.

Innovating via IoT and Integration

IoT technologies that are integrated with EAM systems continue to transform how SAP customers manage their enterprise assets. Although organizations still rely on manual processes, growth in IoT adoption is on the rise. More than 60% of SAP EAM customers expect that IoT will have a moderate to significant impact on their jobs in the next two years. For example, one respondent explained that they “are exploring the use of IoT to automate cradle-to-grave processes.”

IoT technologies can enhance EAM efforts by monitoring and gathering real-time information across multiple connected devices. EAM teams use this information to predict equipment failure, reduce operating costs through smart monitoring, optimize existing processes, and make informed decisions.

Many organizations cannot benefit from IoT today because their technology systems, applications, and databases are siloed. Establishing a fully integrated IoT infrastructure can be challenging for organizations that use various technologies spread across different locations, departments, and databases. Working through this complex infrastructure to achieve a single, holistic view can be difficult. Much as they aspire to move to predictive maintenance, participants in our study also aim to build an integrated IoT infrastructure.



40%

of maintenance projects, on average, are reactive

Expanding Efficiencies and Reach Through Mobility

Mobility has revolutionized EAM practices, giving organizations a competitive edge through expanded reach and operational efficiencies. Mobile EAM solutions allow organizations to track assets in the field, expand access to asset information to employees wherever they might be, and efficiently handle a multitude of activities via a single platform.

“The key for EAM within each company is being able to rationalize one or two technologies from among all of the popular options to derive true ‘money-in-the-bank’ savings.”

— SAP EAM customer

Despite acknowledging the positive impacts of mobility, many respondents are struggling with adoption. Fewer than half of participants use mobile technology in the field (43%) and even fewer (32%) use it across their entire organization. These numbers have increased since last year’s report, where only 35% of participants said they use mobile devices to complete their work. Considering these low adoption rates, it is not surprising that mobile asset management is among the most important technology projects participants plan to work on in the future.

Safety, logistical concerns, and ease of use are among the factors contributing to the limited use of mobile technologies in the field. Challenges associated with integrating mobile solutions with existing asset management and other business systems also hinder adoption. EAM professionals will need to be strategic in facing these challenges as they aim to take advantage of the benefits mobility can bring to their organization.



40%

of users, on average, use a mobile device to complete one or more tasks

Major Pressures

The Rapid Pace of Technology Change

Participants still worry about keeping up with rapid changes in business technology and tools, though the pressure to keep up with rapidly changing industries is driving the need to adopt new technologies. In the next year, participants said they must realize the benefits of an increasingly digital environment. At the same time, these SAP customers were forced to digitally transform almost instantly because of the pandemic, which has had an implication both on organizations' technology needs and their workforces. One participant explained, "We have gone from 6,000 employees to 25,000 employees using the internet to work from home."

Organizations are looking for solutions to help them continue the momentum of their digital transformations. More than a quarter of participants (28%) indicated they need the most help exploring new technology products to buy in the future. SAP customers in the EAM space not only need help implementing these products, but they also need support as they make changes to processes, many of which have been in place for many years.

Resource, Risk, and Cost Management

SAP customers in EAM struggle to balance operational needs with the high cost of adopting new technologies. As IT budgets tighten in 2021, justifying the expenses of adopting new technologies will be increasingly difficult for EAM teams. One participant shared that they are facing "fiscal constraints" while tasked with "managing risks." To gain support from internal stakeholders, EAM teams must present a compelling case that quantifies how each new technology solution aligns to desired business outcomes. What this means for some customers is that they will be unable to make the changes today that are needed to optimize their systems.

"One of our biggest pain points is how to convince top levels in the organization to accept the change in the digital era and revamp our asset maintenance processes and systems."

— SAP EAM customer



28%



of participants indicated they need the most help exploring new technology products to buy in the future

The Change Management Required for SAP S/4HANA Migrations

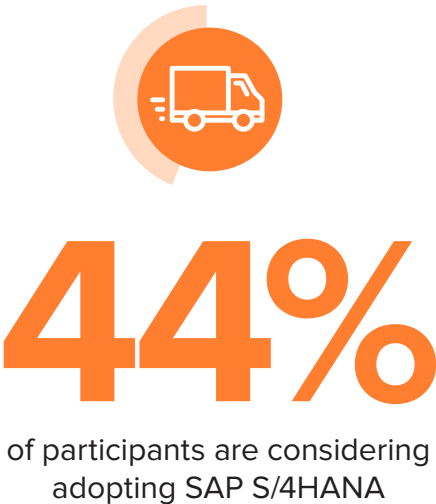
SAP EAM customers identified their organization's SAP S/4HANA conversion and implementation among their biggest concerns in the next two years. While fewer than half of participants (43%) currently use SAP S/4HANA, 44% are considering using it in the future.

EAM teams face internal challenges as they start to build their business cases for SAP S/4HANA migrations. Despite these challenges, more than half of participants (79%) expect to receive improved performance, faster access to analytics (66%), and optimization of existing processes (66%) by adopting the next-generation SAP ERP.

Figure 2: Responsibility for Purchasing and Implementing EAM Technology

	 Primary responsibility for purchases	 Primary responsibility for implementations
Buying committee (C-levels, IT staff, and LoB staff)	44%	19%
LoB department	41%	41%
IT team	28%	54%
C-suite/executives	26%	13%
Partners	13%	17%

Source: ASUG research, June 2020



The Secrets Behind Satisfaction

Critical Factors for Satisfaction

We asked about the factors that are important to SAP customers in the EAM function and evaluated how strongly they correlate to satisfaction with SAP information that is available. Participants consider master data management/governance/data integrity as the most critical factor in EAM today.

This critical factor underscores the importance of data to finding hidden value within EAM operations. To achieve the desired shift from reactive maintenance to predictive and preventative maintenance, EAM professionals require quality data and the right tools to filter out the patterns from the noise. That is likely why data management and governance rose to the surface in importance. EAM teams need to manage the volumes of data gathered through an integrated IoT infrastructure. For businesses that are rapidly evolving and experiencing disruption, the ability to use data to drive better decision-making and cost savings is essential to their survival.

Hidden Motivators Driving Satisfaction

Participants did not initially indicate these factors as critical, but our results indicate they move the needle on satisfaction. They identified the following as hidden motivators: field operations/use of mobile technology in the field, predictive analytics/maintenance, and data transparency/making data available to more users or stakeholders.

These factors reflect most of the technology trends that surfaced in this year's research. They also have the potential to help EAM teams address some of the challenges their organizations face, including preparing for rapid technology change and managing cost and risk. Data plays a major role in both the critical factors and hidden motivators for SAP EAM customers this year, as accurate, well-governed, and accessible data is necessary to deliver the process visibility needed to digitally transform this space.

Bare-Minimum Expectations

SAP customers in the EAM space also have minimum expectations for their investments. These are change management/getting users comfortable with new technology, using planning/scheduling tools to improve efficiency or reduce downtime, and effective communication between IT and Line-of-Business (LoB) users. These expectations will help EAM teams move toward their goals for proactive asset management in the future.

Critical Factor



Importance



Satisfaction

Master data management/
governance/data integrity

Hidden Motivators



Importance



Satisfaction

Field operations/use of mobile
technology in the field

Predictive analytics/maintenance

Data transparency/making data
available to more users or
stakeholders

Products of Interest

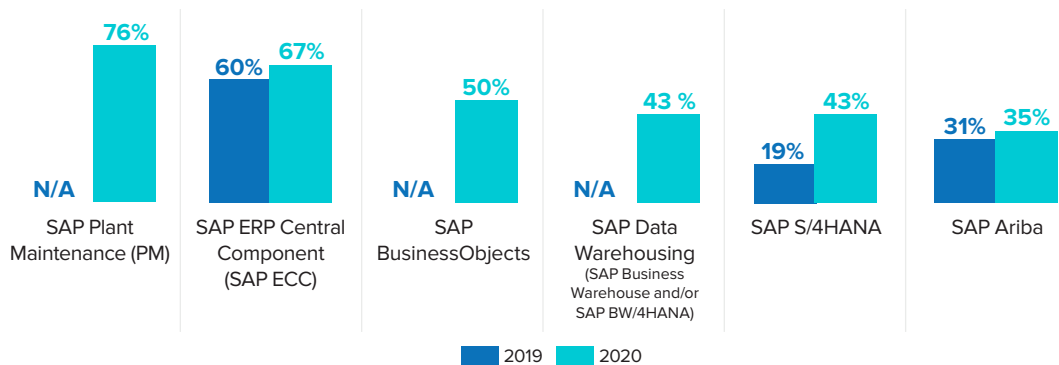
The idea that upgraded technologies can expand your capabilities is not new to EAM professionals, but SAP EAM customers are moving at a slower pace toward modernizing.

Reaching for Newer Technologies

While most participants (67%) still use SAP ECC, there is interest (44%) in adopting SAP S/4HANA. The new ERP system expands capabilities that SAP Plant Maintenance users (76%) are accustomed to with the added benefit of predictive maintenance capabilities. With these benefits in mind, it is not surprising that 39% of participants consider an SAP S/4HANA migration to be their most important technology project within the next two years. Year over year, we saw a very slight uptick of a 4% increase in use of SAP Ariba.

To bring in the benefits of new technologies, IT and LoB teams will need to work collaboratively under tightening constraints. IT departments and LoB teams each play a role when it comes to making decisions about and implementing EAM technologies. Identifying the right set of tools to add to the EAM technology stack will take a coordinated effort, especially as demands on these systems increase while budgets decrease.

Figure 3: Key Products Used by SAP EAM Customers



Source: ASUG research, May 2019 and June 2020



39%

of participants consider implementing SAP S/4HANA their most important technology project within the next two years

Getting the Most from SAP EAM Solutions

Based on our research, SAP EAM customers want to use technology and data to transition their maintenance process from reactive to predictive. They aim to innovate more using IoT and integration, and they want to add efficiencies and expand their reach through mobile technologies. At the same time, they are challenged with the fast pace of technology changes while managing cost and risk. They specifically called out concerns over the vast resources and funds needed to make the move to SAP S/4HANA. Though they know it's a necessary move, they need help with this "monumental task." We see that SAP EAM customers, more than other functions, believe that the purchase and implementation of EAM-related technologies is a collaborative effort across LoB and IT teams.

Figure 4: Top 3 Industries Informing This Trend Report



Source: ASUG research, June 2020

The trends that surfaced in this research will inform future ASUG programming for SAP customers in the EAM space. As part of the benefits of ASUG membership, we offer regular webcasts and digital experiences to help share real-life customer case studies, interactive discussions, SAP expert presentations, and more. ASUG members, visit asug.com and update your profile to discover what we have in store for SAP professionals working in EAM. Please also visit asug.com/events.



About ASUG Research

ASUG research captures a unique view of what SAP customers are doing, thinking, and planning for the future. We apply traditional quantitative and qualitative methodologies and research best practices to deliver insights on technology topics that are relevant to those who work in the SAP world. The information in this report came from a quantitative survey, conducted in June 2020, of SAP customers in the enterprise asset management function.