

# The Ultimo Maintenance Trend Report

**Ultimo**  
an IFS company



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# Foreword



In today's industrial landscape, asset managers are being asked to do more than ever before. They must navigate a global labor shortage, comply with increasingly complex health, safety, and environmental regulations, and keep pace with accelerating technological change. Amid this complexity, one truth stands out: the predictable, manageable performance of physical assets can be a competitive advantage to a business.

Downtime isn't just inconvenient, it's expensive. That's why enterprise asset management (EAM) has become a boardroom topic. But as the EAM marketplace grows, so does the pressure to choose the right solution. Leaders must ask: Which technologies are truly future proof? How can I unlock the full potential of AI? How can AI help me manage my assets most effectively? How can my people benefit from AI? How can we make smart investments today that deliver tangible value tomorrow? And: who can help us on this journey?

This EAM Trend Report is designed to be a guide based on inputs from industry professionals. Too often, businesses invest in feature-rich platforms only to find that complexity, or lack of adoption, slows them down. Sophisticated functionality means little if it requires months of configuration, heavy professional services, or fails to engage the people who use it daily. For these reasons, some EAM users are paying for functionality they don't use, leaving value on the table.

That's why it's no longer just about features, it's about fit. The difference between a bloated system and one

that's intuitive, flexible, easy-to-use, and built for rapid deployment can define your operational resilience. Factors like embedded training, user-friendly design, and speed to value are not just nice-to-haves, they're competitive advantages for your business.

This report reflects our deep commitment to helping you make smarter, faster decisions. As your asset ally, we're here to simplify complexity and enable your organization to thrive in a world where maintenance is strategic, measurable, and mission critical.

Yours sincerely,

**Lyndsey Rojas**

Chief Marketing Officer, Ultimo

# Introduction

The Ultimo Maintenance Trend Report highlights the latest trends shaping the asset management industry. Packed with current insights, it empowers maintenance and asset management professionals to turn today's challenges into tomorrow's drivers of innovation and digital transformation.

Based on data from over 200 maintenance professionals in Spring 2025 across industries - including manufacturing, healthcare, energy, utilities, telecommunications, transportation and logistics - this report captures insights from organizations of all sizes, from small, to medium, and global enterprises. It stands as one of the most comprehensive surveys of asset management professionals worldwide.

Recent data reveals a clear shift: the asset management market is maturing, and fast. Compared to our 2023 survey, today's organizations are demonstrating greater control, smarter technology adoption, and sharper strategic intent.

More organizations now report taking a proactive approach to maintenance, with fewer relying on outdated or non-integrated EAM systems. The rise of dedicated EAM point solutions suggests a preference for specialization and agility over bundled ERP suites.

Digital transformation is no longer aspirational, it's operational. The number of respondents citing AI and digital tools as game-changers for maintenance has doubled, with predictive modeling tripling. Capabilities like mobile workforce management, health & safety technology, and predictive analytics are leading the evolution.

On the flip side, supply chain issues have nearly doubled over two years, underscoring the value of agility. EAM systems provide much of this needed agility: nearly half of respondents believe their asset management strategy strengthens their resilience to disruptive events.

This digital shift isn't replacing people, it's empowering them. Organizations report a threefold increase in staff training and improved team communication, directly supporting sustainability and energy efficiency goals.

One thing is clear. Asset management is no longer just about keeping things running, it's about driving smarter, more sustainable, and resilient operations. The emerging technologies and tools aren't just setting the stage. They are rewriting the script, making intelligent, predictive systems that drive efficiency and transformative value the stars of the show.



# Acknowledgements

We extend our sincere thanks to our customers and their maintenance teams, as well as the industry experts and analysts that contributed insights and perspectives to this EAM Trend Report. Their guidance and real-world input have been invaluable in shaping our understanding of the evolving EAM landscape.

We also appreciate the collaboration of our partners and internal teams who supported the research and analysis efforts. Their commitment reinforces our mission to deliver cloud-based, best-of-breed EAM solutions that empower asset owners with confidence, clarity, and control. This report reflects a collective effort to navigate and lead in a rapidly transforming market environment.

We hope you enjoy it

# EAM maturity: Where do asset managers see their own organization

The results of the survey show that 87% of respondents are currently using an EAM solution. Four in five (81%) have implemented a best-of-breed EAM or CMMS (computerized maintenance management system) a 20% increase compared to our 2023 report.

The number using an EAM solution as part of an integrated software suite or enterprise resource planning (ERP) solution has fallen sharply from 23% to just 6%. The number of responding asset managers indicating that they are not currently using any EAM solutions has shrunk by two thirds (37%) since 2023, to just 12%.

While ERP systems offer a comprehensive suite of capabilities, they can sometimes lack the versatility and wide-ranging asset management features today's industrial firms need to optimize their maintenance and reliability operations effectively. Furthermore, the intricate nature of ERP can slow down complex cross-disciplinary processes and information flows.

This presents challenges when it comes to resource planning and allocation, performance reporting, and confident decision making. To bridge the divide between ERP and EAM, leading EAM vendors have gone down the route of certification. Ultimo is an SAP S4/HANA certified partner, offering the best of both worlds to customers looking to further streamline their operations.

Whether as a best-of-breed solution or as part of an integrated software suite, EAM is more important than ever. In fact, this report goes on to reveal definite trends in the adoption of EAM, innovative

technologies, analytics, and proactive maintenance strategies.

When it comes to their own organization's EAM maturity, the majority of all asset managers see their organization in Stages 1, 2 and 3: When respondents were asked to identify the approach that best represents their organization's maintenance strategy, 66% indicated they follow a controlled approach (Stage 2: "In control"), which involves a combination of corrective and preventive measures along with the use of professional software.

This was followed by a Stage 3 "Proactive" approach (KPI-driven, collaboration is more widespread and improvement continuous thanks to constant monitoring and analysis), selected by 20%, then Stage 1 "Reactive" approach (corrective, no professional software utilized), chosen by 8% of organizations. Compared to our 2023 survey, the number in Stages 1 "Reactive" and Stage 3 "Proactive" has almost halved (from 15% and 12%

respectively). This shows a clear trend that the asset maintenance market is becoming more sophisticated.

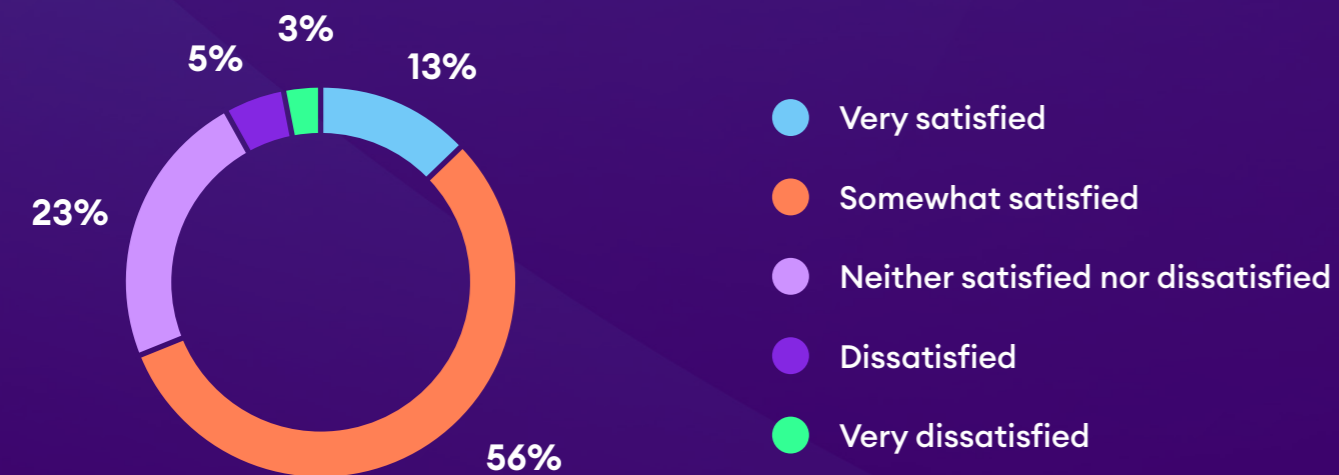
A smaller proportion, 3%, indicated that their organization follows a Stage 5 "Ultimate"

approach, which involves long-term asset planning. In this approach, the software is utilized for all the previously mentioned aspects, and it offers a holistic view, extending to areas like financial optimization and sustainability. Only 2% of asset managers say their organizations implemented a Stage 4 "Smart" approach. Here, maintenance is condition-based, the EAM software is often integration with Enterprise Resource Planning (ERP) systems, and HSE compliance is proactively addressed. In summary, this means that only a combined percentage of over 5% of all asset managers think their organization has already reached the highest stages, Stages 4 or 5, of the "EAM Maturity Model".

**Question:** Which of the following are you primarily using for asset and maintenance management?



**Question:** How satisfied are you with your current maintenance approach?



**Question:** What best represents your organization's approach to maintenance?

**Reactive** (corrective, no professional software utilized)



**In control** (corrective and preventive, professional software utilized)



**Proactive** (condition-based, software utilized for spare parts management and HSE compliance)



**Smart** (risk-based and predictive, ERP and BI integrated)



**Ultimate** (long-term asset planning, software utilized for all of the above as well as other areas such as financial optimization and sustainability)



**Other**



**None of the above**



# Navigating Complexity: The EAM Maturity Model as a Strategic Compass



Structure ► Safety ► More HOTT ► Less unplanned costs ► More uptime ► Reliability ► Efficiency ► Alignment & integration

At the intersection of intensifying challenges and accelerating change, the complexity of managing distributed resources, evolving regulations, and dynamic teams has reached unprecedented levels.

This complexity is compounded internally. Many asset-intensive businesses struggle to maintain a clear and current understanding of their asset inventory, operational health, and maintenance intelligence. Without a reliable, centralized view, decisions become reactive rather than strategic, and businesses fall into cycles of inefficiency.

Furthermore, these internal challenges must be considered within the context of an external environment shaped by macroeconomic volatility, supply chain disruption, and the imperative of sustainability.

Organizations need more than just tools; they need strategic guidance. That's where Ultimo steps in. Not just as a software provider, but as an "asset ally." Recognizing the need for a clear framework to assess and guide asset management efforts, Ultimo has developed a comprehensive EAM Maturity Model. This model is more than a diagnostic tool. It is a roadmap for transformation.

## A Structured Pathway to Maintenance Maturity

The EAM Maturity Model is designed to help organizations benchmark where they stand today, envision what "good" looks like tomorrow, and understand the steps required to bridge that gap. The model is built on four progressive stages:

### Reactive

At this entry-level stage, maintenance is performed only when equipment fails. There is limited planning, high operational risk, and minimal use of data. Most organizations in this stage suffer from costly downtime and inefficient resource use.

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### In control

Here, organizations begin scheduling maintenance by calendar or usage, aiming to reduce unplanned downtime. Mobile solutions emerge, enabling field access and improving efficiency. Collaboration also starts to grow, with departments gradually engaging in shared processes.

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### Proactive

Businesses in this phase start to set meaningful KPIs and are able to analyze asset performance and improve accordingly. Asset management becomes more of a collective effort, as different teams provide their expertise to achieve shared business objectives.

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### Smart

With a more data-driven approach, businesses in the 'Smart' stage leverage real-time monitoring and analytics. Further integration with other business-critical software solutions offers deeper insights and higher efficiency. Maintenance is dictated by asset health and condition rather than time intervals, reducing unnecessary interventions and improving asset lifecycles.

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### Ultimate

At the most advanced stage, maintenance will be fully embedded in organizational strategy. Asset performance is optimized across the entire lifecycle, offering a holistic view that supports continuous improvement, long-term planning, cross-functional collaboration and further digital integration.

By understanding where they currently operate within this spectrum, organizations can make more confident decisions about investments in product, people, and process improvements. The model demystifies the journey to maintenance maturity, offering concrete outcomes, key considerations, and investment milestones at each phase.

Importantly, the EAM Maturity Model isn't about technology alone. It emphasizes the importance of aligning people, processes, and culture with technological capability. As asset managers navigate a world of increasing labor shortages, it is crucial to equip teams with tools that make work more intuitive, insights more actionable, and responsibilities clearer. The model encourages businesses to see maintenance not just as a cost center, but as a strategic driver of performance, resilience, and competitiveness.

Ultimo brings a collaborative approach to this journey. Through workshops, diagnostics, and strategic consultation, they help businesses assess their current state, set realistic goals, and build a roadmap that reflects both their ambitions and their constraints. This approach ensures that transformation is not only possible, but practical and measurable.

As industries continue to evolve amid global uncertainty, the ability to manage

assets efficiently and intelligently has never been more critical. The Ultimo EAM Maturity Model empowers organizations to rise above the chaos and complexity with clarity and control. It transforms maintenance from a necessary burden into a source of operational excellence and competitive advantage.

For organizations seeking to align their asset management strategies with the demands of the modern world, while preparing for the world yet to come, this model offers not just guidance, but confidence. It is a compass for navigating complexity, a catalyst for business transformation, and a cornerstone of long-term asset performance.



“Bahlsen produces bakery products in a total of five plants. With Ultimo, we achieve the greatest possible transparency across all sites regarding the condition of our equipment and improved reporting and monitoring of maintenance activities. This data enables us to move from reactive to preventive maintenance and thus reduce downtimes due to unplanned maintenance to a minimum.”

Aimal Khan, Digital Manager at Bahlsen.

# The Benefits of EAM Technology

The benefits of EAM technology vary based on the requirements of the organization. Almost half (48%) of respondents want to improve equipment uptime through monitoring and maintenance. 46% prioritize the enhancement of aging assets to gain better control over operational risks. 42% want to achieve savings in maintenance costs and time using asset tracking. Across the board, predominantly efficiency-related advantages were indicated as real benefits by our representation of maintenance professionals.

## Which KPIs matter most to asset managers?

In the 2023 report, operational efficiency, overall equipment effectiveness, and asset utilization were the most important key performance indicators (KPIs) for the business. While asset utilization and overall equipment effectiveness remain important as ever, our most recent research highlights the rising importance of sustainability and asset longevity.

Interestingly, while cost control is typically considered a common KPI across

industries, it ranked at the bottom of the list in this survey.

This begs the question: 'are industrial organizations now pressured to do more with the same? And in doing so, are they expected to extend asset lifecycles to meet sustainability targets, and CapEx control? The shift in KPI priorities certainly suggests this to be the case. Rather than focusing solely on cutting costs, asset managers are now tasked with maximizing the value of existing assets. The desired outcome of extending asset lifecycles is not just to defer capital expenditures, but also to align with sustainability goals. Doing more with the same is no longer a temporary measure. It's becoming the new operating model in industrial asset management.

## Asset Performance Management (APM): Unlocking Value Through Integration

As organizations increasingly look to optimize and streamline operations, the conversation around APM offers an interesting perspective. While 53% of asset managers report having the ability to monitor asset health and performance

effectively, a significant 40% admit they lack this visibility. Despite this, there is a firm belief in the potential of this data, with 68% of respondents indicating they see data analytics and predictive modelling as either very or somewhat important in optimizing asset management decisions.

The question no longer is IF APM can add value. It is how that value is best realized. The answer lies in integration. Nearly half (47%) of asset managers expressed a strong interest in exploring the potential of APM technologies. Within this group, there is a very strong preference (68% of respondents) to implement APM within their existing EAM system, rather than as a disconnected third-party solution. This is indicative of a move toward smarter, more streamlined and better-connected digital ecosystems.

It is important to consider that APM does not deliver predictive insights from the get-go. It all starts with data integrity. For APM to function effectively, the data foundation needs to be solid. That means accurate asset registration, consistent work order data, and reliable maintenance histories, to begin with. Without these, even the most advanced analytics tool will

not deliver meaningful insights.

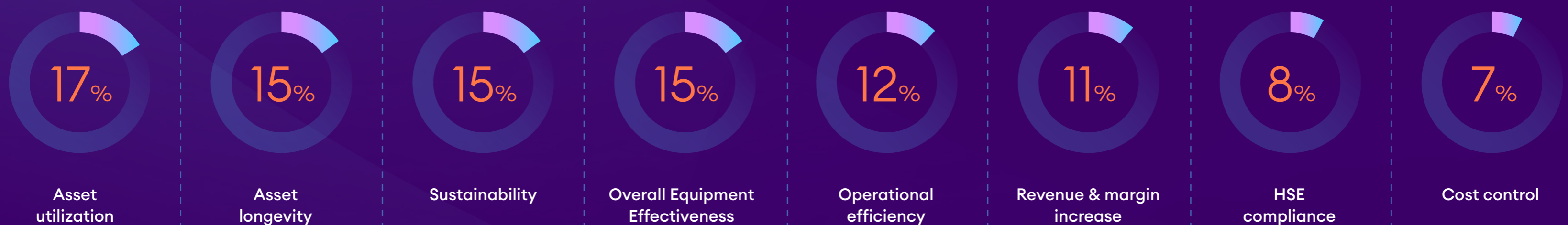
Integrating your EAM with technologies like APM helps asset managers get the most value out of their data. By ensuring these tools don't just exist alongside your systems but deliver insights within your systems helps leverage the full power and potential of a unified, data-driven approach to asset management.



## Question: How do you benefit from EAM technology & solutions?



## Question: What is the most important KPI to measure your asset management efforts?



# 7 Hard Truths About Digital Transformation



**Andrew Dixon**

VP Americas, MaxGrip

Digital transformation is no longer a buzzword, it's a business imperative. Yet despite widespread recognition of its importance, the path to successful digital transformation remains steep, complex, and riddled with pitfalls. Many organizations find themselves stalled in the early stages, grappling with technological, organizational, and cultural challenges.

If you're leading or involved in a digital transformation journey, it's time to confront the hard truths. Here are seven essential realities that can make or break your transformation strategy.

## 01 | **Technology Alone Won't Save You**

The allure of shiny new technologies is strong - AI, IoT, predictive analytics, digital twins. But too often, companies fall into the trap of believing that buying new tech equates to transformation. In reality, without a solid strategy, well-trained staff, and a change-ready culture, new tools will likely gather digital dust.

The answer? Focus on why you're adopting technology before what technology you're adopting.

## 02 | **Change Fatigue Is Real**

Digital transformation is a marathon, not a sprint. The journey often includes repeated phases of trial, learning, adaptation, and sometimes failure. For teams already stretched thin by daily operations, this ongoing change can breed fatigue, skepticism, and even active resistance.

Leaders must acknowledge this emotional toll. Transparency, frequent communication, and visible wins can help keep morale and momentum alive.

Also, manage energy, not just timelines. Pace your transformation and celebrate milestones to keep teams engaged.

## 03 | **Culture Can Be An Obstacle**

You can't transform digitally if your organizational culture is stuck in analog. Legacy mindsets, siloed thinking, and fear of failure often pose bigger threats than outdated systems. Successful transformation requires a cultural shift that encourages cross-functional collaboration, agility, and innovation. This can be especially challenging in asset-heavy industries like manufacturing or utilities, where risk aversion is deeply embedded.

Digital transformation is also cultural transformation. Start reshaping beliefs and behaviors, not just workflows.

## 04 | Leadership Must Evolve

Digital transformation demands a new kind of leadership. It's not enough to support from the sidelines; leaders must be active participants and champions. Transformation success is directly tied to the adaptability and digital fluency of leadership teams.

Modern leaders must become facilitators of innovation, not gatekeepers of tradition. This means embracing ambiguity, empowering teams, and being comfortable with not having all the answers. If leaders aren't changing, transformation isn't happening. Leadership agility is non-negotiable.

## 05 | Data Is an Asset If You Know What to Do With It

Organizations are awash in data, but data abundance doesn't equal data intelligence. One of the biggest barriers is a lack of clarity on how to use data effectively. Whether it's unstructured, siloed, or simply overwhelming, poorly managed data can paralyze decision-making.

Building data capabilities, both in infrastructure and skills, is crucial. That includes aligning on key metrics, ensuring quality and access, and developing

analytical literacy across the organization. Without a data strategy, your digital tools are flying blind.

## 06 | Plan for Scale

Launching a digital pilot is exciting. Scaling it is not. Too often, organizations invest time and money into promising pilots that never make it beyond the test phase. Why? Because they haven't aligned the pilot with broader organizational goals, governance, or scalability requirements.

If a pilot can't be integrated into existing systems or scaled across sites, it becomes a costly sandbox. Design pilots with scalability in mind. If it can't grow, don't greenlight it.

## 07 | Transformation Without Governance Is Chaos

Digital transformation efforts often falter not due to lack of ambition but due to lack of structure. Without clear governance, competing priorities, unclear ownership, and duplication of efforts are inevitable.

A strong governance model ensures that transformation is not just happening in pockets but is being coordinated, measured, and aligned with enterprise-wide strategy. Don't confuse movement with progress. Governance keeps transformation coherent and accountable.

## Progress Over Perfection

There's no single roadmap for digital transformation, and every organization's path will be different. What separates successful companies isn't the absence of barriers, but how they navigate them. The key is to move forward with clarity, humility, and a willingness to adapt.

Digital transformation isn't just about surviving, it's about building the capabilities to thrive in a fast-changing world. Face these hard truths head-on, and your organization will be better equipped to lead, not lag, in the digital era.



# Linking EAM to Strategic Goals

While EAM is not a new concept, it is experiencing a huge jump in capability from a technology standpoint. With advancements in technology, such as the Internet of Things (IoT), AI and predictive analytics, EAM has become more effective, enabling organizations to collect and analyze large amounts of data from assets in real-time, and move towards proactive maintenance and optimization strategies. As a result, asset management strategies are more aligned with broader business objectives. This warrants a closer look at how EAM can best be linked to strategic goals.

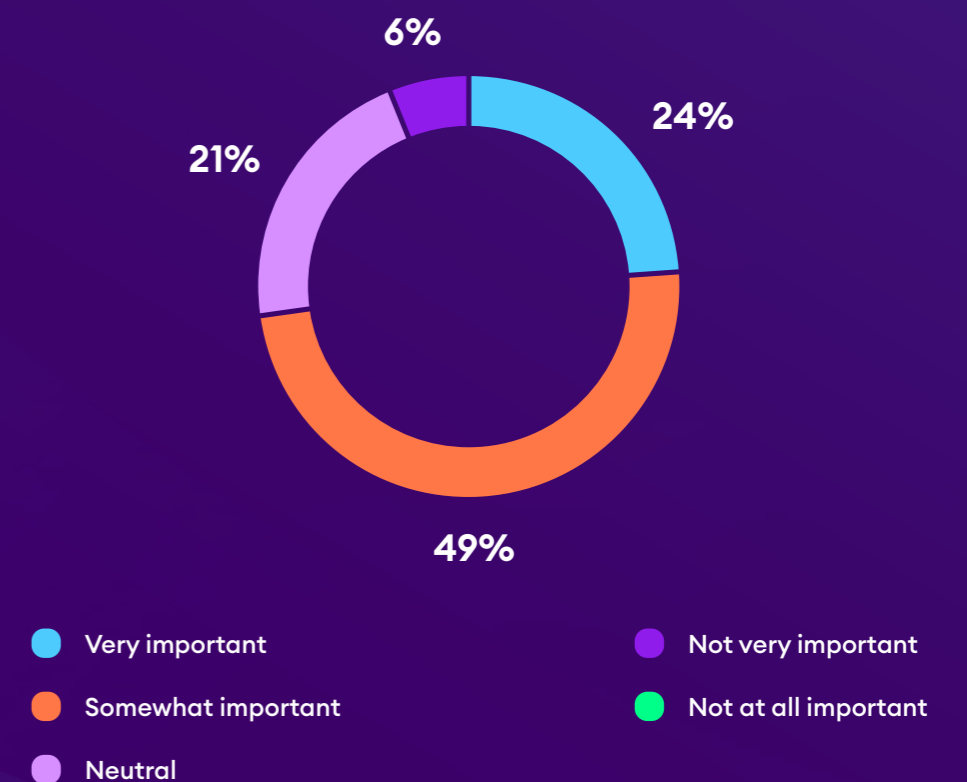
At 61%, the largest percentage of respondents, believe it is primarily achieved through the implementation of standardized best practices and productivity. In contrast, maximizing shareholder value is seen as having the least strategic contribution, with only 11% acknowledging its importance.

## Question: Which of your organization's long-term goals are supported by EAM?



Almost three quarters (73%) of asset managers consider sustainability and energy efficiency to be somewhat or very important when planning investments in new assets.

## Question: When planning investments in new assets, are sustainability and energy efficiency important requirements?



When asked about the factors that have played the biggest role in helping to improve sustainability and energy efficiency in departments, they identified investment in modern assets as the most pivotal, accounting for almost a third (31%) of responses. Government policies and regulation come in second place for the first time in this survey at 21%. Factors such as staff training and better communication between teams have fallen back by almost two thirds at 13% and 9% respectively.

**Question:** What has played the biggest role in helping improve sustainability and energy efficiency in your department?



# Operationalizing ESG: A Strategic Imperative for Industrial Maintenance Teams



**Malavika Tohani**

Research Director, Industrial Transformation, Verdantix

How industrial businesses approach EAM is being reshaped. No longer solely a tool for improving uptime and efficiency, EAM has become a foundational lever in meeting environmental, social, and governance (ESG) goals. As regulatory frameworks shift and stakeholder expectations rise, maintenance leaders are finding themselves at the heart of industrial sustainability strategies.

The ESG regulatory terrain is anything but settled. In the United States of America the Securities and Exchange Commission (SEC) has paused its much-anticipated climate disclosure rule. In the vacuum, states like California have taken matters into their own hands, mandating climate-related disclosures and raising the bar for ESG transparency. Meanwhile, the European Union is streamlining corporate sustainability obligations via the Omnibus initiative, aiming to simplify compliance for firms operating in multiple jurisdictions.

Despite this fragmented approach, corporate resolve on ESG remains robust. According to Verdantix research, 36% of decision-makers now prioritize the reconfiguration of plant operations and maintenance to meet ESG standards - second only to the electrification of industrial systems. This trend underscores a clear message: ESG is now an operational driver, not just a compliance checkbox.

Maintenance teams are in a unique position to direct ESG outcomes, particularly in industrial environments where asset-intensive operations generate significant environmental and safety risks. While advanced decarbonization technologies such as carbon capture and hydrogen electrolyzers offer long-term promise, many remain financially out of reach and technically immature.



ESG initiatives:

- **Environmental Impact:**

Digital maintenance planning and optimized warehouse logistics reduce waste and lower energy consumption. Cloud-based deployments, such as those running on Microsoft Azure, are also more carbon-efficient than on-premises solutions

- **Social Responsibility:**

In an era of skilled labor shortages, EAM solutions are filling the gap by supporting smart automation, mobile working, and wearables. These tools not only streamline workflows but also improve worker safety with features like digital lockout-tagout, real-time risk assessments, and guided permit management

- **Governance & Auditability:**

ESG success hinges on transparency and traceability. EAM systems enforce standardized processes, from procurement to compliance, offering auditable trails and real-time dashboards that help organizations respond confidently to scrutiny from investors, regulators, and customers alike.

One of the most transformative developments in EAM is the rise of digital twins. These dynamic, virtual models simulate equipment and facility operations, allowing teams to forecast the impact of changes before they're made. Whether assessing energy loads, waste outputs, or future maintenance needs, digital twins ensure alignment with taxonomies like those issued by the EU. Once implemented, they continue to track KPIs in real time - creating a continuous feedback loop that improves both environmental performance and asset reliability.

ESG success cannot be achieved in departmental silos. True impact comes from integration - aligning sustainability leadership with maintenance, operations, procurement, and IT. Sustainability is a mindset. It must be embedded into every level of daily business operations, not left to isolated teams working with idealistic goals. Cross-functional collaboration is key to embedding ESG into core operations, ensuring that metrics and responsibilities are shared across departments.

As net-zero deadlines loom and stakeholder expectations grow more sophisticated, maintenance leaders should act decisively.

Verdantix recommends four focus areas:

- **Data Integration:**

Deploy systems that consolidate emissions, energy, and performance data into actionable insights

- **Technology Adoption:**

Prioritize investments in EAM technologies that deliver both lasting return on investment (ROI) and sustainability outcomes

- **Cross-Functional Collaboration:**

Create governance models that connect sustainability, safety, and operations teams

- **Continuous Improvement:**

Use audits, feedback loops, and evolving ESG frameworks to refine processes over time.

Industrial maintenance teams are no longer just the custodians of uptime. They are architects of sustainability. By embracing data-driven tools, aligning with ESG strategies, and modernizing operations, they can transform compliance into competitive advantage.

Verdantix is a research and advisory firm serving as an essential thought-leader for world-enhancing innovation. Their recent Green Quadrant report compared the top EAM software vendors to support smarter software selection.

# How AI and Digital Twins are Supercharging Asset Management



**Jason Dietrich**  
Chief Revenue Officer, TwinThread

EAM is undergoing a quiet revolution powered by proven technologies like artificial intelligence (AI), digital twins, and virtual operations centers (VOCs). These innovations aren't just refining traditional maintenance strategies; they're rewriting the playbook entirely. For process engineers, frontline operators, and business leaders alike, the impact is transformative.

Today's industrial businesses face unrelenting pressure to operate more

efficiently, reduce downtime, operate more efficiently and do more with less. At the same time, many of these organizations are built on legacy systems that, while still functional, struggle to keep pace with the agility modern production environments demand. This is where digital transformation technologies are stepping in - not as wholesale replacements, but as high-value enablers that unlock untapped potential in existing systems.

Our industrial Cloud platform sits at the heart of this transformation. We are blending Industrial AI, digital twins, and no-code/low-code development tools to help organizations accelerate innovation and drive continuous improvement without ripping and replacing legacy infrastructure.

## Revolutionizing Real-Time Decision-Making

Digital twins, the virtual replicas of

physical assets and processes, are changing how engineers interact with highly valuable assets. When paired with AI models that continuously learn and optimize from streams of data from systems supporting industrial processes such as control systems, historians, and LIMS, they provide real-time feedback on production stability. This means process engineers don't just learn about problems after the fact, they get ahead of them.

Warning systems flag abnormal or unstable conditions before they spiral. These predictive insights can be directly integrated with an EAM platform, enabling real-time alerting, detailed root-cause analysis, and corrective action. When a digital twin detects an anomaly, for instance, it can automatically create a maintenance ticket, assign resources, and guide technicians through a resolution workflow. The result? Faster response times, better resource allocation, and fewer unplanned outages.

## Empowering the Frontline with VOCs

The emergence of VOCs is also redefining asset oversight. With centralized visibility across diverse production assets, a small team can now proactively monitor performance and intervene early to prevent issues from escalating. The data from VOCs feeds directly into EAM systems, enriching them with context that transforms reactive maintenance into strategic asset management.

This is particularly powerful for manufacturers striving to improve production line uptime and engineering efficiency. By integrating AI-driven alerts into on-shift engineering routines, teams can prioritize their efforts based on predictive risk - not guesswork. Every decision becomes smarter, faster, and more targeted.

## Continuous Improvement at Scale

Perhaps the most compelling shift is how these technologies empower continuous improvement at a scale that was previously unimaginable. With TwinThread's pre-built, plug-and-play solutions, teams can start optimizing equipment, processes, and supply chains in days instead of months. These tools are specifically designed to democratize

innovation, putting powerful optimization capabilities into the hands of operators and engineers without needing a team of data scientists.

Moreover, the no-code/low-code development environment means operations teams can tailor the solution quickly, adapting to evolving business needs without complex IT projects. The result is a more agile, resilient organization, capable of iterating and improving continuously.

## Extending the Value of EAM Investments

Rather than replacing EAM systems, technologies like AI, digital twins, and VOCs make them significantly more intelligent and effective. They breathe new life into systems, transforming them into the backbone of a smarter, data-driven enterprise. For organizations embarking on digital transformation journeys, this integration isn't just beneficial, it's essential. Cutting edge AI applications can feed extremely valuable insight to EAM systems to allow them to direct maintenance in a more cost-effective manner.

As we move toward a more autonomous future, the convergence of these technologies signals a shift from reactive maintenance to strategic

operations. Businesses that embrace this supercharged EAM will not only improve asset reliability and reduce costs, but they'll also set a new standard for operational excellence.

Learn more about how TwinThread is helping organizations accelerate innovation and unlock the full potential of their operations

# EAM as a Catalyst for Innovation & Agility

From global instability to changing regulations, socio-economic and political shifts are creating uncertainty across industries. In this environment, agility is critical. Businesses must focus on what they can control, like managing costs, optimizing operations, and staying responsive to change. This resilience is key to navigating disruption and sustaining long-term performance. In fact, two-thirds (66%) of survey respondents agree that their organization's asset management strategy fosters more resilience and helps them be better prepared for unexpected events.

## Question: Which external and internal factors have caused the most disruption in your organization last year?



Supply chain issues peaked in the years immediately following the Covid-19 pandemic but have almost halved (27%) since the last survey when it comes to the external and internal factors that have caused the most disruption in organizations in the last year.

This time, half (50%) of respondents identify challenges in recruiting experienced staff as the main contributor to disruption. This is followed by aging assets and/or aging workers for the first time at 38%.

In the past year, organizations participating in the survey have implemented various measures to address disruption and improve resilience.

Among these actions, the most frequently chosen strategies include improving collaboration across the organization, favored by 50%, making investments in new technologies, cited by 38% of participants, and investing in the workforce, selected by 36% of asset managers.

The importance of these strategies is underlined by our 2023 report: the same top three strategies were cited as having the most impact.

EAM can also serve as a catalyst for innovation. IoT, AI, machine learning, digital twins, predictive analytics and other emerging technologies are rapidly transforming industrial businesses. They unlock smarter decision-making, greater efficiency, and a sharper competitive edge.

When asset managers were asked about the emerging technologies expected to have a positive impact on their maintenance and business practices, the top three responses were as follows: contextual intelligence 68% (up from just 8% in the last report), automation and robotics 49%, and machine learning 41%.

Innovation with new technologies has reached a tipping point. Organizations are now actively mobilizing their data, using it in smarter, faster ways to drive real-time insights, automation, and more strategic asset decisions. It's notable that interest in digital twins has more than doubled since the last survey – up to 40% from just 16%.

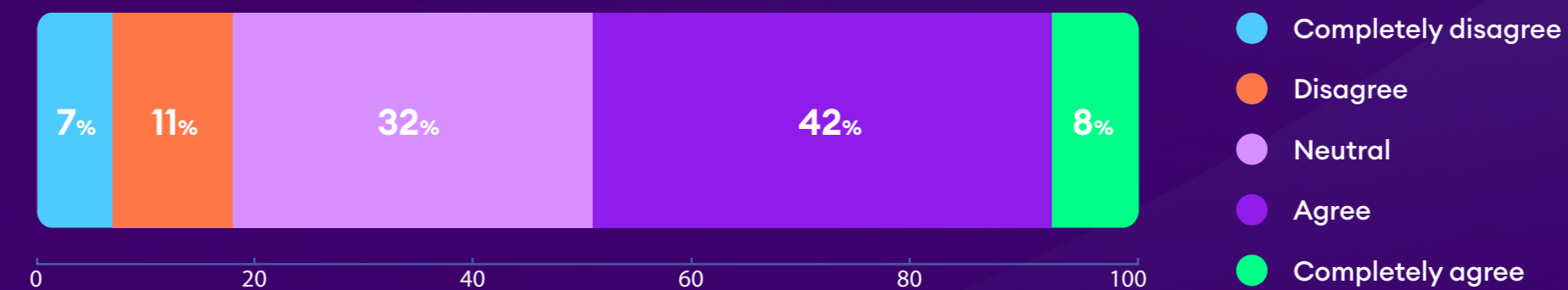
While organizations recognize the importance of adapting emerging technologies, there can be obstacles. As per the findings of this survey, the top two obstacles to leveraging emerging technologies are investment and costs impacting 63%, followed by lack of expertise at 49%, and lack of data which remains a challenge for 34% of those surveyed.

These results are indicative of a shift toward data-driven asset management. The surge in interest in contextual intelligence and digital twins is further proof that organizations are prioritizing technologies that enable this granular level of insight and real-time decision-making. Looking to the future, working with an EAM system that integrates these capabilities seamlessly offers a clear-cut advantage. The role of EAM in getting the most out of your data has become irreplaceable for any organization looking to build a resilient, future-ready business.

### Question: In the past year, what steps have you taken to improve your organisation's response to unprecedented events?



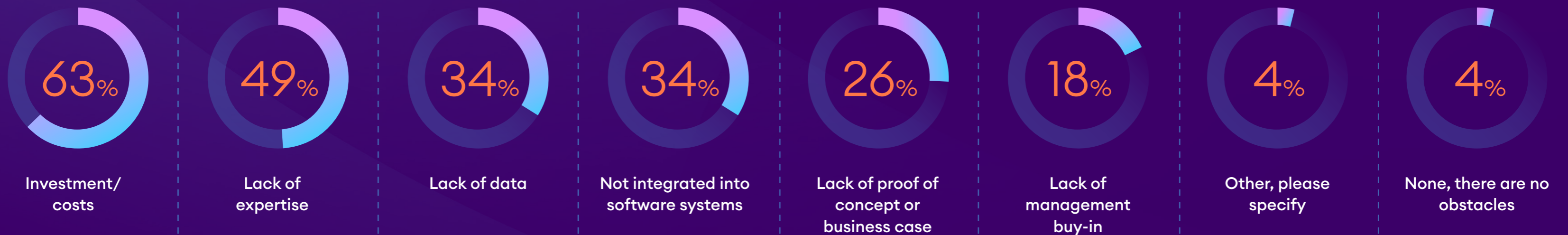
### Question: Can you indicate the extent to which you agree with this statement? Our organization's asset management strategy fosters more resilience and helps us be better prepared



**Question:** What are the emerging technologies that are going to positively impact your maintenance & business practices?



**Question:** What are the biggest obstacles in adopting emerging technologies?



# From Artificial Hype to Agentic Reality



**Chris van den Belt**

Head of Product Management  
at Ultimo

AI is all everyone seems to talk about these days. The technology has come a long way. Despite its meteoric rise to prominence, we're still at the forefront of discovering what this technological breakthrough will bring us. Let's reflect on this leap in modern technology and explore how AI has transformed our product from a Software as a Service (SaaS) platform to an AI-augmented powerhouse.

Conversations in EAM have circled around the future potential of AI for years and focused on predictive maintenance,

virtual assistants, or smarter analytics. With the rise of agentic AI, we're entering a new era where AI doesn't just inform decisions, it acts. Not as a replacement for human expertise, but as a digital coworker that is fully embedded in workflows, operating alongside technicians, and delivering measurable impact from day one.

## **From passive tools to active coworkers**

In the past, any sort of automation in EAM largely meant rigid, predefined rules that would 'automatically' trigger: logging a failure, printing a work order, or marking the job as complete. Even early AI features such as predictive models were mostly reactive, requiring human input for training and interpretation, while often running automatically on data streams.

Agentic AI changes this dynamic. These 'agents' are capable of autonomous action within defined parameters, making decisions, initiating workflows, and learning from the context around them and every interaction they have. Unlike more traditional automation efforts, they

are highly proactive, and capable of spotting safety risks buried in work orders, optimizing preventive maintenance schedules, or identifying inventory gaps before they cause downtime.

This shift is tremendous. AI is no longer a system that you use, but instead a digital colleague that expertly and proactively works with you. Not to replace you, but to offload you so that you can put your expertise to work where it matters most.

## **From challenge to solution**

The time is right for this paradigm shift in how we work. Industrial organizations are facing a convergence of pressures, of which the aging workforce and skills shortages are the most pressing. Institutional know-how and tribal knowledge often resides in the heads of the most senior members of staff. This poses a risk of valuable knowledge retiring or walking out the door. Hiring new skilled workers is increasingly difficult, and the new generation joining the workforce has vastly different requirements when it comes to ways of working. Alongside staffing challenges, compliance and

safety demands are growing ever more complex, making cost control and uptime business-critical given the volatility of the asset-intensive industries most organizations operate in.

Solving these challenges means working smarter, not harder. Agentic AI shrinks the skills gap and provides a way to capture and extend the expertise of seasoned technicians. This ensures consistency in decision-making and lifting the administrative burden on skilled professionals so they can excel in their area of expertise.

### **From vision to reality**

At Ultimo, our mission is to deliver AI-augmented EAM that's specialized for industrial maintenance, trustworthy at scale, and human-centered by design. We deliver digital coworkers, not assistants. This digital workforce is specialized for roles like environmental, health and safety (EHS) management, maintenance planning, reliability engineering and warehousing. They act autonomously and with high levels of expertise, each able to initiate actions, escalate actions, and collaborate with both people and other agents.

In the future, the way we work and interact with these agents will become more intuitive and native to the way we prefer to work. Our agentic AI will deliver insights at

the point of need and is going to be fully multimodal: accessible via mobile devices, your preferred messaging platform, e-mail or voice. Whether you're in the field, at a workstation or on the move, your digital coworker is right by your side.

Our first deployed agent focuses on underreporting in safety management. Traditional safety management relies heavily on manual incident reporting, which tends to create significant blind spots when employees forget or neglect to document safety-related events, near misses, and unsafe conditions. Our EHS agent scans work order requests for signs of safety incidents and logs them automatically, ensuring nothing is missed. By addressing this under-reporting, we create more comprehensive visibility into workplace safety risks, allowing for more effective preventive measures to be taken and higher levels of safety and compliance to be achieved.

### **From data to decision**

One of the most persistent barriers to AI adoption in asset management is data quality. Many organizations worry their incomplete or inconsistent records make them 'not ready' for full-scale AI adoption. That's why all our existing AI features are deliberately designed to improve the data as they work. For example, by prompting technicians to capture sensory observations and provide richer detail

on job reports, using computer vision for accurate readings, or vector-based search to retrieve past failures regardless of phrasing or language.

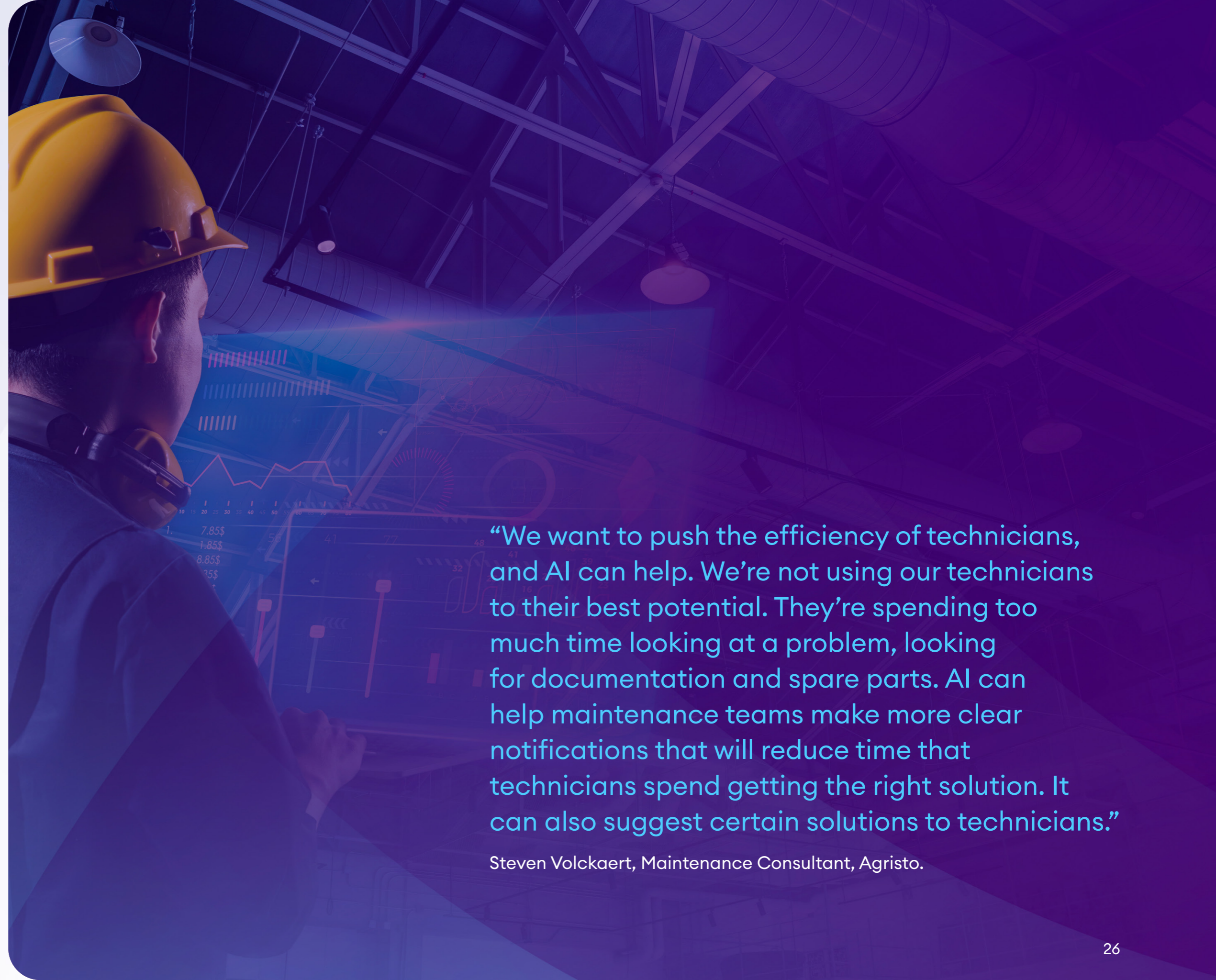
Better data doesn't just improve AI output. It accelerates the maturity of your EAM strategy, enabling a shift from reactive maintenance to predictive reliability.

### From starting to succeeding

The path to agentic AI doesn't require a big bang rollout. Start small, integrate a single agent into an existing workflow, let it prove its value, and expand from there. Each successful step builds trust, improves data, and unlocks more potential for autonomous optimization.

Whether you are a planner, a technician, an operator or a manager, we think that every role in the maintenance ecosystem will soon start working alongside their own specialized digital coworker. These agents will talk to each other, coordinate actions, and free up human teams for the complex, creative, and safety-critical work that adds the most value to the organization.

Our ambition is simple: to advance the industrial maintenance experience by delivering the future of EAM, today. A future where humans and AI collaborate seamlessly, and agentic intelligence is not a far-off ambition, but a working reality.



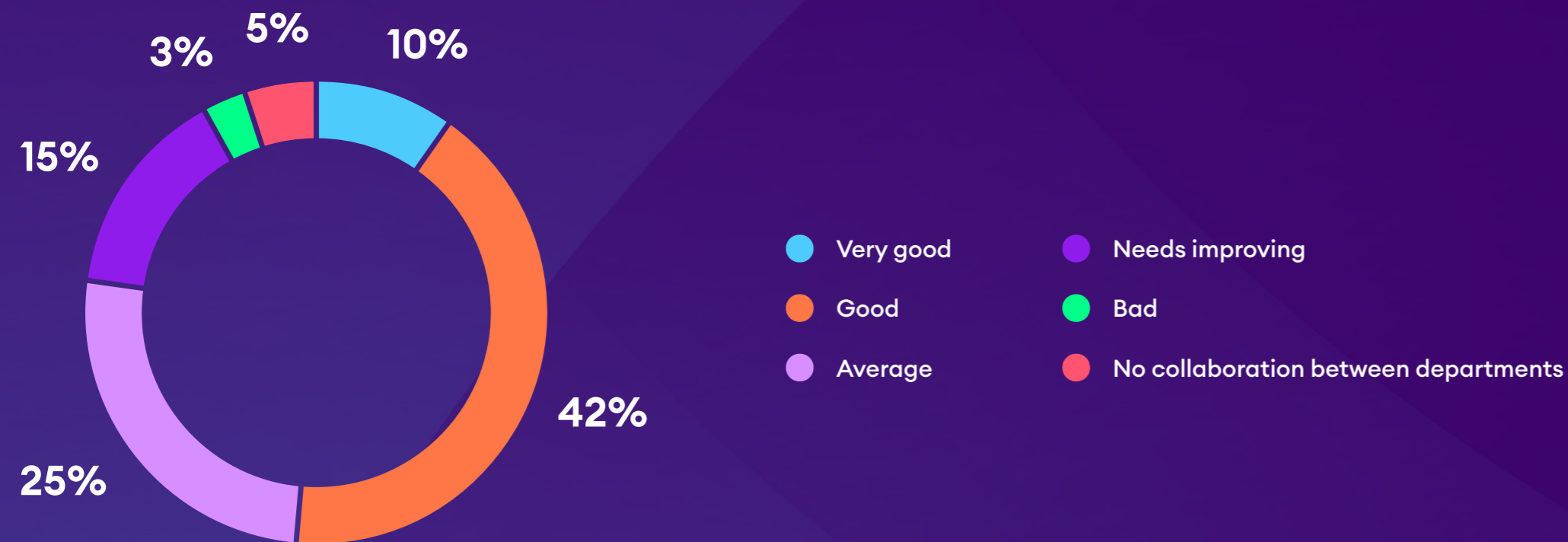
**“We want to push the efficiency of technicians, and AI can help. We’re not using our technicians to their best potential. They’re spending too much time looking at a problem, looking for documentation and spare parts. AI can help maintenance teams make more clear notifications that will reduce time that technicians spend getting the right solution. It can also suggest certain solutions to technicians.”**

Steven Volckaert, Maintenance Consultant, Agristo.

# Collaboration

Collaboration boosts productivity, breaks down silos, and fosters knowledge sharing. Most asset managers report strong collaboration between maintenance and operations - driving better outcomes across the board, with 52% of respondents expressing satisfaction. The same trend was observed when evaluating the collaboration between the maintenance department and the safety department, as well as between maintenance and the senior management team where 52% of participants provided a positive response.

**Question:** How would you rate the collaboration between the maintenance department and the production/operations department?



“Ultimo has helped break down silos in our organization. Before, the attitude was that we were all separate teams; that’s their team, and this is ours. Now, we are one team working across shifts helping us all work better together.”

Rockfon, part of the ROCKWOOL Group.

# Emerging Priorities in Asset Maintenance

When asked about the trends that will have the greatest impact, organizations identified the aging workforce as the top concern (63%), underscoring the urgency of knowledge transfer and workforce planning. ESG pressures followed closely (43%), reflecting growing accountability around sustainability. New to this year's survey, supply chain disruption emerged as a rising issue (34%), highlighting its increasing influence on operational resilience and strategic planning.

There's change when it comes to the trends asset teams expect in the field of EAM in the next 12 months too. In the previous report, almost two thirds (61%) ranked making better use of reporting and analytics as the number one topic, compared to just 47% this time around. This ranks behind increasing digitalization at 50% and more operational efficiency on the floor, with 48%.

Regarding the methods used to ensure continuous improvement and innovation in asset management practices to stay ahead of evolving industry trends, three key themes emerged from the responses: knowledge and skills development, adoption of new technologies, and maintaining close ties to market trends and industry developments.

The most frequently mentioned method was the ongoing development of employee knowledge and capabilities. One participant noted: "Keeping knowledge up to date for personnel", while another emphasized: "We regularly attend seminars and meetings on new developments". A skilled workforce is essential for adapting to new technologies and optimizing asset management practices. Many respondents cited formal training, internal knowledge sharing, and active learning as critical components of their strategy.



This strong emphasis on professional development indicates a broad commitment to continuous improvement through learning.

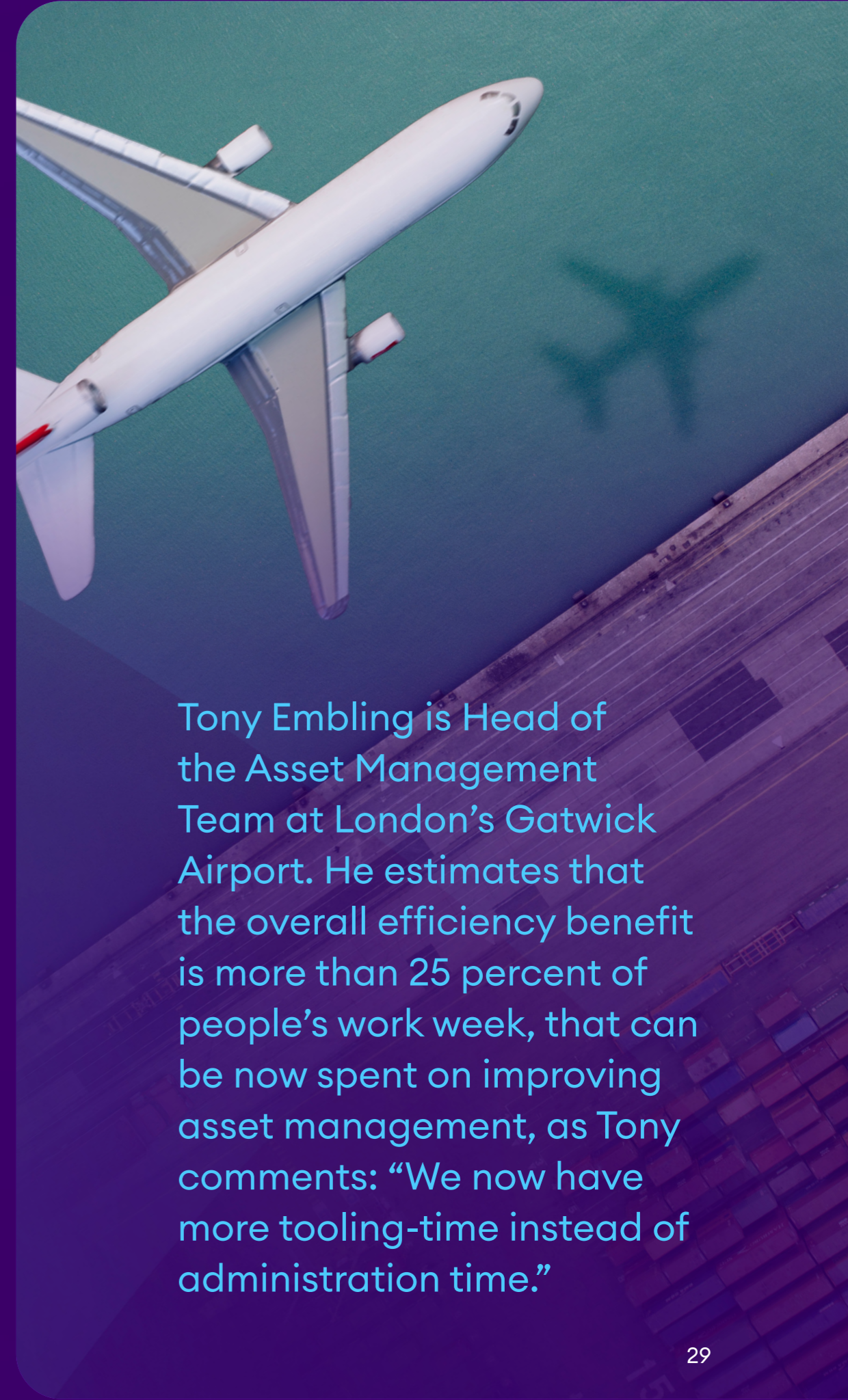
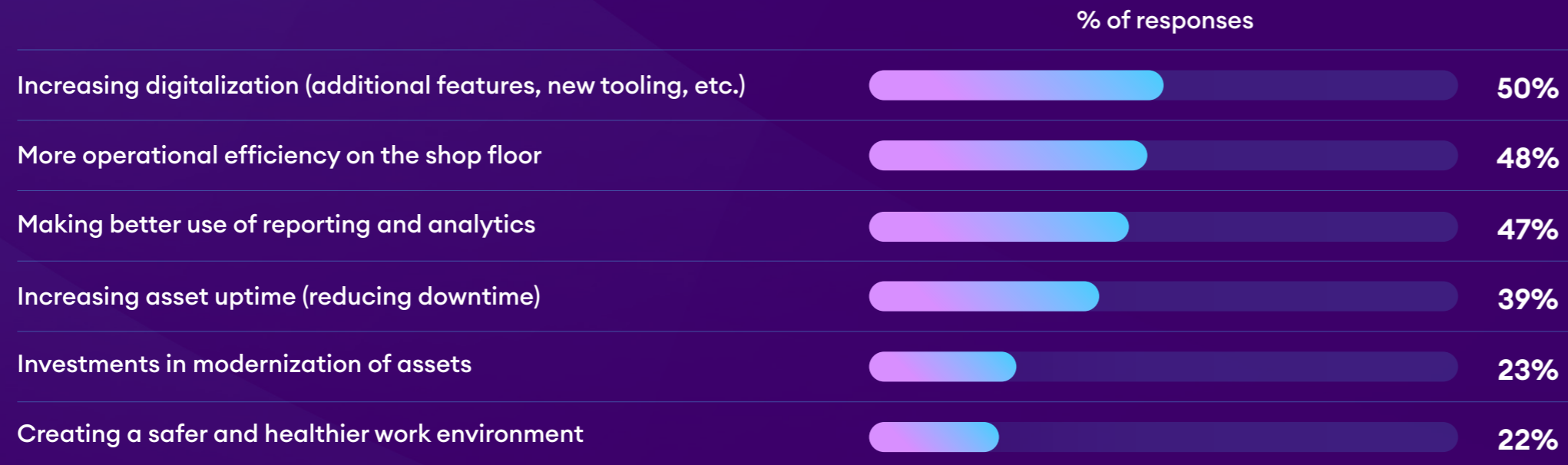
The second most common theme was the implementation of new technologies and the integration of digital tools to enhance asset performance. One organization shared: “We stimulate innovation by allowing room for experimentation, such as pilot projects with new technologies like predictive maintenance and data analysis”. Respondents described efforts to modernize their systems, experiment with innovative solutions, and leverage automation and data analytics. Some mentioned upgrading or consolidating EAM and ERP systems to improve data-driven decision-making. This suggests that technological modernization is a key lever for

unlocking efficiency and long-term resilience in asset management.

Lastly, many respondents stressed the importance of remaining attuned to external developments to inspire innovation and maintain relevance. Participation in conferences, webinars, trade fairs, and industry benchmarking were all highlighted as valuable practices. As one respondent put it: “Benchmarking, conferences, staying close to the heart of maintenance.” Another added: “Trade fair visits, following webinars, conversations with colleagues and/or suppliers.”

These activities not only help organizations stay informed about the latest trends but also encourage the exchange of ideas and identification of new opportunities for continuous improvement.

**Question: Which topics in the field of EAM will be the focus topics over the next 12 months?**



Tony Embling is Head of the Asset Management Team at London’s Gatwick Airport. He estimates that the overall efficiency benefit is more than 25 percent of people’s work week, that can be now spent on improving asset management, as Tony comments: “We now have more tooling-time instead of administration time.”

# Why EAM Systems Must Be Intuitive, Mobile, and Secure by Design



**Russ Mokrouz**

Director of Implementation,  
ABS Consulting

Every organization I work with shares a common challenge: how to keep pace with rapid workforce turnover, increasing operational complexity, and escalating cybersecurity threats - all while trying to maintain efficient, reliable asset management. The solution lies in EAM systems that are intuitive, mobile, and secure by design.

Let's start with the people. With end-user and administrator tenures averaging less than three years, it's no longer realistic to assume deep system familiarity or long-term experience. Companies simply don't have the luxury of investing months into training every new hire. That's why ease of use is no longer optional, it's essential. A modern EAM platform must be designed for simplicity, with guided workflows, built-in training tools, and interfaces that make sense from day one. When a system feels intuitive, users are more confident, faster to adopt it, and less likely to make costly errors. I often tell clients: an intuitive EAM system isn't just a nice-to-have, it's a strategic necessity.

I'm also seeing a fundamental shift in where and how work gets done. Technicians and operators are spending more time in the field, and they expect the same mobile-first experience they're used to in their personal lives. If an EAM system isn't accessible on a phone or tablet, it's effectively a bottleneck. Mobile capabilities are critical, they enable real-time data input, instant task assignments, and seamless cross-team coordination. A technician can complete an inspection, flag an issue, and trigger follow-up actions before leaving the site. This level of mobility isn't just convenient, it transforms workflows, drives responsiveness, and boosts productivity across the board.

But as we increase connectivity, we must also increase vigilance. Cybersecurity is not just an IT concern, it's an operational imperative. As EAM systems integrate with IoT devices and operational technology (OT) environments, the attack surface grows. Organizations need to know their systems are protected. That means end-to-end encryption, multi-

factor authentication, secure access protocols, and continuous monitoring. More importantly, it means selecting EAM solutions that prioritize security as much as they do functionality.

The risk isn't theoretical. A single breach can halt operations, compromise safety, and damage trust. That's why security must be foundational, not an afterthought.

What's clear to me is this: the future of EAM lies in systems that embrace these realities. A transient workforce, mobile work expectations, and growing cyber threats are the new normal. Companies that recognize this and invest in platforms that are intuitive, mobile, and secure will be better positioned to adapt, compete, and thrive.

The bottom line? EAM systems extend beyond managing assets. They enable people, empower agility, and ensure resilience. The systems we choose today will define how well we meet tomorrow's challenges.

# The Future of Asset Management

Much has changed since we last published this report. And even more will change in the years to come. A global directive towards smarter, interconnected ways of working is slated to usher in a new phase of transformation, intelligence, and collaboration between people and technology. The best moment to start preparing for this shift was yesterday. The second-best moment is today.

In trying to predict what our industry will go through and where enterprise asset management will stand, this Ultimo Maintenance Trend Report offers an abundance of insights to plan and prepare for what is to come.

While the future remains uncertain, the Report offers one key insight that rings loud and clear: however rapidly technology will advance, human expertise is irreplaceable. Preparing for our future is not about choosing between people or machines. It's about building strategies that bring out the best in both.

## Rapid tech adoption, enduring human value

EAM is a very dynamic and often evolving space. The appetite for intelligent tools is accelerating at an unprecedented rate. Since our 2023 report, interest in contextual intelligence has increased by 750%. Topics like AI, automation and digital twins are no longer experimental. Half of respondents see automation and robotics as transformative, and the perceived impact of digital twins has more than doubled compared to our previous report. These tools are becoming essential parts of modern maintenance strategies.

In parallel, the value of skilled professionals remains front and center, and can be seen as the biggest challenge impacting asset management. Almost two thirds (63%) of respondents have identified

the aging workforce as the most pressing trend impacting their maintenance strategy, and half stated that hiring skilled labor was the biggest inhibitor to operational success. The message is clear: as machines get smarter, people become even more vital.

This presents a powerful opportunity for organizations looking to get ahead. EAM can serve as a catalyst for innovation when people and technology are paired effectively. Together, they can drive more confident decision-making, faster responses and more proactive maintenance strategies.

## Human-driven, tech-enabled

Building a maintenance strategy that empowers both intelligent systems and the teams using them starts with alignment. Choosing the right technology to invest in and harnessing the skills that make these work creates an environment where man and machine converge, strengthening one another.

I believe that EAM platforms will transform into engines of foresight. They help shift teams from a reactive to a predictive



**Berend Booms**

Head of EAM Insights, Ultimo

mindset, and from guesswork to data-driven decisions. Thanks to AI-powered capabilities that don't require in-house model training or expensive investments, organizations can now lower the barrier to entry while gaining immediate operational value.

Your road to excellence may very well be human-driven, tech-enabled. To adopt a strategy that allows both people and technology to excel, it is important to map out your journey. Where are you in your current asset management journey, where do you want to be in the future, and what support do you need to get there?

I think your journey to excellence starts with supporting your people first. Your experienced staff are more than just operators or engineers that support your assets. They are experts in their field, strategists by nature and problem-solvers by profession. It is their expertise, insight and intuition that help transform data into action. Match their expertise with expert tooling. Invest in tools that elevate their capabilities, rather than overwhelm their capacities. Think of intuitive interfaces, automation that removes repetitive tasks, and AI that surfaces insights. That way, they spend less time on data entry, and more time keeping operations running smoothly.

In addition to investing in the right people, select technology with purpose that will

support your team's growth and help them achieve goals more effectively. Look for platforms and solutions that make life easier, help accelerate your time to value and support future innovation and scaling opportunities. Smart platforms also support knowledge retention and transfer. This is a critical need in our industry, where knowledge is walking out the door at alarming rates. By embedding expertise into systems, you ensure that critical know-how becomes common knowledge, and accessible to anyone looking to make a difference.

At the end of the day, technology should serve your people. Not the other way around.

Finally, plan for growth. Using Ultimo's Maturity Model, you can benchmark where your organization is today, and chart a path to where you want to be tomorrow. Digital transformation is not a destination or the end goal. It's a journey, comprised of a series of small, smart moves, each one strengthening your team, your systems, and your business value. The best way to achieve continuous improvement is through performance analysis.

Realize that by continuously measuring, you create the opportunity to grow. There is always a tailored next step to increase uptime, reduce costs, improve asset availability and future-proof your maintenance operations.

## People and tech, working together

The leading organizations of the future are those that see human and digital capabilities as complementary, not competing. The Maintenance Trend Report underlines this. Maintenance professionals are not just responding to change, they are driving it. And they are doing this with an understanding that blending innovation with expertise leads to substantial, sustainable growth. Integrating a people-first mentality while opening yourself up for future-ready technologies, you build the foundation of new, better maintenance strategies. This will allow you to be in control of your assets and costs, strengthened by real-time actionable intelligence that improves performance and decision-making. The future of maintenance belongs to those that equip their people with the right tools, automate wisely, and build a culture of adaptability.



# Next steps

No matter where you are on your asset management journey, we are with you, every step of the way. Whether you are just starting out or refining an advanced asset strategy, Ultimo is here to help you lead the way.

Every asset hero needs an ally. Chart a path for your journey with our EAM Maturity Model or book a scan to have one of our experts help you uncover growth opportunities. [Visit our website](#) to track your peer stories, and follow Ultimo on [LinkedIn](#) to stay connected with the latest innovations and thought leadership in EAM.

The future of asset management is not about replacing people with technology. The future of asset management is one where human ingenuity and smart technology work hand in hand, delivering results that are bigger than the sum of its parts.

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