



EBOOK

Going **Beyond** Your CMMS

Why Extending Asset Lifecycles Requires
More Than Just Maintenance

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For most asset and facilities managers, a computerized maintenance management system (or CMMS) is a must-have resource. And for good reason – the benefits of a powerful and modern CMMS are vast:

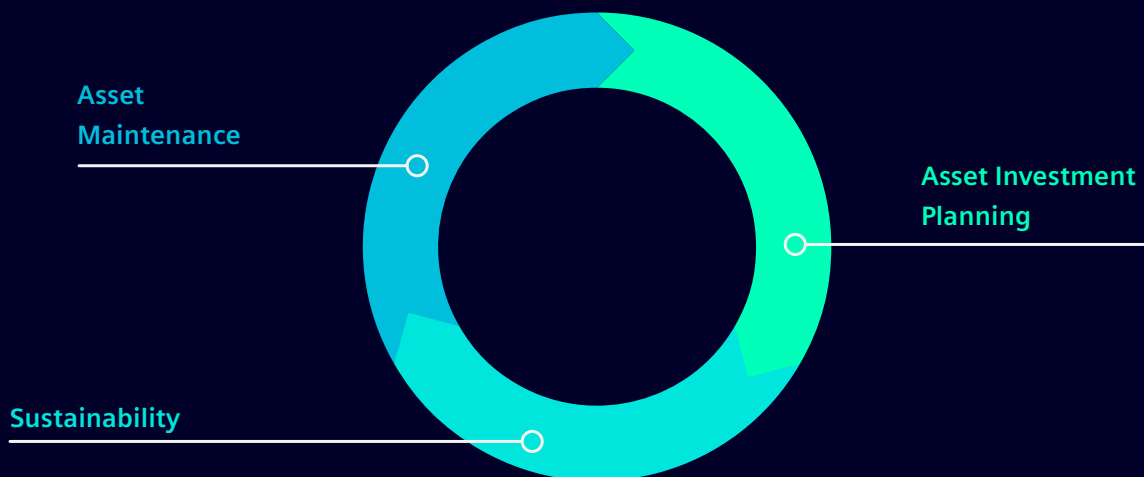
- They provide a centralized location to keep asset and facilities data organized and easily accessible.
- They can accelerate maintenance workflows by making it easier to assign, track, and complete work orders.
- They can automate preventive maintenance scheduling to reduce unplanned downtime and extend asset lifespans.
- They even offer advanced dashboards and analytics to inform decision-making and support funding requests.

But as organizations evolve, the challenges they face often go beyond what a CMMS alone can handle. Long-term capital planning, energy-saving initiatives, ESG reporting, and predictive analytics all require a more comprehensive strategy – one that combines maintenance, data-led capital planning, and sustainability initiatives into a complete asset management strategy.

What is complete asset management?

Complete asset management is a strategic approach to managing the full lifespan of your physical assets and infrastructure that goes beyond day-to-day repairs. Complete asset management connects all aspects of your operations, combining asset maintenance, asset investment planning (AIP), predictive analytics, and sustainability and energy initiatives into a unified framework that transforms operational complexity into clarity.

Together, these pillars not only help facilities and finance leaders gather and centralize asset data, they also empower teams to turn that data into strategic value that helps their organization optimize performance today while preparing for the challenges of tomorrow.



Asset Maintenance

Asset maintenance provides insights and data collected through your CMMS to make daily work smarter, more efficient, and more cost-effective, shifting teams from reactive fixes to proactive and preventive repairs.

Asset Investment Planning

AIP brings modernizes and elevates capital planning with predictive intelligence capabilities, helping decision-makers model funding scenarios, prioritize projects, and make confident, long-term decisions that maximize asset values and extend their lifespans.

Sustainability

Energy and sustainability is an equally important aspect of complete asset management – embedding these initiatives throughout your operations enables you to lower costs through reduced energy consumption, track emissions, and create more efficient, resilient, and long-lasting assets.

Asset maintenance: The foundation for data-driven operations

A modern CMMS is a critical foundation for managing daily maintenance and ensuring operational efficiency. It can provide the structure to accelerate work order completion rates, reduce emergency repairs, and extend asset lifespans. And the right CMMS can act as a single source of truth for your facilities team, turning day-to-day activity into valuable operational insight.

But even a great CMMS is just the starting point for a truly complete asset management approach. The real value comes from how you capture, centralize, and use your asset maintenance data to inform decision-making across your organization.

According to the 2025 State of U.S. Asset & Facilities Management Report, 47% of organizations are currently struggling with aging facilities and infrastructure, and only 59% believe they can confidently predict when assets are likely to fail. While a CMMS can help plan preventive maintenance to keep your assets running, long-term planning, risk mitigation, predictive insights, and sustainability targets require more robust systems.

To move from a preventive to predictive mindset means you must go beyond your CMMS and start using your data as a strategic GPS that can support smarter longterm capital planning, forecast breakdowns before they occur, and reduce waste. That's why maintenance is just the first step toward complete asset management – what you do with that data next is what can take your strategy to the next level.



Client Study

Cornerstone Building Brands

Before implementing Asset Essentials in 2023, Cornerstone was using an older CMMS that did not provide the data Cornerstone required. Within a few months of using Asset Essentials, the team grew accustomed to quickly locating and using the system's easy-to-access data. During the first year, their Sacramento plant recorded maintenance cost savings of \$250,000, with their Auburn, WA plant saving \$180,000 in the first six months as well.

"The data has been the best part. The operations side now has great visibility of what's going on. They can see the status and progress of work orders they put in. They don't have to call anyone to see where we are in the process because the data is right in front of them."

— **Carlos Bueno**

Operational Excellence Manager, Cornerstone Building Brands

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Asset investment planning: A strategic guide for elevating capital plans

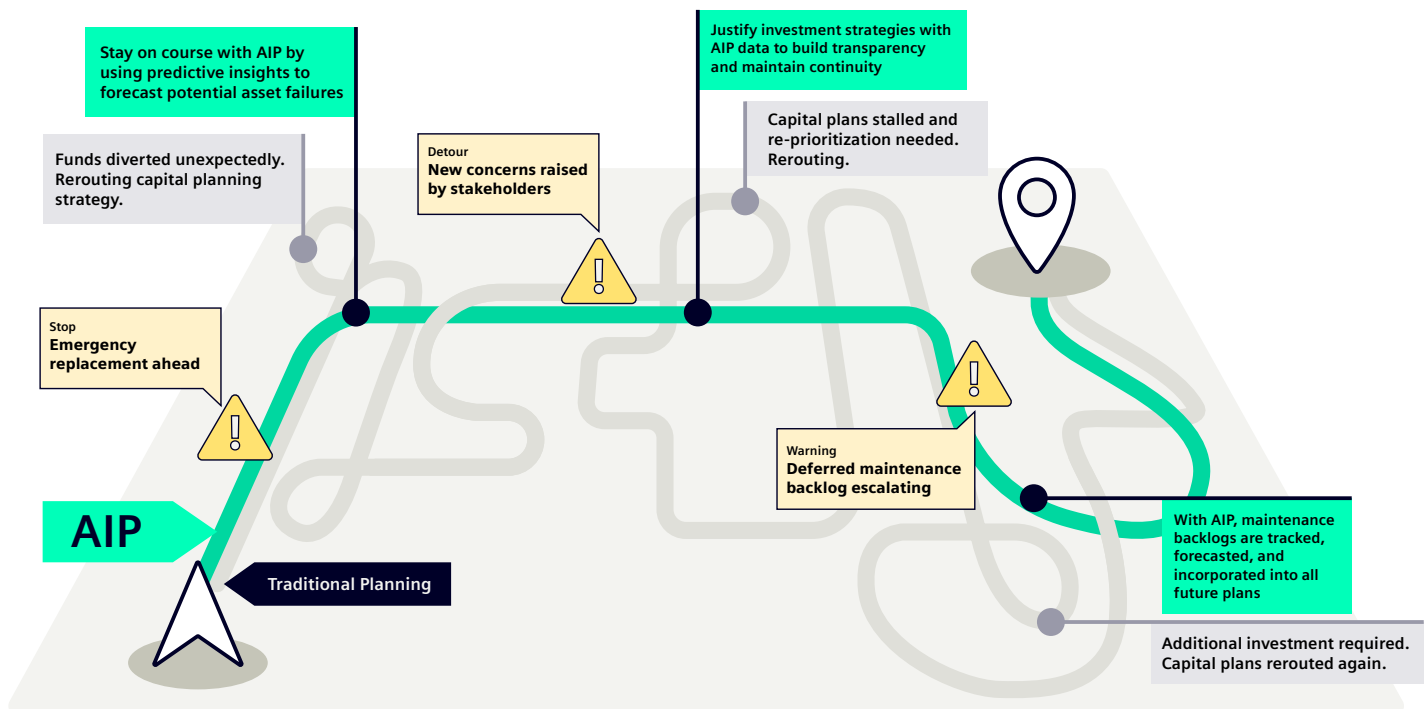
AIP builds on the foundation of your CMMS by transforming asset-level data into actionable insights for long-term capital planning. **Modern AIP** solutions enable facilities, operations, and finance leaders to make more strategic decisions about where, when, and how to invest in assets based on insights around condition data, maintenance history, risk exposure, and expected lifecycles.

Instead of treating capital planning as a static, one-time event, AIP turns it into an ongoing, dynamic process. Whereas traditional capital planning acts as sort of a paper map giving you general direction with limited flexibility, asset investment planning acts as an “GPS for investments” continuously analyzing real-time data, forecasting roadblocks, and helping you choose the most cost-effective path forward to meet your goals.

This shift is more important today than ever. Global energy prices are surging. Unplanned downtime now costs nearly

twice what it did in 2019, with some companies losing an estimated \$1.4 billion each year. And, consumers and investors are increasingly demanding more transparency accountability from decision-makers. AIP helps organizations meet these challenges head-on by providing defensible, data-driven analytics that validate and support financial decisions.

AIP isn’t just a software upgrade – it’s a foundational part of a complete asset lifecycle strategy. It bridges the gap between short-term operations and long-term infrastructure health, creating a continuous loop of improvement fueled by centralized data. Standard asset maintenance tools alone aren’t enough to get you there. In fact, fewer than 25% of facilities leaders have reduced reactive maintenance by more than half with CMMS software alone.



That's why smarter technologies like AIP matter. They allow you model, compare, and justify capital investment decisions with confidence by evaluating factors like asset criticality, risk of failure, and overall impact on operations to help you prioritize the projects that will deliver the most value to your organization, while mitigating the biggest potential risks.

By integrating CMMS data with Siemens AIP tools Origin and Predictor, organizations gain access to a new level of strategic decision-making capabilities.



Origin

Leverages existing CMMS data to give you real-time asset health updates, so you always know precisely where in your asset portfolio to focus your maintenance budget.



Predictor

Gives you the world-class capital planning software needed to model various funding scenarios, use data analytics to justify requests, and improve strategic asset management.

Together, these tools transform capital planning from a budgeting task into a strategic advantage that aligns every investment with your operational, financial, and sustainability goals. By combining the powers of CMMS and AIP, your organization can shift from simply managing maintenance to strategically optimizing your entire operations through a more complete asset management approach.



Client Study

Children's Health Dallas

Children's Health Dallas revolutionized its facilities management and capital planning using Siemens AIP software, improving strategic decisions and long-term capital planning. With detailed asset analytics, the facilities team was able to secure \$20 million in funding from their finance department, develop a 10-year financial plan, and save millions in potential repair costs by optimizing infrastructure investments.

"It helps us consider all the options and change our minds frequently. Every month, someone has a new assessment, new plan or new idea... and we can quickly change our minds because we've used [the software] to build 10-year forecasts for all of our buildings. **So, it's been a really helpful tool for us to plan strategically."**

— **Brooke Bohme**

Director of Engineering, Children's Health

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Sustainability: A connected approach to efficiency and resource management

While a CMMS provides the foundation for maintenance and asset tracking, most platforms lack the capabilities needed to meet the growing demands of energy management, ESG reporting, and resource optimization. That's where energy management software plays a vital role, by bridging the gap between operations and sustainability goals.

With the right tools, organizations can monitor energy usage across multiple facilities in real time, identify inefficiencies, prioritize upgrades, and automate tasks like utility bill entry or energy audits. These insights don't just support sustainability, they also inform capital planning by revealing which aging assets are consuming the most energy and where modern, efficient replacements can deliver long-term returns.

Despite these advantages, energy management software remains underutilized. The 2025 State of U.S. Asset & Facilities Management report found that 95% of organizations report having renewable energy initiatives, but only 51% are using their facilities data to guide

those efforts. That gap highlights the need for integrated solutions that align sustainability goals with broader asset strategies. Tools like Siemens Energy Manager and Stream solutions help close that gap.



Energy Manager

Provides real-time visibility into energy consumption, helping organizations track usage, reduce waste, and identify opportunities for additional savings.



Stream

Increases portfolio and asset value through utility savings and carbon reduction, supports smarter, data-driven decision making, simplifies ESG reporting, and tracks sustainability initiatives and their impact on net-zero carbon targets.

When sustainability is embedded into asset management – not just added on – it becomes a powerful driver of long-term performance and increased asset lifecycles. In a complete asset management model, sustainability should be a core focus to help your organization reduce environmental impact, lower costs, and build a more resilient future.



Client Study

Davis School District

Davis School District in Farmington, Utah reduced energy consumption by 17% despite a 40% growth in facilities and saved hundreds of thousands of dollars in the process by leveraging Siemens Energy Manager. The district was recognized as the 2024 Utah Energy Champion for Education Organizations, a prestigious award presented by the Utah Association of Energy Engineers.

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"Energy Manager makes it so easy to keep track of everything and see percentages and comparisons over time and across buildings... and **we've saved hundreds of thousands of dollars** just by being able to pinpoint billing errors."

— Ranae Stoker

Energy Auditor, Davis School District

Take your asset management to the next level with smart technologies

Together, the three pillars of complete asset management create a strong, data-driven foundation for smarter operations and long-term planning. But for organizations looking to go even further, smart technologies can unlock a new level of insight and efficiency.

Tools like IoT sensors, digital twins, and AI-driven analytics transform your data from informative to truly predictive. They give your assets a voice, helping your team identify problems before they escalate, simulate complex scenarios, and automate decisions that reduce risk and extend asset life.

1. Smart Assets and IoT

Internet of Things (IoT) devices, such as leak or vibration sensors, provide real-time updates on asset performance without requiring manual inspections. This not only saves time but also helps facilities managers detect and address issues before they escalate.

2. Digital Twins

A digital twin – a virtual replica of a physical system – allows facilities teams to visualize assets, systems, and even entire facilities in three dimensions. With digital twins, managers can simulate scenarios, optimize performance, and better understand how their assets function as a cohesive system.

3. Artificial Intelligence (AI)

AI-powered tools can analyze vast amounts of data to identify patterns, predict failures, and suggest improvements. By harnessing AI, facilities managers can move from reactive decision-making to proactive strategies that enhance efficiency and reduce costs.

Smart technologies like these don't replace your CMMS or AIP solutions, they enhance. Together, these technologies can move your organization from reactive or even preventive maintenance to a more predictive and longterm strategy. Siemens Smart Assets solution for example, an add-on to Asset Essentials, brings these innovations together.

Smart Assets enables real-time asset monitoring through IoT integration, 3D visualization with digital twins, and data-driven prioritization through predictive analytics. The result: greater clarity, faster response times, and more confident decision-making at every level.



Conclusion

A CMMS is a vital starting point for smarter asset management, but it's only one piece of a broader, more strategic approach. To truly elevate your operations and extend the life and value of your assets, you need a connected framework that brings together maintenance, capital planning, and sustainability into one unified system.

This is the promise of complete asset management. It provides a model where operational, financial, and environmental goals are all aligned through shared data, smarter planning, and predictive insight. And with the addition of smart technologies, you can give your assets a voice and allow them to “speak up”

through real-time monitoring, AI-driven analysis, and digital models – giving your teams the information they need to act swiftly before problems arise.

With the right tools in place, facilities, finance, and sustainability leaders can all work from the same playbook, making more confident decisions and driving long-term value across the entire organization. Siemens complete asset management solutions are built to support these types of connected, forward-thinking strategies.

From daily maintenance to multi-year capital plans to ESG reporting, we help you turn asset data into action – and transform complexity into clarity.



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