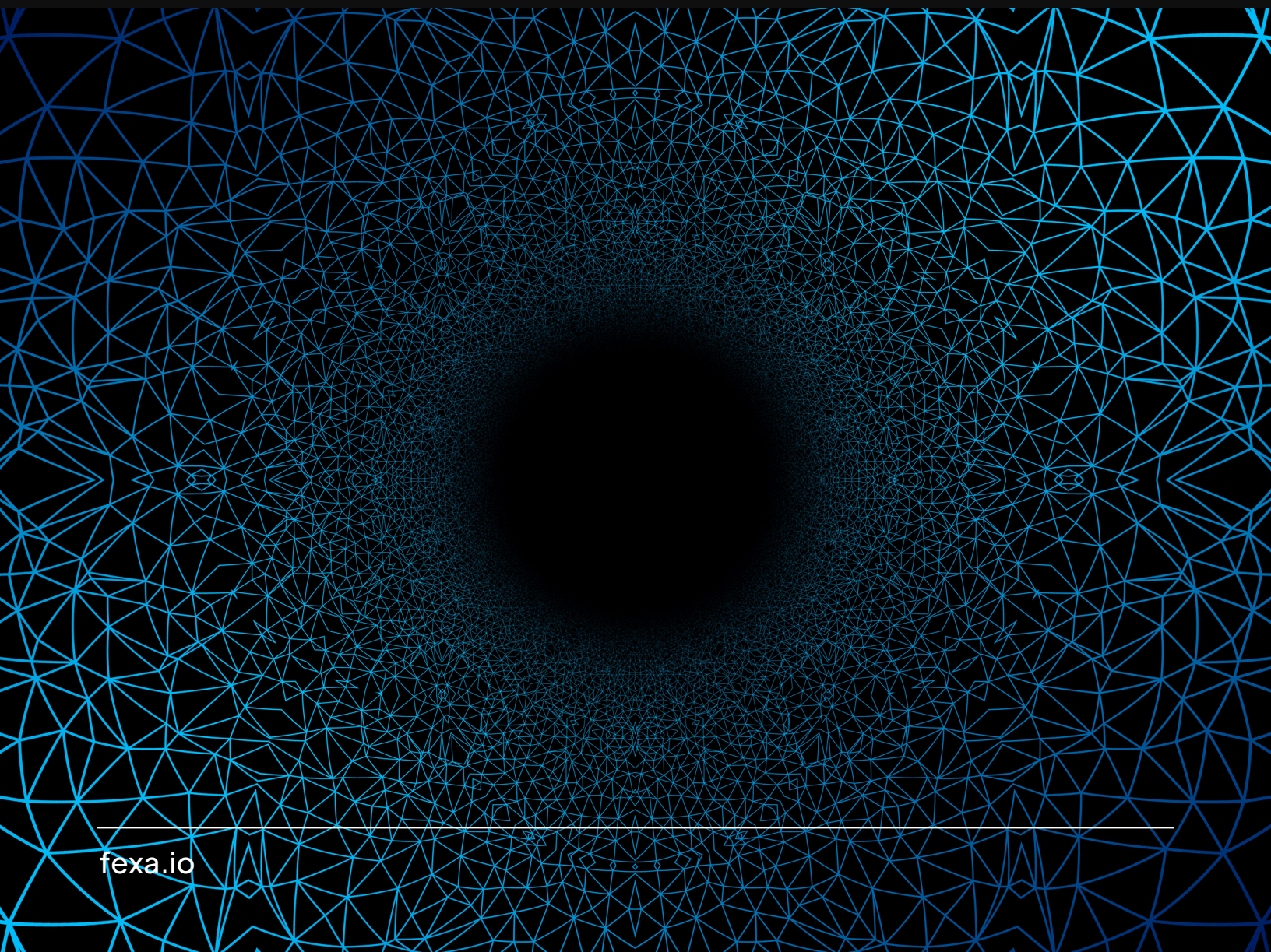
Fexa

The State of AI in Facilities Management

Trends & Predictions: 2025 and Beyond

Insights from Fexa Flex: AI Roadshow – NYC Executive Forum



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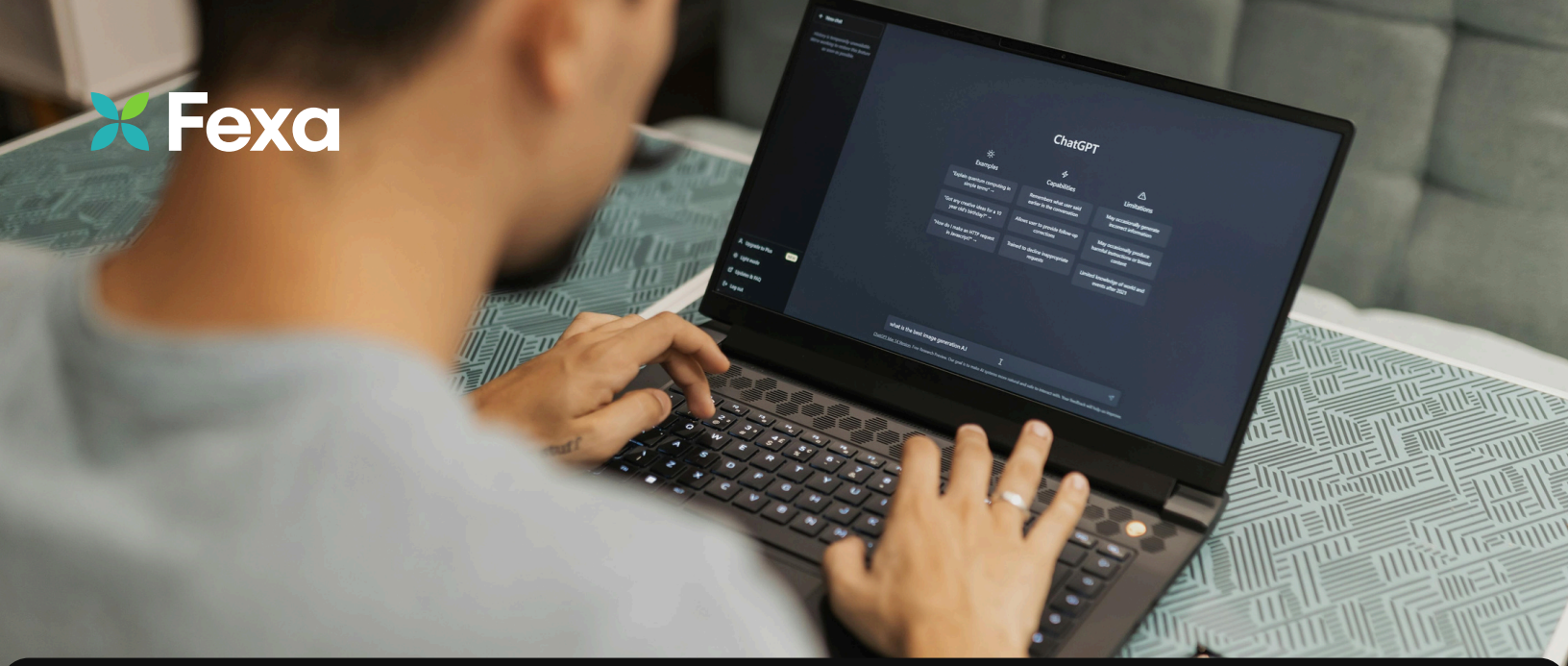


Introduction

Too many facilities managers spend their days trapped in reactive cycles, like chasing work orders, filling out forms, and coordinating vendors. They are left with little time for strategic thinking about rising operational costs, shrinking labor pools, and rapid technological advancement in the field.

Artificial Intelligence is helping facilities professionals break out of these cycles. In just a few short years, AI has moved from some theoretical promises to many practical applications. It's enough that early adopters express that AI has fundamentally altered how their facility teams approach their daily work.

According to Fexa CEO Kurt Smith, "AI is a fundamental paradigm shift for facilities management. The productivity and efficiency of the industry is going to 10x in the next five years."

This transformation is already underway. The question for facilities leaders is no longer whether to adopt AI, but how to implement it effectively and responsibly. At our Fexa Flex: AI Roadshow event on September 30, 2025, in NYC, executives from multiple industries shared their insights about how AI is changing their work and how they are leading the way in AI implementation.

What's driving the rise of AI in facilities management right now?

The convergence of three factors has created optimal conditions for AI adoption in facilities management.

1. Cloud infrastructure providers like Amazon Web Services, Microsoft Azure, and Google Cloud have made powerful computing resources accessible at scale. Companies no longer need to make massive capital investments in hardware just to deploy AI solutions.

2. Companies like OpenAI and Anthropic have developed sophisticated language models that can understand and generate human-like text. These conversational interfaces are practical for everyday use, even for individuals who don't have technical training.

3. These accessible consumer tools have essentially democratized AI. Consider the difference between IBM's Watson, which competed on Jeopardy in 2013, and today's LLM interfaces. What used to take specialized training, software, and hardware is now in the hands of everyday users.

This isn't AI's first moment in the spotlight, of course. The term "artificial intelligence" was coined in 1956, and machine learning gained traction in the 1990s. What's different now is widespread adoption and practical application. Bill Gates compared ChatGPT's significance to the developments of the personal computer and the internet — technologies that made computing accessible to the masses.

Steve Jobs' 2007 iPhone launch provided instant access to information through an intuitive interface. Similarly, conversational AI interfaces are making sophisticated technology approachable for facilities teams who may not have technical backgrounds.

The urgency behind AI adoption

The pressure on facilities teams is measurable, not theoretical. According to information shared at the Fexa Flex AI Summit, industry data reveals the scale of challenges driving organizations toward AI solutions:

- More than half of shoppers abandon a brand after one bad in-store experience
- Skilled trades face 20 job openings for every new hire expected over the next decade
- Non-compliance with EPA refrigerant regulations can result in fines up to $60,000 per day
- Operators often capture only 60-70 cents of value for every R&M dollar spent due to inefficiencies

Meanwhile, AI adoption is accelerating rapidly. Gartner predicts that **33% of enterprise software** will include agentic AI by 2028, up from less than 1% in 2024. And **85% of enterprises** are expected to implement AI agents by the end of 2025.

Organizations that adopt AI are resolving facilities-based customer problems faster and more effectively than their competitors.

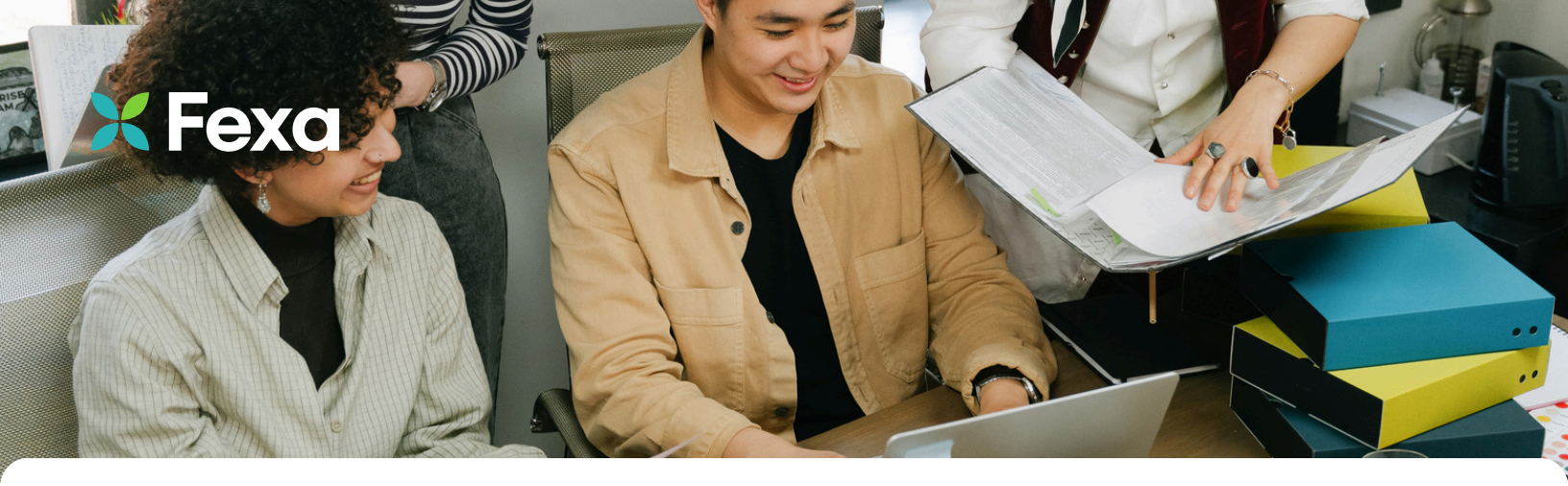
The accessibility breakthrough and the issue of responsibility

Thanks to AI, facilities teams now expect interactive technology to understand natural language and provide direct answers rather than requiring navigation through complex menus or form fields.

However, this ease of use creates new risks. At a recent Fexa event, Senior Director of Strategy and Business Development Brian Haines of Johnson Controls illustrated this tension with his farm emergency. Haines was recently named as one of IFMA's Top Global FM Influencers. When his donkey kicked through a fence late at night and experienced an emergency, he consulted ChatGPT for immediate guidance, but he didn't act on that advice alone.

"I didn't fully trust the AI answer with an animal's life," he explained. He also called a veterinarian and an experienced neighbor to verify the recommendation. His directive is clear: "Always, always check your results."

As AI becomes more conversational and confident-sounding, users must resist the temptation to accept outputs without verification — especially when decisions carry safety or financial consequences.



How is AI changing the way facility teams work day-to-day?

According to facilities pros who have already implemented AI into their processes, the most immediate impact appears in work order management.

Traditional CMMS platforms required facilities staff to navigate through multiple form fields, selecting from dropdown menus and entering data in specific formats. AI-powered systems support better work orders by using conversational interfaces instead.

A facilities manager can now type or speak naturally: "The walk-in cooler at Store 47 isn't maintaining temperature." The AI agent gathers context through follow-up questions, determines the appropriate trade and vendor, and creates a properly routed work order. Kurt Smith explains this transformation bluntly: "Forms are dead. AI is replacing them with seamless, chat- and voice-based experiences." This shift eliminates what he calls "busy work." AKA: The administrative tasks that consume facility managers' time without adding strategic value.

Real-world examples demonstrate the impact of these changes. When a technician needs troubleshooting guidance, AI can instantly query historical maintenance data and manufacturer specifications. If similar issues occurred at other locations, the system could identify patterns and provide insights about what has successfully resolved the issues previously. All of this reduces repeat visits and helps technicians fix problems on the first trip.

Duplicate work orders represent a persistent pain point that AI can remedy. AI can identify when multiple people submit tickets for the same issue, preventing unnecessary truck rolls and wasted labor. They can also flag situations where store-level staff could resolve problems through simple troubleshooting rather than calling a service provider.

Why are data and infrastructure so critical to AI success?

Here is an essential truth about working with AI: AI systems are only as good as the data they're trained on.

One of the biggest challenges of AI implementation across industries is data hygiene and management. If your data is a mess, your AI implementation will be equally messy, and your results will be less effective.

For facilities management, bad data management looks like asset information that is scattered across spreadsheets. It looks like storing some information digitally and other information on paper. AI can't provide an effective maintenance projection if maintenance histories are incomplete because of years of inconsistent record-keeping.

Structured versus unstructured data presents a fundamental challenge. Structured data follows consistent formats: asset IDs, location codes, and completion dates. AI can easily process and analyze these standardized fields. Unstructured data includes technician notes, photos, and email threads. Modern AI excels at extracting meaning from unstructured sources, but only if that information is accessible and properly contextualized.

Building data lakes for AI applications

One proven solution to this problem is to create a centralized repository for data, where diverse data streams converge. These are often called "data lakes." Brian Haines described how Johnson Controls deployed hundreds of thousands of occupancy sensors globally, creating massive datasets that track facility utilization patterns.

These sensors report every 10 milliseconds — a volume of data that humans cannot process but AI can analyze effectively.

Interoperability is another critical concern. Building management systems, CMMS platforms, energy meters, and occupancy sensors often speak different data languages. AI applications require integration layers that normalize this information into formats that algorithms can consume. Without this foundation, even the most sophisticated AI tools will fail to deliver value.

What problems is AI actually solving in FM today?

AI skeptics pose a very reasonable question: Is AI actually solving FM problems right now? Or are we just looking at futuristic hypotheticals?

Although the future of facilities work is absolutely tied up in AI technologies, the fact is that AI is here ***now***. It is already affecting how professionals do their work. Consider these current problems that are being resolved through AI today:

- Automated work order generation, eliminating manual data entry and reducing the likelihood of missing critical information.
- Fault detection and diagnostics that leverage AI's pattern recognition capabilities.
- Energy optimization, in which AI analyzes occupancy patterns, weather forecasts, and utility rate structures to make real-time decisions about HVAC operations.
- Occupancy analytics create deeper insights, which organizations can use to rightsize their real estate portfolios and optimize facility operations.
- Sentiment analysis of post-work reviews to identify service quality issues
- Speech recognition for hands-free status updates from field technicians
- Visual inspection using image recognition to assess equipment condition
- Automated vendor dispatch based on warranty status to avoid unnecessary expenses

How are companies turning AI into real ROI?

Like with any other ROI analysis, companies need to interrogate their AI adoption processes to determine what is working and what needs to be improved.

Successful AI adoption requires a structured framework for evaluating potential use cases. At our recent Fexa Flex: AI Roadshow event, Tarik Makota, a Builder at Amazon Web Services, described the DVF model (Desirability, Viability, and Feasibility) as a tool for quickly assessing whether an AI application makes business sense. After all, just because something is technologically possible doesn't mean it should be implemented.

Makota shared an example from an insurance company that wanted to automate claims processing. The technology could accomplish the task, but the AI model would cost approximately $120,000 monthly to operate compared to $80,000 for offshore human workers. The desirability and feasibility were clear, but the viability wasn't there. His advice: wait until the technology becomes more cost-effective.

However, there are many use cases in which AI is proving to provide phenomenal ROI.

Identifying high-value use cases

Organizations should prioritize AI applications that fix problems that have three distinct characteristics:

- Consume significant staff time without requiring deep expertise
- Occur frequently enough that automation delivers measurable time savings
- Have clear success metrics that enable ROI calculation

Kurt Smith describes Fexa's approach as "pattern-matching" — identifying where AI has solved similar problems in other industries and adapting those solutions for facilities management. This strategy avoids experimental applications in favor of proven approaches applied to facilities-specific challenges.

What does "agentic AI" mean for facility operations?

Agentic AI represents an evolution from simple automation to systems that can reason, make decisions, and take action on behalf of users. When you hear people talk about “AI agents,” they’re talking about agentic AI.

A traditional automation rule might route all HVAC/R work orders to a specific vendor. An agentic system, on the other hand, analyzes the specific request, considers equipment warranty status, evaluates vendor performance history, checks current workloads, and selects the optimal provider for this particular situation.

Think of the differences like this: Basic automation handles repetitive tasks following fixed rules. Machine learning systems identify patterns and make predictions. Agentic AI combines prediction with action, operating semi-autonomously within defined parameters. Kurt Smith describes this evolution in practical terms. FexaAI's Work Order Agent doesn't just collect information — it actively queries databases, identifies troubleshooting opportunities, detects duplicates, and makes routing decisions using what Smith calls a "context window" of all relevant information.

Here’s an example from Johnson Controls: They developed a mobile app using AI in two weeks that previously would have required 18 months of traditional programming. However, testing, integration, and security reviews took ten times longer than the AI development itself. AI can accelerate specific tasks dramatically, but human oversight and validation remain essential.

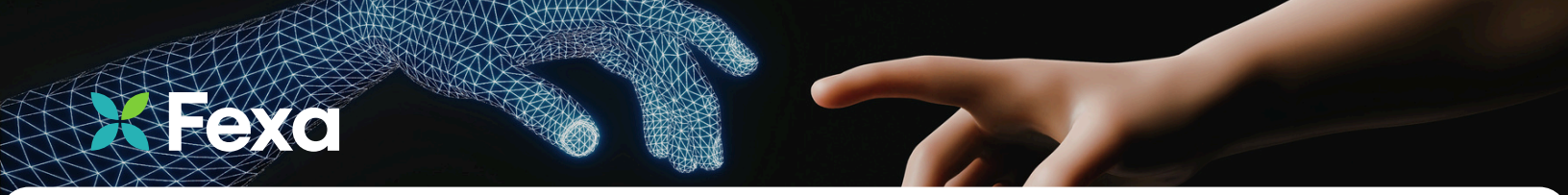
Multi-agent systems represent the next frontier. This will include specialized agents that focus on things like energy management, work order routing, or vendor performance evaluation. These agents coordinate with each other, sharing information and collectively optimizing facility operations.

How are smart buildings becoming self-healing and autonomous?

Johnson Controls' headquarters in Milwaukee provides a concrete example of how smart buildings are moving towards more autonomy.

Fifteen years ago, the facility required 25 full-time maintenance staff. Today, two people manage multiple LEED Platinum buildings equipped with smart systems that solve problems autonomously. The company didn't hire more people—it deployed technology that enabled buildings to self-diagnose and self-correct issues.

The latest Metasys building control systems include AI-based self-healing capabilities that attempt to diagnose problems and adjust operations in real time. Kurt Smith noted that while AI won't literally turn a wrench, it can control valves, adjust lighting levels, and optimize air handlers. These micro-adjustments happen constantly, responding to occupancy patterns, weather conditions, and system performance.



What role should humans still play in an AI-driven FM world?

Brian Haines offered a clear directive when he spoke to our Fexa event audience: "We still need to be the adults in the room all the time. We don't want buildings making these decisions by themselves."

When his farm donkey had that medical emergency, he consulted AI but also called a veterinarian and an experienced neighbor before acting. Owning a donkey and running multi-site facilities may feel like very different scenarios, but the same principle applies: AI can recommend specific actions, but humans must validate those recommendations before implementing them.

This is especially important for decisions that involve safety or finances.

Oversight and validation requirements

Certain decisions require human oversight regardless of AI capabilities. Safety-critical systems should have human approval gates, and of course, major capital expenditures need review even when AI provides analysis. Vendor selections benefit from AI-driven performance data but should incorporate relationship factors that algorithms can't fully assess.

Kurt Smith emphasized that AI's role is empowerment, not displacement. He referenced ATMs as an analogy—people feared these machines would eliminate bank teller jobs, but tellers instead shifted to more strategic, valuable aspects of banking.

Facilities management will follow a similar pattern. "I don't believe AI will lead to mass job destruction," Smith stated. "We're going to see the same thing here, and we don't even know yet what new jobs will be created to manage this new world."

The new jobs will likely involve managing and orchestrating AI agents. Smith envisions the Fexa platform as a place where facility managers have "full oversight and confidence that the work is getting done" without being manually involved in every step. They'll monitor dashboards showing agent performance, intervene when exceptions occur, and focus on strategic decisions about portfolio-wide optimization.

How can organizations adopt AI responsibly and securely?

Responsible AI deployment requires guardrails that prevent unintended consequences. Companies need to care about these consequences because they can get expensive and time-consuming to correct, especially if they are unnoticed for an extended period of time.

Solid AI usage creates strong audit trails, which must document every decision an AI agent makes. This creates accountability and enables individuals to quickly review the trail when an issue arises. For example, if an AI system routes work to the wrong vendor or approves an inappropriate expense, teams need visibility into the reasoning behind that outcome.

Responsible AI usage also means prioritizing data privacy. When a company deploys hundreds of thousands of occupancy sensors, it's normal for employees to express resistance over surveillance concerns. If the company is transparent about how they are protecting users' data and privacy, they can replace skepticism with acceptance.

Ethical deployment principles

AI systems should:

- Amplify human capabilities rather than replace oversight for critical decisions
- Operate transparently so users understand how recommendations are generated
- Be tested thoroughly before deployment, with attention to edge cases and failure modes

It's imperative to engage employees early in AI adoption, as many workers fear job elimination. Organizations should frame AI as an augmentation technology that makes existing staff more effective rather than as a replacement strategy.

Starting with a single team committed to delivering value allows organizations to learn and iterate before broader deployment, creating internal champions who can demonstrate AI's value to skeptical colleagues.

Where is AI in facilities management headed next?

Kurt Smith's prediction is bold and specific: facility management productivity will increase tenfold within five years. This transformation will stem from AI agents handling increasingly complex tasks so that humans get to focus on strategic planning and high-value decision-making.

The next evolution involves what Smith calls a "holistic facility agent" that acts across entire portfolios. This agent will ingest multiple data streams, including:

- building management systems
- historical maintenance records
- asset-level performance data
- surface insights

Combined, this will help facility teams improve performance across their entire real estate footprint. This AI future will enable executives to ask strategic questions like "Which locations underperform for their market?" or "Where should we prioritize capital investment for maximum impact?"

Multimodal AI and integrated ecosystems

Current AI agents primarily process text, but the next generation will seamlessly handle images, video, voice, and other data types. A facilities manager could take a photo of a malfunctioning piece of equipment, and the AI would identify the model, diagnose the problem, and initiate a work order with full context.

It's also important to consider how AI can support the changes and trends that are already happening across physical retail locations. Today's retail stores are providing more than just a shopping experience; they are focused on becoming brand experiences.

Companies like Sweetgreen are experimenting with the Infinite Kitchen concept, while Chipotle explores similar models. This means that facilities teams must maintain and transform these spaces quickly as business needs evolve. AI provides the efficiency boost necessary to keep pace with these changes.

The future of AI in facilities work is exciting, especially to those who are early adopters. Fully integrated FM ecosystems will connect work order management, asset tracking, energy optimization, occupancy analytics, vendor management, and financial systems into a unified platform.

AI agents will operate across these systems, optimizing not just individual processes but the interactions between them. When an asset approaches the end of its life, agents will automatically trigger capital planning processes, coordinate vendor evaluations, schedule replacements during low-occupancy periods, and update financial forecasts.

The AI era is here

Kurt Smith is unequivocal about the trajectory of AI in FM: "We've fully shifted into the AI era. The tools built 25 or 30 years ago weren't made for this new world—full stop." His message to facilities leaders is direct: partner with technology providers built for this new era or risk falling behind competitors who embrace the transformation.

The facilities management industry stands at a defining moment. Organizations that successfully implement AI will achieve dramatic productivity gains, cost savings, and competitive advantages. Those who delay risk being unable to catch up as the gap widens.

Ready to transform your facilities operations with AI?

Fexa's AI-powered platform eliminates busywork, increases spend efficiency, and frees your team to focus on strategic priorities. From conversational work order creation to intelligent vendor routing and duplicate detection, FexaAI delivers the productivity gains that Kurt Smith predicts will define the next era of facilities management. See how AI can work for your portfolio — request a demo today. your

Fexa Flex: AI Roadshow - NYC Executive Forum was held on September 30, 2025 in Manhattan, and we were joined by executives from brands like Walgreens, Bath & Body Works, Burlington, Chipotle Mexican Grill, Dollar Tree, Foot Locker, J. Crew, Michaels, Murphy Oil, Panda Express, Sweetgreen, EssilorLuxottica, and Tractor Supply Company to focus on AI in facilities management. Follow us on LinkedIn to stay updated on upcoming Fexa events!