

PROPTECHOS RESEARCH PAPER

Digitizing Work: How AI Agents will perform 40% of operational work in real estate



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1. Executive summary

The real estate industry has spent two decades digitizing data. The next transformation is digitizing work itself.

This paper presents findings from a comprehensive mapping of 289 distinct operational processes across the real estate value chain — from alarm handling and maintenance workflows to energy management, vendor coordination, and ESG compliance. Each process was classified by its potential for AI agent automation, creating the most granular analysis to date of where autonomous software can replace, augment, or support human work in building operations.

40%

of the total operational workload in real estate.

The findings are striking. Of the 289 processes mapped, 25.6% can be fully automated by AI agents operating autonomously, and an additional 27.7% are largely automatable — meaning AI performs the primary work with minimal human oversight. When weighted by operational effort, AI agents can execute approximately 40% of the total operational workload in real estate.

This finding does not stand in isolation. Morgan Stanley Research, analyzing 162 REITs and commercial real estate firms with a combined \$92 billion in labor costs, independently concluded that 37% of tasks across the sector can be automated — representing up to \$34 billion in efficiency gains by 2030. McKinsey's Global Institute estimates that automation applied to knowledge work could unlock \$430 to \$550 billion in annual value globally across real estate, construction, and development.

The convergence is clear: multiple independent analyses arrive at the same conclusion. Roughly four out of every ten units of operational work in real estate can be performed by software.

But having the potential is not the same as capturing it. Most organizations that have invested in building management systems, IoT, and digital twin platforms find themselves data-rich and still operationally manual. The gap is not data availability. It is the absence of an execution layer that translates data into action — and the organizational foundation of clean, connected data that an execution layer requires.

Realizing this value requires more than piloting chatbots or deploying point solutions. It requires an execution platform — an infrastructure layer where AI agents can monitor building systems, interpret data, make decisions within defined parameters, trigger actions inside existing workflows, escalate to humans when necessary, and continuously learn from outcomes.

ProptechOS is that platform. Purpose-built as the operational layer for real estate, ProptechOS connects building management systems, IoT infrastructure, maintenance platforms, and enterprise systems into a unified environment where AI agents can act — not merely analyze.

The operating model of the future is not a choice between human workers and AI. It is a collaboration model where AI agents handle the digital workflow lifecycle — everything before physical intervention and everything after — while human professionals focus on judgment, relationships, physical work, and strategic decisions. AI owns the workflow; humans own the moment.

For real estate leaders, the strategic question has shifted from whether AI will transform operations to whether their organization has the platform architecture to capture that transformation — and the data foundation to make it operational today.

2. The shift from digitalization to agentic operations

The dashboard era is over

For the past decade, the dominant technology narrative in real estate has been about data: collecting it, visualizing it, and presenting it on dashboards. Building management systems generate millions of data points daily. IoT sensors proliferate across portfolios. CMMS platforms accumulate work order histories. Energy monitoring tools track consumption in real time.

The result is an industry awash in information — and still drowning in manual work.

A facilities manager today may have access to a sophisticated BMS dashboard showing that a rooftop unit is alarming. But the subsequent workflow — determining whether the alarm is genuine, classifying its severity, identifying who should respond, creating a work order, dispatching a technician with the right context, verifying the repair, and closing out the financial records — remains overwhelmingly manual. The data is digital. The work is not.

This is the central paradox of proptech's first wave: buildings got smarter, but operations didn't.

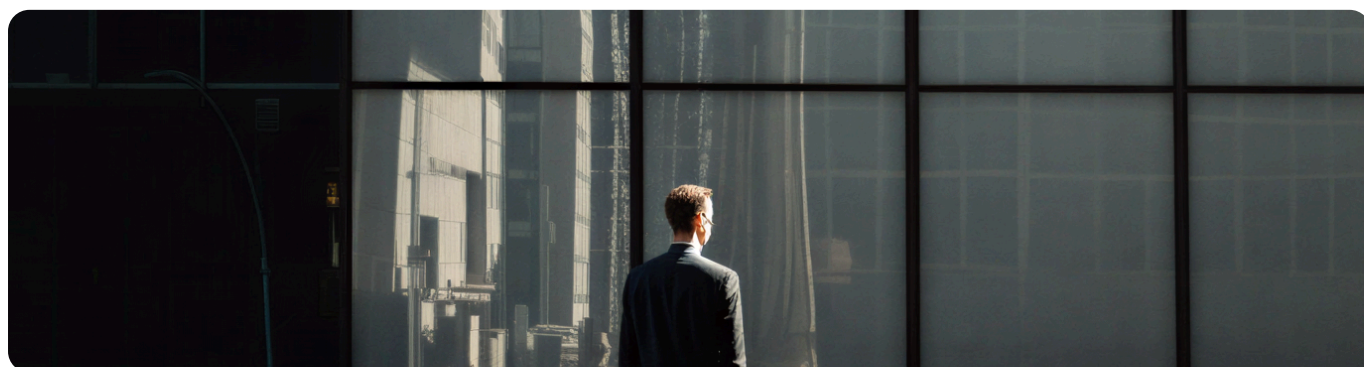
From insights to execution

McKinsey's research on agentic AI in real estate captures this inflection precisely. The shift, as their analysts describe it, is from "help me understand" to "help me get it done."

The first generation of AI in real estate summarized leases, generated reports, and answered questions faster. These are valuable capabilities, but they rarely transform how work gets done inside core systems.

Agentic AI is fundamentally different. An agent is not a chatbot responding to prompts. It is a system that can plan, remember context, integrate with operational platforms, and execute multi-step workflows with appropriate governance. When a chiller alarm fires at 2:00 a.m., an agentic system does not generate a notification and wait. It correlates the alarm with condenser water temperature trends, identifies probable root cause, checks the maintenance history, creates an enriched work order, dispatches the closest qualified technician with a full context package, and begins monitoring post-repair performance — all before a human has finished reading the alert.

This is the transition from digitalization to agentic operations. And it represents the largest operational productivity opportunity in the history of commercial real estate.



Why now

Three forces have converged to make this moment different from previous waves of proptech optimism.

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First, AI capabilities have crossed the threshold from analysis to action. Large language models can now interpret unstructured data — tenant complaints, maintenance notes, alarm descriptions — with sufficient reliability to drive workflow decisions. Agentic frameworks allow these models to operate within structured processes, not just respond to ad hoc queries.

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Second, the data infrastructure is finally in place. After years of investment in BMS, IoT, CMMS, and digital twin platforms, most commercial portfolios now have the underlying data streams that AI agents need to operate. The gap is no longer data availability. It is the absence of an execution layer that translates data into action.

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Third, economic and regulatory pressure demands it. Rising operating costs, persistent labor shortages in facilities management, and intensifying ESG compliance requirements are compressing margins across the industry. The EU Energy Performance of Buildings Directive, recast in 2024 and phasing in requirements through 2030, adds mandatory building renovation and reporting obligations to portfolios across Europe. Concurrently, EU member states are expanding energy benchmarking and carbon disclosure requirements. Organizations that manage compliance through manual processes will face increasing cost and risk exposure. Those that can automate compliance monitoring and reporting while operating more efficiently with the same or fewer resources will outperform.

3. Research methodology

Scope and approach

To quantify the automation opportunity with precision, we conducted a bottom-up mapping of operational processes across the real estate value chain. The research identified and classified 289 distinct processes spanning the full spectrum of building operations and facilities management.

The process inventory was developed through a structured combination of sources: operational data and workflow documentation from ProptechOS customer deployments across Nordic commercial and healthcare property portfolios; established FM industry frameworks including EN 15221 and ISO 41001; and expert review by ProptechOS operational specialists with direct experience managing building operations at scale. Each process was validated against observed operational practice, not theoretical frameworks.

The mapping covered 15 operational domains: preventive maintenance, reactive maintenance, predictive maintenance, regulatory compliance, energy management, space management, cleaning and janitorial, security and access control, vendor management, tenant services, capital planning, health safety and environment, document management, financial management, sustainability and ESG, smart building and IoT management, and workplace experience.

For three core operational workflows — alarm handling, work order lifecycle, and error and fault management — the analysis went deeper, decomposing each workflow into its atomic process steps. This granular decomposition produced 94 atomic steps across the three workflows, revealing precisely where within a workflow AI can act and where human intervention remains necessary.

Classification framework

Each of the 289 processes and 94 atomic steps was classified into one of four automation categories:

Fully automatable

AI agents can perform the process end-to-end without human involvement under normal operating conditions. Examples include BMS alarm filtering, energy consumption anomaly detection, SLA compliance calculation, and automated vendor invoice matching.

Largely automatable

AI agents perform the primary work, but human oversight, approval, or exception handling is required at defined checkpoints. Examples include root cause analysis with AI-generated hypotheses requiring human validation, corrective action approval above cost thresholds, and regulatory report pre-population requiring compliance officer sign-off.

Partially automatable

AI provides meaningful assistance — data assembly, recommendation, guidance, or monitoring — but a human drives the process. Examples include on-site diagnosis (AI provides hypothesis; technician confirms physically), quality inspections, and complex procurement negotiations.

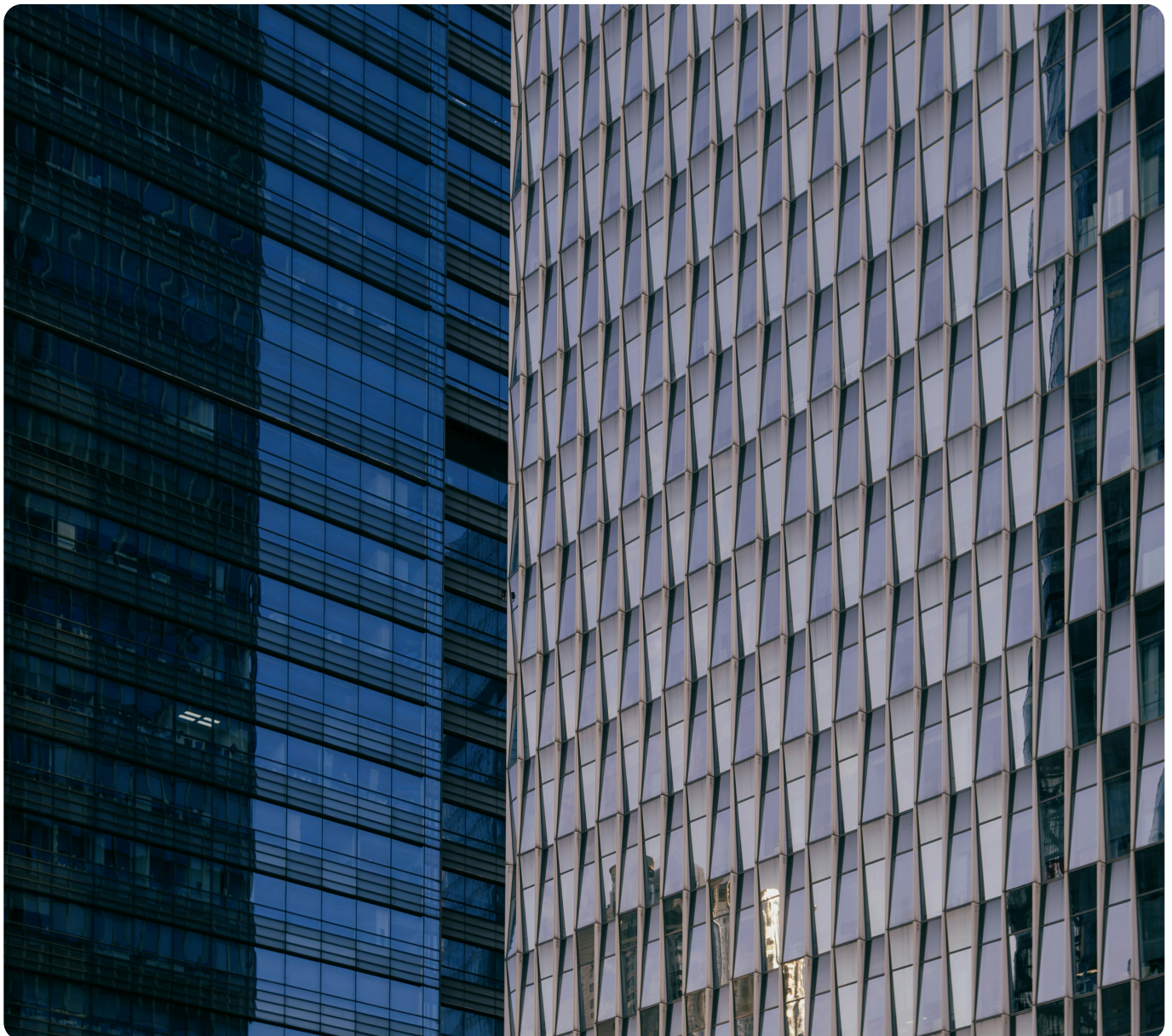
Minimally automatable

The process is fundamentally physical, interpersonal, or strategic in nature. AI contribution is limited to peripheral support. Examples include physical repair execution, emergency evacuation leadership, and organizational change management.

Validation approach

The classification was informed by current technology capabilities as assessed against production-grade AI systems, not theoretical future capabilities. Each classification was cross-referenced against the current industry state for that process — what is standard practice today, what is emerging, and what remains frontier.

The resulting dataset provides a process-by-process view of the automation landscape in real estate operations, creating a rigorous foundation for the aggregate findings that follow.



4. Key finding: AI agents can perform 40% of operational work

The aggregate picture

Across all 289 mapped processes, the distribution of automation potential is as follows:

Automation level	Process count	Share of total
Fully automatable	74	25.6%
Largely automatable	80	27.7%
Partially Automatable	129	44.6%
Minimally automatable	6	2.1%

More than half of all operational processes — 53.3% — fall into the fully or largely automatable categories. In these processes, AI agents either work autonomously or perform the primary work with human oversight limited to approvals and exception handling.

When the analysis accounts for the proportion of work within each process that AI can perform — recognizing that "largely automatable" processes still require some human input, and "partially automatable" processes still contain sub-steps where AI contributes meaningfully — the weighted estimate of AI-executable work is approximately 40% of total operational effort.

Scope and approach

This finding aligns closely with independent research from Morgan Stanley, which analyzed tasks across 162 REITs and commercial real estate firms representing 525,000 employees and \$92 billion in labor costs. Their conclusion: 37% of tasks across the sector can be automated, concentrated in management, administrative support, sales, and installation/maintenance functions.

The directional convergence between our bottom-up process mapping (289 processes, four-tier classification, weighted at ~40%) and Morgan Stanley's top-down labor task analysis (~37%) provides strong mutual validation. Neither analysis was conducted with knowledge of the other. Both arrive at the same order of magnitude.

McKinsey's Global Institute estimates the total value at stake even higher, projecting \$430 to \$550 billion in annual value from automation applied to knowledge work across real estate, construction, and development globally. Their analysis emphasizes that this value does not materialize from scattered pilots but from end-to-end domain redesign — precisely the approach this research advocates.

The core operational workflows: a deeper look

The atomic process analysis of the three core workflows reveals an even more compelling picture:

Workflow	Total steps	Fully automatable	Largely automatable	Partially automatable	Minimally automatable
Alarm handling	36	26 (72%)	5 (14%)	4 (11%)	1 (3%)
Work order lifecycle	34	23 (68%)	6 (18%)	4 (12%)	1 (3%)
Error and fault management	24	7 (29%)	10 (42%)	6 (25%)	1 (4%)
Total	94	56 (60%)	21 (22%)	14 (15%)	3 (3%)

Across these 94 atomic steps, 82% are fully or largely automatable. The pattern reveals a clear structural insight: the digital-physical divide is the dominant automation boundary.

The digital-physical divide

Virtually every step before physical site arrival and after repair completion is fully or largely automatable. The physical work itself — turning a wrench, inspecting a component, replacing a part — remains minimally automatable. This creates an operating model where AI agents own the entire workflow lifecycle except the physical intervention, generating continuous intelligence before, during (as a copilot), and after the human technician's work.

The alarm triage environment at Locum — the healthcare property company responsible for Stockholm's acute care hospitals — illustrates this pattern concretely. Before AI, Locum's alarm dashboard was, in the words of Thomas Ahlberg, Technical Manager, "extensive and unmanageable over time": a high-volume daily backlog that facility technicians struggled to sort through manually, with no mechanism to surface correlations when multiple faults occurred simultaneously.

This is precisely the pre-intervention workflow that AI agents are structurally designed to own. The technician's value lies in the physical diagnosis and resolution that follows — not in the triage, classification, and routing that precedes it.

This is the architecture of the future operating model: AI handles the 90% of workflow that is informational, coordinative, and analytical. Humans handle the 10% that requires physical presence, professional judgment, or interpersonal skill.



90% AI agents — informational, coordinative, analytical

10% Humans —
physical presence, judgment,
interpersonal skill

5. High-value domains

Not all operational domains offer equal automation potential. Our analysis identifies six domains where AI agents create disproportionate value — either because automation potential is exceptionally high, because current manual effort is exceptionally wasteful, or both. The financial impact of these domain-level gains is quantified in section 6.

Energy management

Energy management is the single most automatable domain in real estate operations. Processes such as HVAC optimization, lighting controls, peak demand management, utility monitoring, energy benchmarking, and fault detection are overwhelmingly fully automatable. AI agents operating continuously can optimize building energy consumption in ways that human operators, reviewing dashboards intermittently, structurally cannot match.

The value is demonstrated in production.

Vasakronan, Sweden's largest commercial property owner, achieved a 36% reduction in district cooling and heating costs at Kista Science Tower using continuous automated optimization — a saving of 200,000 SEK per year at a single asset. Scaled across a majority of Vasakronan's Stockholm portfolio, the projected annual savings from district heating and cooling alone exceed 6 MSEK.

At Eufemia, a mixed-use development in Oslo, AI-driven energy management delivered a 31% reduction in energy consumption, equivalent to 292,000 kWh annually. These are not projected savings. They are measured outcomes from operating portfolios.

The value of energy automation is twofold: direct cost reduction through lower utility spend, and regulatory compliance value as energy benchmarking and carbon reporting mandates expand across European markets.

Predictive maintenance and condition monitoring

Vibration analysis, motor current analysis, anomaly detection, remaining useful life prediction, and IoT sensor data analysis are all fully automatable through AI. These processes represent a structural shift from calendar-based maintenance — where equipment is serviced on fixed intervals regardless of condition — to condition-based and predictive maintenance, where interventions are triggered by actual equipment state. The economic case is compelling: fewer unnecessary maintenance events, fewer emergency breakdowns, longer asset life, and reduced spare parts inventory.

Alarm handling and triage

The alarm lifecycle is ripe for transformation. Industry studies consistently find that 80 to 95% of BMS alarms are non-actionable — nuisance alarms, chattering sensors, and cascading alerts from single root causes. Today, human operators wade through this noise manually.

Locum's experience is instructive. Hospitals generate a high volume of alarms every day. Before AI, Locum's technicians faced an alarm backlog that was impossible to manually triage, with no way to identify when several faults were occurring simultaneously and should be addressed as a correlated group rather than individual events. AI agents address this directly: analyzing multiple alarms in parallel, identifying correlations across systems, and surfacing what requires urgent human attention. Locum has also encountered a related problem that AI agents are now addressing — when sensor data stops flowing, the gap can go undetected for days, meaning operational decisions are made on absent or stale information. AI agents detect data flow failures as they occur and alert technicians before silent errors propagate.

Vendor and financial management

Invoice processing, purchase order management, spend analysis, SLA monitoring, performance scorecards, and insurance certificate tracking are heavily automatable. These processes are high-volume, rule-bound, and currently consume disproportionate staff time relative to their complexity. AI agents can execute three-way invoice matching, flag contract rate violations, auto-code expenses to the correct general ledger, and generate variance reports — eliminating significant back-office labor.

Compliance and regulatory management

Permit tracking, certification management, regulatory submission preparation, energy benchmarking reporting, and environmental compliance monitoring are largely or fully automatable. The value here extends beyond labor savings: AI agents reduce the risk of missed deadlines, lapsed permits, and compliance violations — failures that carry financial penalties and reputational consequences.

The capacity gain in compliance-related work can be substantial. Locum's experience provides a concrete reference point: using AI tools, one specialist now produces regulatory inspection reports in four hours — work that previously required a two-day external consultant engagement, plus the lead time to schedule and procure that engagement. The efficiency gain applies not only to the hours saved, but to the elimination of procurement overhead and external dependency for a recurring compliance workflow.

Tenant services and communication

Help desk triage, occupant communications, satisfaction surveys, complaint management, and service request processing can be substantially automated. NLP-powered intake systems parse requests with high accuracy, detect urgency from language cues, match requests to open work orders, and route to the correct workflow. Automated tenant notifications — contextual, personalized, and timely — improve the service experience while reducing manual communication burden.



6. Business impact

The findings presented in sections 3 and 4 translate into four measurable dimensions of organizational performance: the capacity of human professionals to do more, the direct reduction of operating costs, the structural improvement of response time, and the ability to grow a portfolio without growing headcount proportionally.

Productivity

The most immediate and significant impact of AI agent deployment is the extension of human professional capacity. When AI agents absorb the coordinative, administrative, and analytical components of operational work — alarm triage, work order generation, compliance tracking, reporting — the same team can manage a materially larger portfolio, or the same portfolio with higher service quality and lower error rates.

This productivity gain is not distributed evenly across roles. It concentrates in positions that are primarily coordinative in nature: alarm monitoring staff, dispatchers, help desk operators, compliance coordinators, reporting analysts, and accounts payable clerks. These roles are not displaced. Their function shifts from executing tasks to supervising AI agents that execute tasks — a transition that raises the strategic value of each position while reducing the manual burden that occupies the majority of time today. For organizations facing persistent labor shortages in facilities management, this is not a marginal efficiency gain. It is a structural solution to a structural constraint.

Morgan Stanley's analysis of the sector corroborates this finding at scale. Examining 162 REITs and commercial real estate firms representing 525,000 employees and \$92 billion in aggregate labor costs, their research found that self-storage operators deploying AI-powered staffing models reduced on-site labor hours by 30% while sustaining or improving both customer and employee satisfaction scores.

Cost reduction

Direct cost savings emerge from several independent channels, and the evidence from production deployments is increasingly concrete. Energy optimization is the most quantifiable.

Vasakronan achieved a 36% reduction in district cooling and heating costs at Kista Science Tower — 200,000 SEK per year at a single asset, with projected portfolio savings exceeding 6 MSEK annually once scaled across Stockholm properties. At Eufemia, AI-driven energy management delivered a 31% reduction in consumption, equivalent to 292,000 kWh annually.

Predictive and condition-based maintenance represents a second, less immediately visible source of cost reduction. By shifting from calendar-based service intervals to interventions triggered by actual equipment state, organizations eliminate unnecessary maintenance events, reduce emergency repair frequency, and extend asset life. When combined with automated work order generation and dispatch, the administrative overhead of the maintenance cycle is substantially reduced as well.

Locum offers a concrete illustration of what workflow automation means for specialist capacity. Using AI tools, one of Locum's specialists now produces regulatory inspection reports in four hours — work that previously required a two-day external consultant engagement, plus the lead time to schedule and procure that engagement. The efficiency gain applies not only to the hours saved, but to the elimination of procurement overhead and contractor dependency for a recurring compliance workflow.

36%

lower district cooling and heating at Kista Science Tower — 200 000 SEK per year

31%

lower energy consumption at Eufemia — 292 000 kWh per year

Response time

AI agents operate without interruption and respond to building events in seconds, not hours. This structural difference in response time has direct operational consequences that cannot be replicated through improved staffing alone.

In alarm management — one of the most time-sensitive workflows in building operations — the gap between AI and manual response is most acute. Locum describes their alarm environment before AI as an extensive and unmanageable backlog: a high daily volume of alerts that facility technicians struggled to manually triage, with no mechanism to surface correlations between simultaneous faults. AI agents address this by analyzing multiple alarms in parallel, correlating events across systems, and surfacing what requires urgent human attention — converting an unmanageable queue into a prioritized, actionable list.

Locum's technical teams also encountered a related failure mode: when sensor data stopped flowing, the gap could go undetected for days — meaning operational decisions were being made on absent or stale information without anyone realizing it. AI agents now detect data flow failures as they occur and notify technicians before silent errors propagate into decisions.

For SLA-governed environments, particularly commercial offices, retail, and healthcare facilities, faster detection and dispatch translates directly into fewer breaches, lower penalty exposure, and demonstrably higher service levels for occupants.

Service quality

The commercial case for AI in tenant-facing operations rests not on technology capability, but on occupant experience and its relationship to retention. When operational issues are detected before tenants notice them, when notifications are accurate and timely, and when requests are routed and resolved faster, the quality of the tenant relationship improves in ways that influence lease renewal decisions.

Locum has begun sharing a portion of its AI agent dashboard capability with tenants — clinical and administrative staff in Stockholm's hospital facilities — and the response has been strongly positive, based on data Locum already possessed.

Thomas Ahlberg, Technical Manager at Locum, identifies proactive fault resolution as among the most important outcomes of the pilot: resolving issues before the customer has discovered they exist. In a healthcare environment where operational continuity directly affects patient care, this is a qualitatively different standard of facilities performance.

The same dynamic operates in commercial real estate, where tenant satisfaction has measurable influence on renewal rates and the reputational positioning of an asset in its market. AI-driven service delivery raises the baseline of responsiveness without requiring additional staffing — and raises it consistently, across shifts and property types, without the variance that manual service models produce.

Scalability

The most strategically significant dimension of AI agent adoption is the change it introduces in how portfolio growth is cost.

Under a conventional facilities management operating model, growth scales approximately linearly with headcount. Each additional building requires incremental coordinative capacity — more alarm monitoring, more work order handling, more reporting, more compliance administration. The marginal cost of portfolio expansion remains high regardless of operational maturity.

An operating model built on AI agent infrastructure scales differently. The incremental cost of adding a building to a platform-managed portfolio is a fraction of the incremental cost under a manual model, because the coordinative and administrative load of that building is absorbed by existing agent infrastructure rather than new staff.

The human professionals added to support growth focus on physical intervention, relationship management, and strategic oversight — the work that does not scale through software.

Locum's pilot experience illustrates how rapidly this model becomes viable once the data foundation is in place. Building ProptechOS integrations across the project now proceeds approximately 60 times faster than a year ago — a two-way integration against a new system was completed in three hours.

Thomas Ahlberg's assessment is direct: scaling the agentic AI model to all acute care hospitals in Stockholm is a realistic near-term ambition. The constraint is organizational readiness, not platform capacity.



7. Why platform architecture matters

The integration imperative

AI agents cannot operate in isolation. An agent that can read BMS data but cannot write work orders is limited to generating recommendations — the same limitation that has constrained the impact of analytics platforms for years. An agent that can create work orders but cannot check parts inventory, dispatch technicians, or monitor post-repair performance captures only a fraction of the available value.

The full automation potential revealed by our research — 40% of operational work — is only accessible when AI agents can operate across systems: BMS, CMMS, IoT platforms, energy management, vendor portals, lease administration, accounting systems, tenant portals, and document management. This requires a platform layer that abstracts the complexity of integrating heterogeneous building systems and provides AI agents with a unified, semantically consistent operational environment.

McKinsey's research on scaling agentic AI reinforces this point. Their analysis finds that fewer than 10% of organizations have scaled AI agents to deliver tangible value, with data integration and semantic consistency identified as primary barriers. The organizations that succeed are those that invest in a platform architecture featuring a shared semantic layer — an ontology that defines what entities are, how they relate, and what rules govern them — enabling agents to operate reliably across systems.

The Locum implementation demonstrates what this looks like in practice. Rather than replacing existing systems — a path explicitly ruled out as too expensive and time-consuming — ProptechOS became the connective layer that gives all Locum's systems a common language and shared environment. Sensors in the ProptechOS environment now trigger work orders directly in Locum's facility management system, Faciliate: the complete feedback loop from alarm detection to completed action and feedback has been proven end-to-end.

Building integrations that previously took weeks now complete in hours — a two-way integration against a new system was delivered in three hours, at approximately 60 times the speed of equivalent work a year earlier. This is the integration imperative made operational.



Fewer than 10%

of organizations have scaled AI agents to deliver tangible value

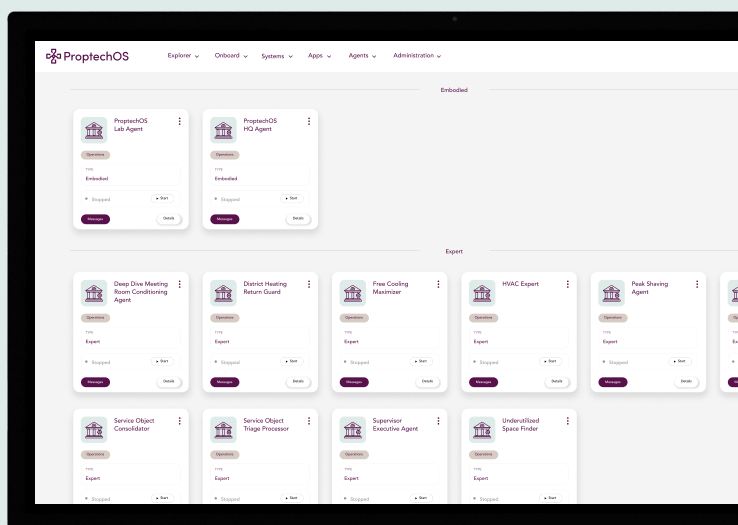
What a platform must provide

An effective platform for AI agent operations in real estate must deliver several capabilities. It must provide a unified data model that normalizes data from diverse BMS vendors, IoT protocols, and enterprise systems into a consistent ontology. It must enable bidirectional integration — not just reading data from building systems, but writing back: adjusting setpoints, creating work orders, triggering notifications, and executing

approved actions. It must offer workflow orchestration that allows AI agents to execute multi-step processes with defined governance, escalation rules, and human approval checkpoints. It must provide an audit trail that satisfies both operational accountability and regulatory compliance requirements. And it must support continuous learning, where the outcomes of AI agent actions feed back into models that improve future performance.

ProptechOS was designed to meet precisely these requirements.

As the operational layer connecting building infrastructure to enterprise systems, ProptechOS provides the environment where AI agents can move from analysis to execution — performing real work inside real workflows, at portfolio scale.



8. The operating model of the future

From org chart to orchestration model

The traditional facilities management operating model is organized around functional roles: building engineers, dispatchers, help desk staff, compliance officers, energy managers, AP clerks. Each role owns a slice of the workflow and passes work to the next. Coordination is manual. Information is fragmented. Response times are bounded by human availability.

The emerging operating model is organized around workflows, not roles. AI agents own workflow execution end-to-end, and humans are deployed where they add irreplaceable value: physical intervention, complex judgment, relationship management, and strategic decision-making.

Three tiers of human-AI collaboration

Our research suggests three distinct tiers of collaboration that will define the future operating model.

The traditional facilities management operating model is organized around functional roles: building engineers, dispatchers, help desk staff, compliance officers, energy managers, AP clerks. Each role owns a slice of the workflow and passes work to the next. Coordination is manual. Information is fragmented. Response times are bounded by human availability.

The emerging operating model is organized around workflows, not roles. AI agents own workflow execution end-to-end, and humans are deployed where they add irreplaceable value: physical intervention, complex judgment, relationship management, and strategic decision-making.

Tier 1:

AI-autonomous.

Processes where AI agents operate independently under defined parameters with no routine human involvement. This tier encompasses the 74 fully automatable processes identified in our research: alarm filtering, energy optimization, SLA calculation, invoice matching, KPI reporting, compliance tracking, and similar functions. Humans define the parameters and review exceptions. AI does the work.

Tier 2:

AI-primary, human-supervised.

Processes where AI performs the primary work but human approval, validation, or exception handling is required at defined gates. This tier encompasses the 80 largely automatable processes: root cause analysis with human validation, corrective action approval, regulatory submission review, budget forecasting, and similar functions. AI does 80% of the work. Humans provide the 20% that requires judgment, accountability, or authority.

Tier 3:

Human-primary, AI-assisted.

Processes where humans drive the work but AI provides meaningful support: data assembly, recommendation, real-time guidance, or monitoring. This tier encompasses the 129 partially automatable processes: on-site diagnosis, physical repair, quality inspection, contract negotiation, capital project management, and similar functions. Humans do the work. AI makes them faster, better informed, and more consistent.



"The role of the facility technician is already shifting — from someone with a wrench in their back pocket to someone who reads data, interprets it, and acts on AI-generated recommendations. The whole industry is in the middle of that transition."

— Thomas Ahlberg, Technical Manager, Locum

The role of the human professional

In this model, the human professional's role becomes more valuable, not less. Freed from routine data processing, coordination, and administrative tasks, facilities professionals focus on what they do best: diagnosing complex problems that require physical presence, making judgment calls in ambiguous situations, managing relationships with tenants and vendors, and developing strategic plans for asset performance.

The technician who today spends a substantial portion of their time on paperwork, travel coordination, and parts lookup instead spends that time on diagnosis and repair — supported by an AI copilot that provides real-time guidance, wiring diagrams, troubleshooting trees, and historical context.

The facilities manager who today spends hours generating reports and reviewing alarm logs instead focuses on interpreting AI-generated insights, making capital allocation decisions, and building tenant relationships.

The result is not fewer professionals, but more effective ones — managing larger portfolios, delivering higher service quality, and operating with greater strategic impact.

9. Conclusion: the case for acting now

The evidence presented in this paper leads to a clear strategic conclusion. AI agents can perform approximately 40% of operational work in real estate today. This finding is validated by our proprietary mapping of 289 processes, corroborated by Morgan Stanley's independent analysis of 37% task automation potential across 162 firms, and reinforced by McKinsey's estimate of \$430 to \$550 billion in global value at stake.

It is grounded in production deployments across commercial, healthcare, and mixed-use real estate portfolios that are already generating measurable results.

The technology is ready. The economic case is compelling. The question is no longer whether to adopt agentic AI in real estate operations. It is how quickly your organization can build the platform infrastructure required to capture this value.

Three realities make urgency appropriate.

01

First, the advantages compound. Organizations that deploy AI agents earlier accumulate operational data that improves agent performance over time. Every resolved alarm, every completed work order, and every optimized energy sequence is training data that makes the system smarter. Late adopters face a widening capability gap that becomes increasingly difficult to close.

02

Second, talent scarcity is structural. The facilities management industry faces persistent labor shortages, particularly in skilled trades. An operating model that extends the capacity of every human professional — allowing smaller teams to manage larger portfolios without sacrificing service quality — is not a luxury. It is a competitive necessity.

03

Third, regulatory complexity is accelerating. ESG reporting requirements, energy benchmarking mandates, carbon disclosure obligations, and building performance standards are expanding in scope and rigor across every major market. The EU Energy Performance of Buildings Directive, the EU Taxonomy, and national building performance standards are creating compliance obligations that manual processes cannot absorb at scale. Organizations that rely on manual compliance processes will be increasingly exposed to risk, cost, and delay. AI agents that continuously monitor, calculate, and prepare regulatory submissions provide structural resilience.

Real estate has digitized its data.

The next transformation — the one that will separate market leaders from the rest — is digitizing work itself.

ProptechOS is the platform where that transformation happens.

[Visit the ProptechOS Agency](#)

References and further reading

This research paper is based on the ProptechOS Operational Process Mapping Study, which analyzed 289 processes and 94 atomic workflow steps across the real estate operational value chain.

External references include Morgan Stanley Research, "AI in Real Estate: Innovations Reshaping the Real Estate Sector" (2025); McKinsey & Company, "How Agentic AI Can Reshape Real Estate's Operating Model" (2026); and McKinsey Global Institute labor productivity analysis.

Customer case studies referenced:

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- Vasakronan: energy optimization with ProptechOS Optimize — Nicklas Walldan, CTO; Oskar Häger, Energy Data Scientist