



VOLUME 02

The Changing World of HVAC

How to operate beyond break-fix



Introduction

The FSPs who lead the next decade won't operate like the ones who led the last.

A story for the ages. Your customer's equipment goes down, you diagnose, you fix. This is how the HVAC industry has run for 40+ years. According to Zapium's Maintenance Maturity Insights Report — a [2025 survey of 1,000 maintenance leaders](#) across manufacturing, facilities management, utilities and infrastructure — 49% of vendors still make maintenance decisions reactively or only during audits and major failures, and just 26% use real-time dashboards to drive proactive strategy. That's not a fringe behavior. That's still, functionally, the industry default.

This model is simple and reliable. But in today's climate of tighter margins, thinner crews, and customers who expect visibility, is it still defensible? Can a modern FSP stay alive on break-fix?

We're continuing our Changing World of HVAC series with a look at the economics and future-reliability of a break-fix model. If you were one of the over 200 HVAC leaders that downloaded the first in the series, [Why Now is the Time to Invest in Your Data](#), this is the follow-up: how to align the knowledge that comes from the data foundation with a proactive approach to business modeling and financial decision making.



01

How break-fix creates unpredictable demand and revenue

The traditional field service model relies heavily on a predictable yet flawed cycle: selling four preventative maintenance (PM) visits a year in the hope of securing subsequent break-fix work. Break-fix work itself isn't the problem, but relying on it as the primary economic driver creates highly unpredictable demand and volatile revenue streams. When an organization's financial success is tied to equipment failure rather than equipment uptime, forecasting revenue, resource allocation, scheduling, and parts inventory becomes an ongoing challenge.

The cost of that model is well documented and remains true even outside of the HVAC sector. Siemens' [2024 analysis of the 500 largest global companies](#) found that they lose an average of 11% of annual revenue to unplanned downtime; roughly \$1.4 trillion a year.

[According to a 2026 Maintenance Contract Math report](#) analyzing quickbooks data, companies that operate with preventative maintenance contracts comprising less than 20% of their business model are “weather-dependent,” meaning the health of the overall business relies on bad weather and a busy shoulder season. If the calls aren’t coming through, or your season is mild, your books may never balance.

On paper, break-fix and emergency service calls appear lucrative because contractors command higher margins on urgent repairs. However, when financial performance depends on equipment failure rather than system uptime, core operational planning becomes a constant struggle.

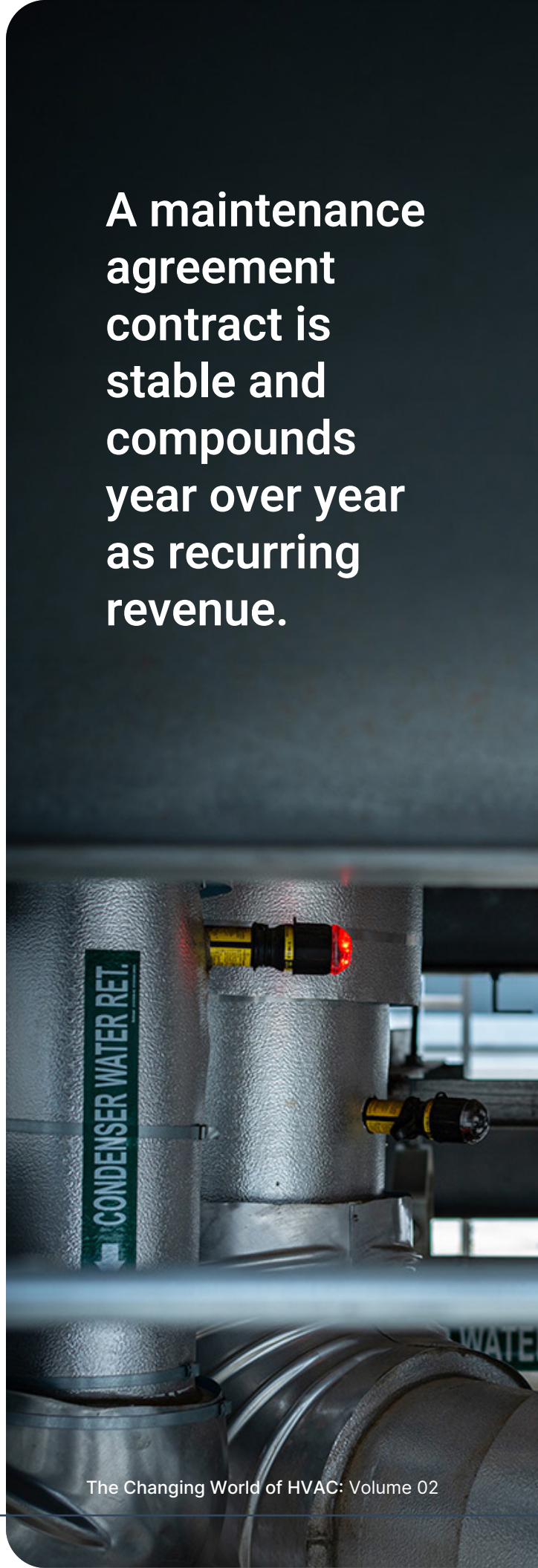
- **Labor allocation & scheduling:** Staffing appropriately is very difficult when call volumes spike unpredictably
- **Parts inventory:** Inventory management remains reactive, leading to tied-up capital or missing components when failures occur

Although the contractor’s margins may be lower on a maintenance agreement versus a break-fix or emergency repair, (with those savings passed directly to the customer,) the value of those contracts are stable and compound year over year as recurring revenue.

MINDSET SHIFT

If you’re selling your customers on the value of their equipment uptime, it shifts thinking from reactive to proactive.

A maintenance agreement contract is stable and compounds year over year as recurring revenue.





02

How incomplete field data keeps service organizations reactive

Business instability is further compounded by incomplete field data, which forces service organizations to remain strictly reactive. Historically, the industry heavily invested digitization dollars into back-office tools like FSMs and ERPs for billing and dispatch, leaving the actual job site messy and dependent on tribal knowledge.

When a technician's field notes are limited to vague summaries, and the equipment data is surface-level, the office has no real visibility into the actual condition of an asset. Without clean, structured data on symptom-issue-resolution and asset history, companies are trapped in a cycle of reacting to the next emergency rather than orchestrating proactive operations.

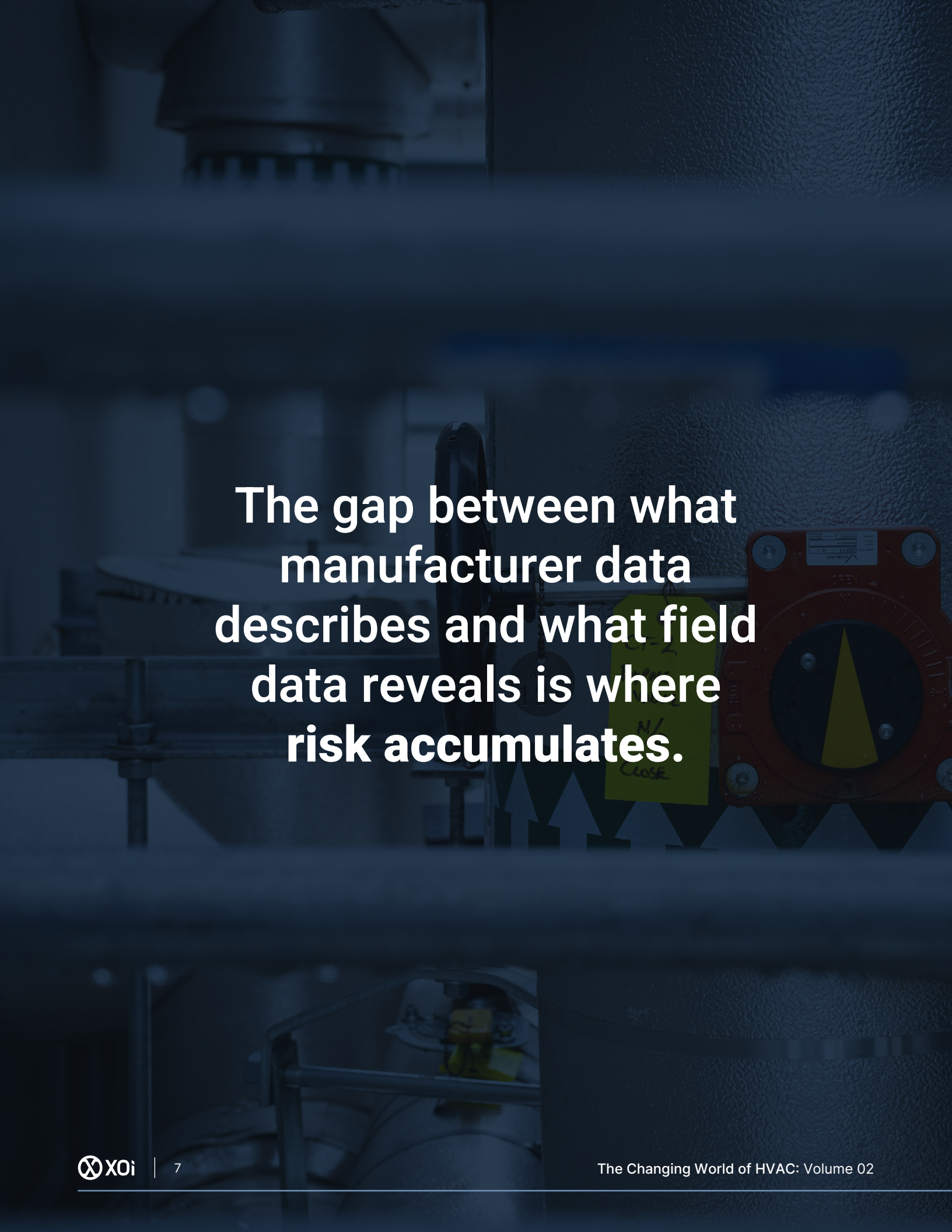
A majority of service providers do not possess accurate data around asset performance over time, so they cannot put exact dollar values on outcomes or predict how equipment will perform. This lack of data intelligence forces them to revert to competing on low-cost PM pricing while simply reacting to the next broken machine.

The gap between what manufacturer data describes and what field data reveals is where risk accumulates. Manufacturer data describes what an asset should be. Manuals explain how it should be handled. Field data shows what actually happens on the jobsite. For most organizations, none of that information is connected or kept current. The result is that the decisions with the highest financial stakes are being made on the thinnest information

MINDSET SHIFT

Establish best practices for consistent data gathering directly from job sites. Your technicians and sales teams may want to “do it the old way,” but this is where using mobile jobsite technology becomes critical — not a nice-to-have on top of the real work.



The background image shows industrial HVAC equipment. A prominent red pressure gauge with a yellow needle is visible on the right. A yellow tag with handwritten text is attached to the equipment. The overall scene is dimly lit, emphasizing the mechanical components.

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03

How service history and equipment data can reveal repair, replacement and capital-planning opportunities

To successfully run a business in today's marketplace — against regulation compliance pressure, a skilled labor shortage, and rising energy costs — requires vast amounts of structured, model-specific equipment data that must be actively procured and maintained on an ongoing basis. We're speaking of enriched data points such as refrigerant charge, heat types, fan speed controls, and more.



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When data flows through a single source, it unlocks your ability to scale business within your current customer roster, keep your data centralized, bid accurately on new work, and proactively plan for future failures and maintenance needs. Equipment condition data reveals direct pipelines to increasing maintenance frequency, tasking, and immediate and/or long-term equipment replacement opportunities.

An older asset may still be operating reliably and require only routine maintenance. A newer asset experiencing repeated failures may need immediate intervention. Age alone cannot reveal that distinction. Neither can the most recent work order. The answer comes from connecting the asset's specifications with its real-world performance over time.

Service history helps teams move beyond treating every job as an isolated event. When service interactions are consistently associated with the correct asset, patterns begin to emerge. Repeated electrical problems, refrigerant issues, control failures, or water-related calls may indicate an unresolved underlying condition. A rising number of service visits could point to inadequate preventive maintenance, incomplete tasking, an equipment configuration issue, or a repair that is no longer holding. These signals give service teams an opportunity to intervene earlier.

Once equipment and service information is standardized across sites, field service providers can group assets. Instead of delivering a long list of aging equipment, they can help customers understand which investments should happen first and what funding may be required over time.

A data-backed capital plan can answer questions such as:

- ✓ Which assets present the greatest near-term operational risk?
- ✓ Where is repair spending increasing?
- ✓ Which sites have the highest concentration of aging or unreliable equipment?
- ✓ Which assets should be replaced this year, and which can be monitored?
- ✓ What level of capital investment should the customer anticipate over the next three, five, or ten years?
- ✓ Where could coordinated purchasing reduce equipment, parts, or consumables costs?

This turns capital planning from a periodic budgeting exercise into an evolving strategy. Each new service event adds evidence, allowing priorities and forecasts to be updated as equipment conditions change.

Transitioning toward a proactive model changes the cash-flow equation. While per-contract margins on a maintenance agreement are generally lower than emergency repair margins the overall financial return is significantly more resilient.

Key benefits of a contract-heavy revenue model include:



Compounding recurring revenue: PM contract values are stable, creating a baseline that guarantees a year-over-year increase in recurring revenue



Predictable demand: Servicing equipment on a planned cadence smooths out technician scheduling and inventory requirements



Mindset shift to uptime: Selling customers on the value of equipment uptime shifts the service relationship from a reactive expense into a proactive partnership



Energy savings: The [DOE finds](#) that proactive maintenance saves 12-15% in energy costs and reduces failure rates by 35-45%

Ultimately, this shift lets an FSP protect its existing revenue base while building proactive, profitable growth with customers. Moving toward full-service and intelligent maintenance agreements requires a deep understanding of how assets will perform under specific conditions. Armed with this data, FSPs no longer have to compete purely on PM pricing against lower-cost competitors. Instead, they can deliver verified work assurance and maximized uptime, transforming the service provider into a high-value partner and unlocking sustainable business growth across the entire asset lifecycle.

MINDSET SHIFT

How assets actually behave reveals what static records cannot: future revenue.

Operate beyond break-fix

Your customers don't need another vendor. They need an advisor.

Break-fix is reliable, but it's no longer enough. Asset owners want visibility. Equipment and facility environments are more complex. Environmental requirements are tightening. Experienced labor is harder to replace. The FSPs who lead the next decade won't operate like the ones who led the last.

The providers pulling ahead all share one thing: they know their customers' assets — not as a service log or a spreadsheet, but at the level of real field performance. What's installed. How it's configured. How it behaves in its environment. Where risk is quietly building. They have built a foundation of asset data that shows something most vendors miss: a proactive business strategy, sitting in plain sight.

So we built XOi not just to store your field data, but to put it to work. A single hub for every asset. A read on technician performance. The largest, most enriched dataset in the industry, matched against your own. The result: lower operational costs, more revenue, and customers who trust you to help them meet the industry's rising demands head-on.

Stop fixing what breaks. Start preventing what fails.

The data was always there. Now know what to do with it.

See how portfolio intelligence turns equipment data into clearer priorities and more confident decisions.

[Read the article](#)

