



SIGNAL DIAGNOSTIC AUDIT

Findings, priorities, and what to fix first.

Northwind Mechanical Services

Prepared for Marcus Delgado, Owner

Engagement SD-2026-005

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Sector 238220 — Plumbing, Heating & Air-Conditioning Contractors

Accounting basis Accrual

Sample report — Northwind Mechanical Services is a fictional company, published to show the structure and standard of a Signal Diagnostic. This document is professional analysis and opinion, not an audit or attestation. Signal Strategy LLC • signalstrategy.ai

Worked example. Northwind Mechanical Services is fictional. This report exists to show the structure and standard of a Signal Diagnostic, not to describe a real engagement.

01

Executive Summary

The hours you're hiring for are already on the payroll — as overtime.

Northwind isn't short of people. Revenue grew about 15% in the first half, and almost all of it went back out as overtime, return trips and rework. Technician labor moved from 38% of revenue to 40.5%. Overtime alone ran \$148,000 in six months, more than double all of last year. That is roughly the cost of the two technicians you want to hire, and a new hire into this pattern inherits it.

Cash is tight for a second reason, and it's a process. About \$310,000 of finished work is sitting unbilled because invoices wait for your Friday-night approval and then get re-keyed into QuickBooks. Another \$310,000 is past due on Net 30 terms. Most of that comes back within a quarter once the approval moves off your desk.

The walk through your day answered the open question. Four of the six handoffs between a call and the bank wait on you: the quote, the schedule, the change order and the invoice. Techs wait at the shop for the morning schedule, and change orders get done before they're priced, so about half never get billed. That's the normal path for an owner-run business that grew faster than its paperwork, and it's fixable without a hire: a schedule built the afternoon before by your office manager or a lead tech, a change-order rule, and an invoice that goes out the day the job closes.

What You Asked vs. What the Evidence Shows

PRESENTED AS	A capacity problem — too much work for the people on hand — solved by hiring two technicians and a dispatcher, constrained by cash.
EVIDENCE SUPPORTS	Capacity consumed rather than absent: overtime, return trips and rework absorb the growth, while unbilled work and slow invoicing hold the cash the hires would need. Four of the six steps between a call and the bank wait on the owner, and the walk through the day confirmed it step by step.
WHY THE GAP	Busy feels like understaffed. Overtime hides inside cost of revenue, callbacks look like customer service, and finished-but-unbilled work never appears on a bank statement. None of the three numbers that explain the situation is on a monthly report a service contractor normally looks at, so the visible symptom — everyone is slammed — gets the visible answer. That is a reporting gap, not a management failure.

Findings

Every finding below is traceable to something you provided. Findings marked **Low confidence** are stated as questions for you to verify — they are not conclusions.

F1 Growth is being absorbed by overtime, return trips and rework, not by a shortage of people

HIGH CONFIDENCE

OPERATIONS

≈ \$224,000 OF FIRST-HALF MARGIN, ABOUT THE COST OF THE TWO HIRES

EVIDENCE

Technician labor rose from 38.0% of revenue (FY2025) to 40.5% (first half 2026): \$106,000 on \$4.26M. Overtime premium was \$148,000 in six months against \$61,000 for all of FY2025. Warranty and callbacks ran \$97,000 in the half against \$118,000 for the full prior year. Gross margin fell from 34.1% to 29.5%. From the question round: a July rooftop replacement estimated at 26 labor hours took 41, nine of them on two return trips (a curb adapter not on the truck, a thermostat callback). Maintenance visits run to estimate.

WHAT'S HAPPENING

The hours are being spent where they aren't billed. The schedule is built at about 6 a.m. by the owner and the techs wait at the shop until it's out. Parts are whatever is on the truck, so a missing part is a trip back. The callback was rework. Install and repair jobs blow up and maintenance doesn't, which points at job setup and dispatch rather than at the crew. The fix is a schedule built the afternoon before, parts staged by job, and one weekly report of hours, overtime and callbacks by tech and by job.

IMPACT

Holding labor at last year's share and overtime at last year's pace is worth about \$450,000 a year at current volume. Two additional technicians cost roughly \$180,000–\$220,000 loaded and, without the fix, inherit the same pattern.

F2 \$310,000 of finished work is unbilled, and another \$310,000 is past due

HIGH CONFIDENCE

FINANCIAL

≈ \$525,000 BEYOND A NORMAL CYCLE: \$215,000 OF UNBILLED GROWTH PLUS \$310,000 PAST DUE; LINE AT ITS \$400,000 LIMIT

EVIDENCE

Unbilled work in progress rose from \$95,000 to \$310,000 between December 31 and June 30. Your A/R aging at August 20 shows \$872,000 outstanding, \$310,000 of it past due, concentrated in three property-management accounts. Terms are Net 30 on every invoice; property managers pay in 45 to 60 days by your account. Cash fell \$123,000 on \$188,000 of profit, and the line of credit rose from \$250,000 to its \$400,000 limit.

WHAT'S HAPPENING

The mechanism is the one you described in the walk. Dana builds the invoice in Jobber the same day or the next. It then waits for your approval, which happens Friday night or over the weekend, and is re-keyed into QuickBooks Online before it goes out — 8 to 10 days from job done to invoice out, longer in a busy week. The past-due balance is partly a terms mismatch: property managers pay when their owners fund them, and there is no follow-up sequence in between.

IMPACT

Invoicing the day the job closes and a written follow-up at 7, 21 and 35 days would release about \$370,000 within a quarter — the unbilled growth plus half the past-due balance — which brings the line well off its limit without a single new sale.

F3 Four of the six handoffs between a call and the bank wait on one person

HIGH CONFIDENCE

MANAGEMENT

NOT QUANTIFIABLE FROM THE STATEMENTS; 8–10 DAYS ON EVERY INVOICE AND A MORNING WAIT FOR EVERY TECHNICIAN TRACE TO IT

EVIDENCE

The walk from the question round: Dana takes the call; anything over about \$2,000 waits for you to quote that evening; you build the next day's schedule at about 6 a.m. and techs wait at the shop until it's out; change orders wait for your call, and if you can't be reached the tech does the work anyway; Dana builds the invoice and it waits for your approval before it's re-keyed and sent. You work about 70 hours a week. Unbilled work tripled in six months.

WHAT'S HAPPENING

Decision rights were never written down, so they defaulted to you as the business grew. That is the common path for an owner-run business: nobody decides it, it accumulates. The morning wait at the shop and the change orders done before they're priced both trace to the same queue. The fix is a one-page decision-rights chart: what Dana approves, what a lead tech can price from a rate card, what still comes to you — and a weekly exception review in place of a daily queue.

IMPACT

Raising quote approval to \$5,000, moving invoice approval to the office manager and giving dispatch to someone else gives back the evenings and weekends now spent approving, and shortens the invoice queue to a day.

F4 The labor drift is return trips and unpriced change orders, not the estimate

MODERATE CONFIDENCE

PRICING & JOB COSTING

ONE JOB: 26 HOURS ESTIMATED, 41 ACTUAL — 9 ON RETURN TRIPS, 6 ON ADDED SCOPE THAT WAS NEVER BILLED. ABOUT HALF OF CHANGE ORDERS GO UNBILLED, BY YOUR ESTIMATE.

EVIDENCE

The July rooftop job from the question round: the customer added a second disconnect and a condensate pump while the crew was there, the tech couldn't reach you, the work was done and never invoiced. Maintenance visits run to estimate (4 hours estimated, 4.5 actual). No estimate-to-actual comparison exists today; estimates come from an Excel template and time is on paper, keyed weekly.

WHAT'S HAPPENING

Moderate because it rests on one job and your own account. When maintenance runs to estimate and installs blow up on return trips and added scope, the estimating template isn't the first problem — job setup and change-order discipline are. Sixty days of time data in Jobber, by tech and by job, would make this High and would put a number on the unbilled scope. If that data shows estimates consistently short, the template is next.

IMPACT

Not quantified — the unbilled change orders have no number yet. Fix 3 produces one.

Threshold Scorecard

Measured against the thresholds Signal Strategy applies to every diagnostic, so your results are comparable to any other engagement.

SIGNAL	YOUR POSITION	STATUS
Technician labor as % of revenue	40.5%, up 2.5 pts from 38.0%	WATCH
Overtime premium	\$148K in six months ($\approx$ 3.5% of revenue) vs \$61K all of FY2025	BROKEN
Unbilled work in progress	\$310K, up from \$95K	BROKEN
Days to collect (DSO) vs. stated terms	43 days vs. Net 30; \$310K past due	WATCH
Cash trend vs. profit	Cash $-\$123$ K on $\$188$ K profit; line at its $\$400$ K limit	BROKEN
Manual re-entry points	4 — estimates, timesheets (twice), invoices	WATCH
Decision rights	Quote, schedule, change order and invoice all route to the owner	BROKEN
Documentation & role discipline	Critical (single point of failure) — no written process; the schedule stops when the owner is unavailable	BROKEN

Quality of Earnings

The checks a buyer or lender would run to decide whether the profit on your P&L is what it looks like.

Two normalizations before the profit means what it appears to: owner pay is below market and rent is a little above it. Net of both, operating margin is nearer 4.5% than the reported 5.6%. The working-capital movement is the core finding rather than a distortion of it.

CHECK	RESULT
Owner compensation vs. market (add-backs)	Reversed: at \$90,000 on \$7.4M of revenue the owner is underpaid for the role, so profit is overstated by roughly \$90,000–\$110,000 a year against a market salary.
One-time revenue treated as run-rate	No non-recurring revenue visible. Maintenance agreements are deferred and recognized over the term, which is correct.
Related-party transactions	Rent of \$132,000 a year to Delgado Properties LLC — about \$11.40 a square foot against roughly \$9.50 market by your broker's read, so about \$22,000 a year above market. Disclosed; understates profit by that amount.
Capitalized costs	Two vans financed in March; additions of \$150,000 against \$104,000 of depreciation. Nothing suggests operating costs are being capitalized.
Revenue concentration	About 14% from the largest customer and 30% from the top three, by your estimate — below the 40% flag. No customer schedule was provided.
Working capital swings	Unbilled work and receivables absorbed more than the half's profit. This is F2, not a distortion.

06

Peer Comparison

Comparison is to the median of the peer set. Where Northwind sits within normal range, no conclusion is drawn.

METRIC	YOU	PEER MEDIAN	READ
Gross margin	29.5%	33.5%	Materially worse
Direct labor as % of revenue	40.5%	35%	Materially worse
Days sales outstanding	43 days	38 days	Slightly worse
Revenue per technician	≈ \$608,000	≈ \$560,000	Within range
Current ratio	1.3	1.5	Slightly worse

Source: Illustrative peer figures for a fictional company. Real reports cite RMA eStatement Studies by NAICS code and revenue band (here: 238220, \$5M–\$10M).

What to Fix First

Ranked by impact against effort. Start at one.

1

Invoice the day the job closes, and take yourself out of the approval loop

Effort Low · **Returns** ≈ \$370,000 of cash within a quarter · **Horizon** Two to four weeks

Let Dana approve and send invoices under a threshold straight from Jobber, and turn on Jobber's QuickBooks Online sync so nothing is re-keyed. Review exceptions weekly instead of every invoice on Friday night. Then a written follow-up at 7, 21 and 35 days past due, starting with the three property-management accounts. This is the fastest money in the business and it costs nothing but the decision.

2

Move dispatch off your desk, and write down who decides what

Effort Medium · **Returns** ≈ \$450,000 a year if labor returns to last year's share · **Horizon** One quarter

Build the schedule the afternoon before, by Dana or a lead tech, and stage parts by job so the truck carries the job. Put decision rights on one page: Dana approves quotes and invoices under \$5,000, lead techs price change orders from a rate card, you see exceptions once a week. Move time capture from paper into Jobber and produce one weekly report of hours, overtime and callbacks by tech and by job. Sixty days of that data answers the hiring question with numbers.

3

Price the change order before the work, and compare estimate to actual on every install

Effort Medium · **Returns** Not quantified until sixty days of data — the unbilled half of change orders · **Horizon** Sixty days of data, then a week to act

A rate card so a tech can price added scope on site, and a rule that the change order is recorded in Jobber before the work starts. Compare estimated to actual hours on every job over \$2,500. If estimates run consistently short, rebuild the template with current hours and rates. If they hold, the leak was the change orders, and fix 2 has already closed it.

What Was Examined

Examined in depth

- Financial — cost of revenue makeup, working capital, quality of earnings
- Operational — job flow from call to cash, decision rights, dispatch and job setup, time capture and invoicing workflow

Reviewed for attribution only

- Sales and marketing — reviewed for attribution only. Demand is not the constraint.
- Supply chain and materials — reviewed only to confirm the margin drift is labor, not parts. It is.
- General management — reviewed for attribution; the owner's place in the workflow is finding F3.

Not examined — outside our scope

- Technician compensation, incentives and retention — outside our scope, though F1 will raise the question.
- Legal and contracts — outside our scope. Maintenance agreement terms were not reviewed.
- Safety, licensing and compliance — outside our scope.

Basis and Limitations

This diagnostic is professional analysis and opinion based on the information you supplied: the completed intake form, the profit and loss statement for fiscal 2025 and the six months to June 30, 2026, the balance sheet at both dates, the A/R aging summary and one job's estimated-versus-actual hours from the question round, and your answers to one round of questions. No revenue-by-customer schedule was provided; concentration is taken from your estimate. It is not an audit, an attestation, a legal opinion, a tax opinion, or investment advice.

Accuracy depends on the accuracy and completeness of what was provided. We did not independently verify the underlying records.

Analysis was assisted by automated tools for structured extraction, benchmark comparison and drafting. Every finding was reviewed, edited and signed by Ryan Funke, CFA before delivery. No finding reached you unreviewed.

Findings are labeled High, Moderate or Low confidence. Low-confidence findings are stated as questions for you to verify, never as conclusions.

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