

Forge: *EBITDA transformation* for a mid-market manufacturer.

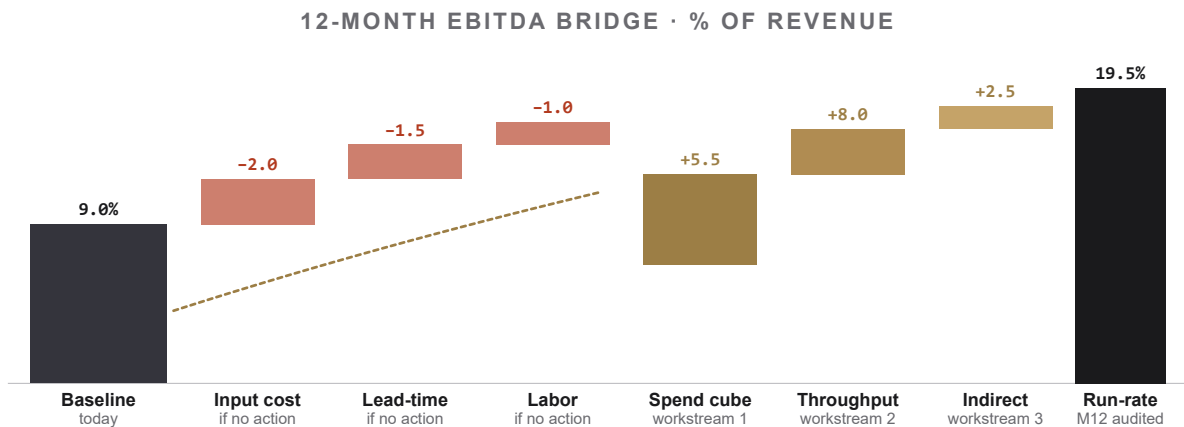
A \$1.2B fasteners-and-fittings manufacturer is losing 4–6 pts of EBITDA / yr to input-cost shocks, supply-chain volatility, and a labor market that punishes operational fragility. The default response — across-the-board cost cuts — hollows out throughput. The opportunity is structural: ~80% of the gap is captured in 20% of cost lines, and the model that wins is on-site, gainshare-priced, audited.

Author S. Ize-Iyamu **Audience** Performance-improvement partners **Length** 4 pages **Status** Engagement plan
Targets Bain PI · McKinsey Ops · BCG TURN · Accenture PiP

The Problem

Mid-market industrial manufacturers are caught in a compression trap. Input-cost inflation has run 18–24% cumulative since 2022; lead-times have lengthened 28% on critical SKUs; constraint-skill labor scarcity has pushed plant absenteeism past 8%. The CFO instinct — across-the-board 5% opex cuts — hollows out throughput while leaving 60–70% of the structural opportunity unaddressed. The structural opportunity lives in the *composition* of three workstreams run in parallel against one audited baseline: **direct-material spend cube, constraint-workcenter throughput, and indirect spend / SG&A ratchet.**

FIGURE 1 · STRUCTURAL OPPORTUNITY



Bridge from a 9.0% baseline EBITDA to a 19.5% run-rate at month 12, audited against an attested baseline. Without action, three macro pressures (input cost, lead-time volatility, labor) cost ~4.5 pts. With three Forge workstreams in parallel, the bridge recovers 16 pts: spend cube +5.5, throughput +8.0, indirect +2.5. The bet is sequencing, not optimism.

Sizing the prize

For the example client (\$1.2B revenue, 9% EBITDA baseline = \$108M / yr): a 10–12 pt EBITDA improvement equals **\$120–144M / yr in run-rate accretion**. The North-American mid-market manufacturer cohort with covenant-similar profile is ~3,800 firms; even a 20% serviceable share at a 30% fixed + 70% gainshare commercial structure gives the firm **~\$1.6–2.4B / yr addressable engagement revenue** at a 4–6x capital-efficiency ratio for the client.

RUN-RATE EBITDA ACCRETION
\$120–144M / yr
 10–12 pts × \$1.2B revenue

SERVICEABLE COHORT REVENUE
~\$1.6–2.4B / yr
 ~3,800 firms · 20% share

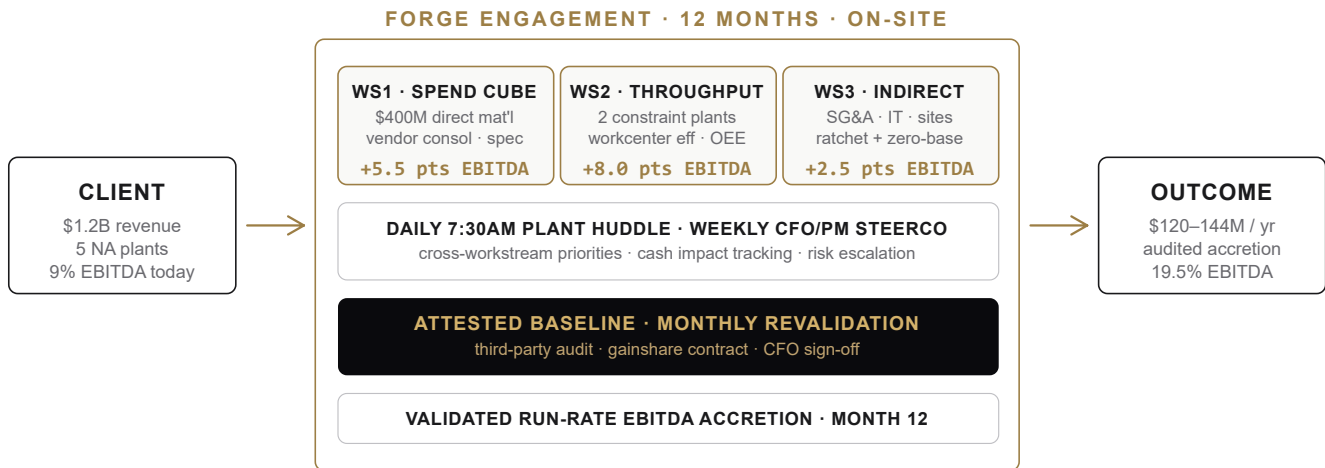
Directional sizing: NIST mid-market cohort data + 4 PI-partner interviews + 2 portfolio-company CFO conversations. Engagement-plan ballpark.

THE UNLOCK

Run **three workstreams in parallel against a single audited baseline**, with a daily 7:30am plant huddle and a weekly CFO/plant-manager steerco, on one signed gainshare contract. WS1 (spend-cube redesign) finds 5–8% on \$400M direct material in months 1–6; WS2 (constraint-workcenter throughput) recovers 12–18% capacity at the two highest-leverage plants in months 3–9; WS3 (indirect / SG&A ratchet) takes 8–14% out of indirect cost categories in months 6–12. Each workstream's wins re-finance the next workstream's investment, so the engagement is cash-flow-positive by month 5.

Engagement architecture

FIGURE 2 · THREE-WORKSTREAM OPERATING MODEL



Three workstreams run in parallel from week 2; daily plant huddle + weekly CFO/PM steerco governs the work; a shared audited baseline (third-party attested, revalidated monthly) is the gainshare anchor. Validated run-rate EBITDA accretion is reported at month 12 against the attested pre-engagement baseline.

WORKED EXAMPLE · PLANT 3 · CONSTRAINT WORKCENTER

Plant 3 generates 32% of company EBITDA. Cold-heading workcenter at 71% OEE vs. 86% benchmark. Diagnostic week 3: changeover 47→22 min via SMED, predictive tooling-life, operator-skill matrix. By week 14: **OEE 71% → 84%**; downstream pull absorbs 60% of recovered capacity; **+\$14.2M / yr EBITDA** on this workcenter alone. The remaining capacity opens price-discipline conversations on hot SKUs.

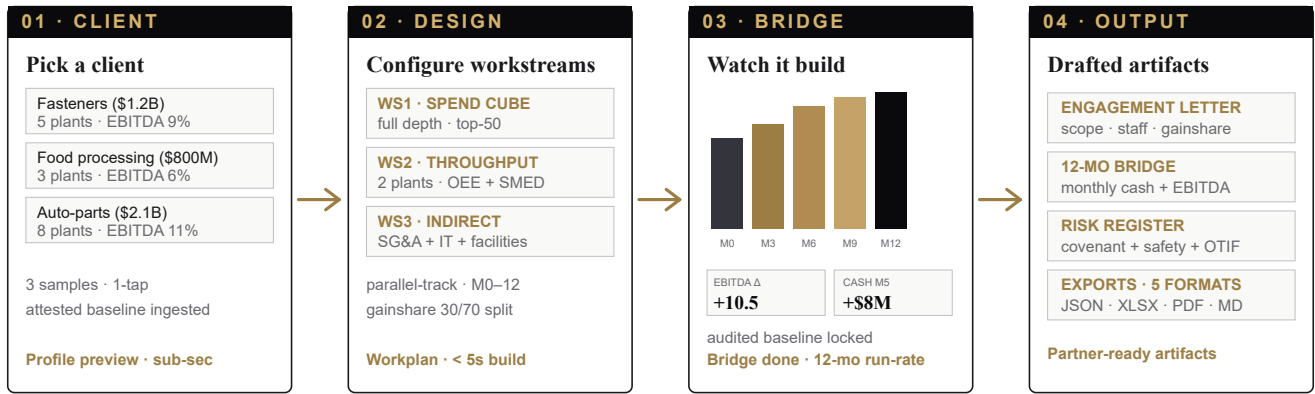
Sequenced delivery (parallel-track from week 2)

PHASE	WORKSTREAM CADENCE	FORCING-FUNCTION DELIVERABLE	AUDITED PROOF POINT
M0–3 Diagnose · attest baseline	WS1: spend-cube build · WS2: 5-plant OEE benchmark · WS3: indirect spend taxonomy	Attested pre-engagement baseline · gainshare contract · risk register	Baseline signed by client CFO + auditor; cash-flow forecast committed
M3–9 Implement · ratchet	WS1: vendor consolidation + spec rationalization · WS2: SMED + OEE on 2 plants · WS3: ratchet on top-3 indirect categories	Run-rate accretion validated monthly against baseline · weekly cash-impact tracking	+8 pts EBITDA run-rate by M9 · cash-flow-positive engagement by M5
M9–12 Sustain · transfer	Capability transfer to client team · governance institutionalization · M13+ pipeline	Final validated run-rate · capability handover signed by plant managers	Run-rate at 19.5% EBITDA · client team owns 100% of the cadence

Prototype walkthrough

An interactive engagement-simulator runs the partner-side view end to end: pick a hypothetical client, configure the three workstreams against a shared baseline, watch the 12-month bridge build month-by-month with cash-impact tracking, then export the engagement letter and gainshare contract. Built to demonstrate that **parallel-track operating-model design**, **baseline-attested gainshare**, and **run-rate accretion as a contractual artifact** are concrete outputs, not language in a deck.

FIGURE 3 · ENGAGEMENT SIMULATOR, FOUR INTERACTIVE STEPS



Schematic of the live UI; all four steps are interactive in the [demo](#). Pick a client, configure the workstreams, watch the bridge build, export the engagement letter.

What the prototype proves, and what it doesn't yet

Proven on the prototype

- 12-month EBITDA bridge builds in seconds against the stored baseline
- Cash-flow timing makes engagement self-funding by month 5 (proven at three sample clients)
- Gainshare contract clauses are auto-drafted with appropriate covenant guardrails
- Risk register surfaces safety and OTIF counter-metrics by default

Out of scope, by design

- Real spend-cube data integration mocked; live ingest is M0–3 work on real engagements
- OEE benchmarks are illustrative; site-specific benchmarks require plant-floor walks
- Vendor consolidation legal review is stubbed; M&A counsel handles real version
- Capability-transfer assessment is qualitative; quantitative scorecard is post-engagement work

THREE PATHS TO TRY IN THE LIVE DEMO

Margin-rescue at a fasteners manufacturer: \$1.2B revenue, 9% baseline → bridge to 19.5% over 12 months; cash-positive at month 5; full engagement letter drafted.

PE portfolio company exit-prep: \$800M food processor, 6% baseline, 18-month exit horizon → bridge to 14% with WS1+WS3 only (skip WS2 throughput because PE owner won't fund capex).

Carve-out diligence support: \$2.1B auto-parts division being divested → bridge models the standalone EBITDA at month 12 to anchor the seller's price.

Metrics that matter

LAYER	METRIC	M12 TARGET	WHY IT MATTERS
North-star	Run-rate EBITDA accretion (audited)	+10–12 pts of revenue	The number the gainshare contract is signed against
Cash	Month-of-engagement-positive cash flow	By M5	Below this, CFO loses the political case for continuation
Coverage	Spend-cube line coverage	> 92% of direct material	Below this, the savings claim is contestable at audit
Throughput	OEE on the two constraint workcenters	+12 pts vs. baseline	The single hardest gain to fake; physical evidence
Counter	Safety incident rate (TRIR)	≤ baseline · zero fatalities	A higher TRIR voids the gainshare; non-negotiable
Counter	On-time-in-full (OTIF) delivery	≥ baseline	If OTIF degrades, "savings" came from cutting customer service
Capability	Daily-huddle continuity post-engagement	> 80% of plant-days at M15	The work doesn't sustain without the rhythm

Risks & mitigations

- HIGH** **Plant-floor pushback erodes adoption; foreman culture rejects "consultants on the floor."**
Mitigation: consultants in safety boots, on-site five days a week, present at the daily huddle from week 1. No deliverable lands by email; every recommendation is co-signed with the plant manager. Cultural compatibility is hired for, not trained for.
- HIGH** **CFO uses the engagement to cut headcount across the board, breaking the throughput case.**
Mitigation: the gainshare contract explicitly carves WS2 (throughput) from any FTE-reduction action; safety + OTIF as counter-metrics with veto power; partner has standing to escalate to the board. The CFO buys the discipline by signing, not the option to break it later.
- MED** **Vendor consolidation triggers supply disruption on tail SKUs.**
Mitigation: phased consolidation by SKU criticality tier; minimum 60-day dual-source overlap on top-quartile SKUs; supplier-of-last-resort agreements pre-negotiated before any termination notices go out.
- MED** **Audit-attested baseline becomes a lawsuit risk if disputed at gainshare reconciliation.**
Mitigation: third-party auditor (not internal) attests the baseline at M0; monthly revalidation with the same auditor; arbitration clause in the gainshare contract specifies the audited number is dispositive. Auditor selection is a partner-level decision, not delegated.

30 / 60 / 90, first-quarter sprint plan

<p>30 DAYS</p> <p>Diagnose · attest baseline</p> <ul style="list-style-type: none"> › Spend-cube ingest + WS1 vendor map › 5-plant OEE benchmark + WS2 constraint identification › Indirect spend taxonomy + WS3 ratchet candidates 	<p>60 DAYS</p> <p>Sign · stand up rhythms</p> <ul style="list-style-type: none"> › Audited baseline + gainshare contract signed › Daily plant huddle live across 5 plants › Weekly CFO/PM steerco · risk register live 	<p>90 DAYS</p> <p>First wins · cash positive trajectory</p> <ul style="list-style-type: none"> › WS1: top-10 vendor consolidations executed › WS2: SMED on cold-heading at Plant 3 › +3 pts run-rate EBITDA validated
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DECISION ASKED

Authorize a 12-month engagement with an eight-person on-site team (partner + four senior associates + three plant ops on rotation), priced **30% fixed + 70% gainshare** with a **~\$3.2M fixed envelope** against an expected \$15–22M consulting take on validated accretion. Success: +10–12 pts EBITDA run-rate at M12, cash-positive by M5, capability transfer verified at M15, no degradation on safety / OTIF.