

Growth Outran the Business

A defense electronics manufacturer's 12-month conversion to operational intelligence — the full account: situation, architecture, results, and what it means for a buyer.

The situation

The company was growing. That was the good news, and it was real. Delivery-based revenue had increased 30% year-over-year. Backlog had reached \$93M across more than twenty programs serving four Tier-1 prime contractors. The pipeline held \$250M in unweighted opportunities. By every outward measure, this was a defense electronics manufacturer that had earned its seat at the table with Tier-1 primes.

The problem was that the business running behind that growth was not built for it.

Operations

Clear-to-Build analysis consumed 48 to 72 hours of labor per cycle. The process ran across the ERP and MES systems, bridged by human beings carrying spreadsheets. Supply chain gaps were discovered when the build stopped, not before. SMT scheduling reflected planned material availability, not actual availability. Every delivery commitment was made with some degree of exposure the team could not fully quantify.

Finance

Accounts payable ran on email. More than 200 vendor emails were processed daily, each invoice matched by hand across three separate filing locations. The unposted-receipts report ran 68 pages and could not be sorted by vendor. Each PO required 5 to 10 minutes to locate and reconcile. Progress-payment tracking was a manual spreadsheet, checked once a month. Month-end close required 11 days and heroics from people who should have been doing analysis. The CFO had no real-time view of program-level cash flow — only a sense of what was in backlog and a general feel for when it might convert.

Business development

The opportunity pipeline held more open RFQs than the team could meaningfully pursue. There was no documented go/no-go framework, no scoring against historical win criteria, no model connecting bid decisions to production capacity or

program cash-flow profiles. Approximately 65% of all proposal labor was being spent on opportunities the company was unlikely to win. The CEO was personally carrying too much of the BD function — which meant that when he was in banker meetings, BD decisions stalled or did not happen.

Compliance and AI adoption

The company was ITAR-registered and actively pursuing CMMC Level 2 certification. Those credentials were supposed to be advantages. In practice, they had become the reason the organization avoided new tools entirely. Nobody knew exactly where the CUI boundary was. The safest answer to any new technology proposal was always no. Meanwhile, Tier-1 primes were beginning to add AI governance requirements to supplier NDAs and contract language. The company had no written policy and no compliant architecture to respond with.

The M&A dimension

The CEO had a clear exit horizon. The business was worth what it was — and he knew the gap between current valuation and what it could command was primarily an operational infrastructure story. A buyer looking at the business would see a company that grew because of talented people who worked extremely hard. They would also see key-person risk everywhere they looked. Closing that gap was the mandate for the engagement.

The engagement

The engagement designed and implemented an Operational Intelligence platform — not as a technology project, but as the operating system the business needed to scale. It ran in three parallel workstreams across 12 months, sequenced to deliver early wins while building toward the full platform architecture.

Workstream 1: Compliance foundation and AI governance

Before any AI was deployed, the engagement built the organizational framework that made deployment safe and adoption possible. Three things: a complete CUI classification table covering every data type in the business, a written AI governance policy that told every employee exactly what they could and could not do, and an Azure GovCloud architecture reviewed and approved by the CISO and vCISO.

The effect was immediate and unexpected. Within three weeks of the policy being published, the number of employees actively experimenting with AI tools increased dramatically. The barrier to adoption was not interest. It was uncertainty. When the uncertainty was removed, the behavior changed.

Workstream 2: Operations and finance automation

The AP automation pilot launched first — chosen deliberately because it was the fastest path to a measurable outcome with no CUI exposure. Finance data was confirmed to carry no controlled information, so deployment could begin immediately, without waiting for GovCloud infrastructure. Within 45 days, the AP matching workflow was automated: invoice extraction, three-way matching, and exception routing handled by the platform, with the AP team shifted from document recovery to exception management.

The Clear-to-Build intelligence layer followed. The platform connected ERP, MES, and procurement data into a single, always-current readiness view. Supply chain gaps were surfaced 18 to 21 days before they reached the floor. SMT scheduling was rebuilt around actual CTB priority. The daily 48-to-72-hour analysis cycle was eliminated.

Workstream 3: Business development intelligence

The BD scorecard was built from the company's historical win/loss data, current capacity model, program cash-flow profiles, and prime-customer strategic fit criteria. The result: a go/no-go scoring model that processes an inbound RFQ in under 20 minutes and produces a ranked recommendation. SAM.gov cross-

referencing was added in month seven, enabling the team to identify the competitive landscape and incumbents before committing pursuit labor.

The impact was structural. Proposal labor on losing bids dropped because losing bids were identified and walked away from earlier — or never pursued. The CEO's personal involvement in BD decisions dropped from daily to weekly. The function could operate without him.

The architecture

an Operational Intelligence platform connects the company's existing systems — ERP, MES, financials, and Microsoft 365 — into a single intelligence layer using Retrieval-Augmented Generation (RAG). The platform reads from systems of record and never writes back to them. AI surfaces. Humans decide. Humans act. The system learns.

- Built entirely inside Azure GovCloud (GCC High), compliant with ITAR and CUI requirements
- The AI brain is owned by the company, not tied to any vendor — portable to any compliant environment
- Identity and access management scoped to role: every user sees only what they are authorized to see
- Full audit trails on all AI-assisted decisions, creating documentation for quality and compliance reviews
- Modular: each workstream (AP, CTB, BD, program management) runs independently or together
- The platform learns from proprietary data — the longer it runs, the more accurate and valuable it becomes

That last point matters most for competitive positioning. The platform's intelligence is built on this company's programs, yield history, supplier relationships, and win/loss record. A competitor who buys the same software gets none of it. The data advantage is proprietary, and it compounds.

The results

Metric	Before	After
On-time delivery to primes	81%	96% (within two quarters)
EBITDA	7.6%	12.1% (+450 bps)
Win rate on pursued bids	34%	61%
Clear-to-Build analysis	48-72 hours per cycle	Eliminated; gaps surfaced 18-21 days early
AP processing	200+ emails/day, hand-matched	Automated in 45 days; exceptions only
RFQ go/no-go decision	Undocumented, CEO-dependent	Scored in under 20 minutes
Revenue vs. headcount	Growth required proportional hiring	+44% revenue on +8% headcount
Operational scorecard	31 / 100	86 / 100

Margin

EBITDA improved from 7.6% to 12.1% — 450 basis points. The improvement was structural, not timing-driven. Quotes became informed by actual production data: historical yield, labor actuals, material variance by program type, supplier delivery performance. The gap between quoted margin and executed margin narrowed materially. Scrap and rework declined as CTB intelligence flagged issues before production release rather than during it.

Cash flow

Delivery predictability improved to 96% on-time performance, and billing timing improved with it — programs that hit delivery milestones on schedule generate milestone billing on schedule. Working capital tied up in disruption and replanning was reduced. Progress-payment tracking moved from a once-monthly manual check to a continuously updated automated system surfacing discrepancies in real time.

Efficiency

Manual coordination was eliminated across three major workflows: AP matching, CTB analysis, and program status reporting. The company added 44% in revenue with 8% growth in headcount — decoupling revenue growth from proportional labor cost for the first time in its history. People in the building started doing the jobs they were hired for.

Business development

The BD transformation produced the highest ROI of any workstream. Proposal labor on opportunities the company did not win was cut in half. Win rate on pursued opportunities increased from 34% to 61%, because the company was only chasing programs where the fit was real.

The scorecard: 31 to 86

The engagement scored the business across seven weighted dimensions — operational visibility and CTB intelligence (20%), finance and AP automation (18%), business development discipline (17%), and four others spanning compliance, data, program management, and people-dependence. Each dimension carries four objectively assessable criteria worth 25 points.

A total weighted score below 35 indicates a business that is person-dependent, reactive, and not investable at a premium. Above 75 indicates a business that is system-driven, predictable, and positioned for a quality-of-earnings transaction. This company moved from 31 to 86.

What it means for a buyer

Every improvement described here is legible to a financial buyer: close cycle, AP efficiency, delivery predictability, pipeline discipline, margin quality. That was the design. An operational intelligence platform is not an IT line item — it is the difference between a business that trades on the strength of its people and a business that trades on the strength of its systems. One of those commands a premium. The other is a key-person-risk discount waiting to be applied.

Method note: results reflect the documented 12-month engagement outcomes across all workstreams. Systems named generically to protect the client's confidentiality and transaction posture.