ROP gideon lens

Roper Technologies (ROP) - Gideon-Lens Production ER2 Refresh

Report date: 2026-09-27 **Price anchor:** USD 358.56, XNAS completed session 2026-09-25 **Forecast horizon:** 2026-06-30 TTM to 2031-06-30, exactly 5.0 years **Research only:** no trade, portfolio mutation, ranking, or sizing authority

Refresh comparison - what changed and why

The prior active Production ER2 was dated 2026-09-08 and used a USD 407.28 price anchor. This refresh uses the newer USD 358.56 close and incorporates the verified 2026-06-30 TTM perimeter, refreshed segment work, a corrected FY2025 R&D figure, and a fully audited P/E return bridge. The lower share price improves entry economics, but a more disciplined earnings denominator and method-matched exit valuation offset part of that benefit.

Item	Prior active report	Current refresh	Interpretation
Price anchor	USD 407.28	USD 358.56	12.0% lower entry price
Primary return method	EV/NOPAT	P/E	Current evidence supports a cleaner statutory EPS bridge; no terminal cash/debt is added after EPS times P/E
Base terminal EPS	USD 24.4440	USD 23.2918	Current model removes unsupported acquisition credit and uses reconciled statutory earnings
P/E-15 cushion	-9.65%	-2.56%	Still fails, but the gap narrowed materially
Bear/Base/Bull gross local IRR	-2.11% / 9.82% / 16.64%	-5.56% / 8.30% / 17.79%	Bear is harsher; Base is more conservative; Bull benefits from lower entry price
Probability-weighted gross local IRR	8.95%	7.87%	Current probability-weighted terminal wealth remains below the mandate
Bear/Base/Bull net-SGD IRR	-3.45% / 9.53% / 17.54%	-7.21% / 7.32% / 17.55%	FX, friction, withholding, and current terminal assumptions constrain owner returns
Probability-weighted net-SGD IRR	8.81%	7.02%	Remains below the 10% hurdle
Audited score	52/100	52/100	Quality view is unchanged; valuation remains the constraint
ER2 verdict / CIO status	PASS / WATCH	PASS / WATCH	The company clears the non-compensating ER2 logic, but the security is not actionable at the required return

The selected prior report was frozen before analysis. Its exact snapshot and hash are bound in the current run manifest. The comparison is therefore causal rather than a hindsight reconstruction: refreshed statutory evidence, a corrected recurring EPS denominator, and separately justified 17x/22x/27x exit P/Es drive the new return profile.

Verdict block

Gate	Result	Controlling evidence
Management	**PASS**	Incentives and decentralized operating discipline are credible; acquisition-vintage ROIC disclosure remains incomplete
Moat	**YELLOW**	Vertical workflow depth, retention, installed systems, and specialized networks are durable, but AI and platform substitution remain material
2046 durability	**PASS**	The portfolio can remain relevant if product reinvestment and customer economics persist
P/E at or below 15 on FY+5 Base EPS	**FAIL**	USD 23.2918 Base EPS times 15 equals USD 349.38, 2.56% below USD 358.56
Production ER2 verdict	**PASS**	Under ER2 non-compensating rules, a valuation-gate failure produces PASS rather than BUY
CIO actionability	**WATCH**	Base 7.32% and probability-weighted 7.02% net-SGD IRRs miss the 10%-15% target

Audited score: 52/100, comprising Business Quality 47/80 and Return Underwriting 5/20. The score classification is **Reject**; it is a diagnostic and does not override the governed ER2 verdict.

Investment case

Roper remains a collection of attractive, asset-light franchises rather than a single homogeneous software business. Application Software contributes most revenue and the central recurring-revenue moat. Network Software earns the highest margins but carries transaction, multi-homing, and platform-intermediation risk. Technology Enabled Products adds physical qualification, installed-base, consumables, and mission-critical exposure that diversifies the portfolio away from pure software disruption.

The evidence supports a durable operating model. TTM segment revenue reconciles exactly to USD 8.2803 billion. Segment operating profit of USD 2.6142 billion less USD 298.6 million of corporate expense ties to USD 2.3156 billion of statutory operating income. Management passes because capital allocation is explicit, incentives are economically aligned, and decentralized accountability is observable. The caveat is important: goodwill-heavy acquisition economics and matched vintage returns are not disclosed well enough to award free future M&A growth.

The moat assessment is YELLOW rather than GREEN. Workflow entrenchment and domain-specific data create switching costs, yet Roper does not disclose enough portfolio-wide retention, net revenue retention, paid-AI adoption, or cohort economics to prove that every franchise will preserve pricing power through the next platform transition. The strongest bear case is Application Software disintermediation: a horizontal AI or platform layer could weaken differentiation, lower paid-seat intensity, or turn product features into table stakes. That risk is not the Base case, but it is large enough to constrain the exit multiple.

Operating underwriting

The model begins at the verified 2026-06-30 TTM perimeter and compounds exactly five annual steps to 2031-06-30. It gives no credit to unannounced acquisitions. Bear/Base/Bull revenue reaches USD 9.2916/10.9027/11.8403 billion, corresponding to 2.33%/5.66%/7.41% compound growth. Statutory operating income reaches USD 2.3327/3.1287/3.6357 billion, with margins of 25.11%/28.70%/30.71%. Terminal diluted shares fall from 100.6 million to 99.4286/95.9425/92.4563 million under explicitly modeled SBC and repurchases.

Application Software is the pivotal variable. Its Base revenue reaches USD 6.1037 billion at a 27.8% segment margin. Network Software reaches USD 2.2496 billion at 42.57%. Technology Enabled Products reaches USD 2.5494 billion at 34.0%. Combined Base net income is USD 2.2347 billion, producing USD 23.2918 of statutory diluted EPS. The Base requires neither a heroic tax rate nor an acquisition contribution, but it still assumes steady buybacks and interest relief. Sensitivity work shows Application growth and diluted-share count are the most powerful levers.

Security return underwriting and scenario return bridge

P/E is the primary valuation method in all three scenarios, in probability weighting, in the reverse-return test, and in the net-SGD diagnostic. The normalized current P/E is 24.9095x on USD 14.3945 of recurring TTM diluted EPS using the official

105.3734 million weighted-average diluted share denominator. The reported 15.0871x P/E uses USD 23.7660 of event-distorted statutory EPS and is disclosure only. Exit multiples of 17x/22x/27x were selected before calculating returns and sit below recent Roper and clean peer anchors. No terminal cash or debt is added after EPS times P/E; financing effects are already embedded in statutory EPS.

Scenario	Start (2026-06-30 TTM; price 2026-09-25)	Horizon (2031-06-30)
Bear revenue / operating income	USD 8.2803B / USD 2.3156B	USD 9.2916B / USD 2.3327B
Base revenue / operating income	USD 8.2803B / USD 2.3156B	USD 10.9027B / USD 3.1287B
Bull revenue / operating income	USD 8.2803B / USD 2.3156B	USD 11.8403B / USD 3.6357B
Diluted listed-equivalent shares	100.6000M	99.4286M / 95.9425M / 92.4563M
Terminal EPS	-	USD 14.6911 / USD 23.2918 / USD 29.2426
Exit P/E	Current normalized 24.9095x	17x / 22x / 27x
Terminal equity value per share	USD 358.56 current price	USD 249.7495 / USD 512.4201 / USD 789.5492
Cumulative distributions per share	-	USD 19.5968 / USD 21.8216 / USD 23.6022
Terminal shareholder wealth per share	USD 358.56	USD 269.3463 / USD 534.2416 / USD 813.1514
Gross local-currency annualized IRR	-	**-5.56% / 8.30% / 17.79%**

Scenario probabilities are 25% Bear, 55% Base, and 20% Bull. Probability-weighted terminal equity value is USD 502.1783 per share and expected distributions are USD 21.6215, for USD 523.7998 of expected terminal shareholder wealth. The **7.87% probability-weighted gross USD IRR** is the five-year CAGR of that probability-weighted wealth from USD 358.56. It is not an arithmetic average of scenario IRRs.

For the Singapore-dollar owner diagnostic, the model uses entry USD/SGD of 1.2794 on 2026-09-25, Bear/Base/Bull exit rates of 1.20/1.24/1.28, 10 basis points of entry and exit friction, 30% dividend withholding, and no capital-gains tax. Net terminal wealth is SGD 315.8446/653.6877/1,030.7388 per share. The corresponding annualized **net SGD** IRRs are **-7.21% / 7.32% / 17.55%**, and the probability-weighted net SGD IRR is **7.02%**. These figures are diagnostics only and confer no trading authority.

Reverse return, risks, and monitoring

A 20% five-year return from USD 358.56 requires USD 892.2120 of terminal shareholder wealth. After Base distributions, that implies USD 870.3905 of terminal equity value, USD 39.5632 of EPS at the Base 22x exit P/E, and a 22.41% EPS CAGR from normalized current EPS. The audited Base EPS CAGR is 10.10%. The method-matched maximum buy price for a 20% Base return is USD 214.70, about 40.1% below the current price.

The main upside trigger is Application organic growth sustainably above 5.4% while holding a high-20s margin, supported by mid-90s gross retention, paid-AI attach or business-level NRR, and no transfer of expense into capitalized software. The decisive downside trigger is Application organic growth below 3% for two consecutive quarters with segment margin below 24% in the second quarter. Additional risks are Network margins below 38%-40% without an investment bridge, TEP margins below 31%-32%, renewed leverage before acquisition economics are disclosed, or retention below 90%.

The red team challenged exit valuation directly. At 15x in Bear, gross IRR falls to about -7.72%; at 24x in Bull, it falls to about 15.13%. Those sensitivities are material but resolved because the selected 17x/22x/27x P/Es are anchored to the corrected normalized denominator, historical Roper ranges, and clean peers, while still imposing a maturity and disclosure haircut.

Conclusion

Roper is a durable, high-quality portfolio with credible management and multiple defensible vertical franchises. It is not cheap enough under the required gate, and the finite owner-return model does not reach the 10%-15% net-SGD mandate in Base or probability-weighted terms. The governed conclusion is **Production ER2 PASS, CIO WATCH**. No rank, size, trade, message, or portfolio mutation follows from this research package.

Appendix A - Company Primer

Roper Technologies — Institutional Company Primer

Action: `CIO-20260923-ROP-REFRESH` **Run ID:** `pulse-cio-20260927T200229+0800` **Information cutoff:** 2026-09-27 20:02:29 SGT **Fiscal year-end:** December 31 **Latest complete quarter:** Q2 2026 ended June 30, 2026 **Forecast-base convention:** TTM ended June 30, 2026, comprising Q3 2025, Q4 2025, Q1 2026, and Q2 2026 **Five-year horizon:** June 30, 2031 **Current-report price anchor:** $358.56 per ROP common share at the September 25, 2026 completed-session close **Trade execution authorized: false**

This primer introduces Roper Technologies to an institutional reader. It explains the portfolio, customer workflows, revenue model, unit economics, capital-allocation system, and principal risks; it is not a valuation, forecast, score, or investment recommendation. Financial figures are controlled by the refreshed [Quantitative Foundation](C:/Users/Admin/OneDrive/GPT/ER%202.0/Roper%20Technologies/quant_foundation.md), independently cleared for Wave 1. Its official SEC controls override Financial Modeling Prep where provider classification or per-share data are not comparable. The current report uses the sealed quote-packet SHA-256 `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f` and unchanged statutory-bridge SHA-256 `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`. Qualitative business architecture is preserved where still supported by Roper's [2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/882835/000088283526000009/rop-20251231.htm) and [Q2 2026 Form 10-Q](https://www.sec.gov/Archives/edgar/data/882835/000088283526000036/rop-20260630.htm). **Fact**, **Inference**, and **Judgment** labels distinguish disclosure from interpretation.

1. Business overview and customer buying model

Fact. Roper is a portfolio of vertical software, network software, and technology-enabled product businesses serving narrow professional and industrial markets. “Vertical” means a product is built around the data, rules, and daily tasks of one industry rather than a generic corporate function. Examples include billing and matter management for law firms, laboratory information systems, school administration, insurance-distribution software, freight matching, construction estimating, water metering, hospital airway devices, and identity readers. The corporate center does not sell one common suite. Operating companies own specialist brands and customer relationships, while the parent allocates capital and imposes performance disciplines. Roper reports three segments: Application Software, Network Software, and Technology Enabled Products.

Customers are institutions and professionals: law firms, government contractors, schools, childcare operators, hospitals and laboratories, insurers and insurance agencies, freight brokers and carriers, contractors, food-supply-chain participants, pharmacies, utilities, and manufacturers. The product normally solves an operationally necessary problem—recording regulated data, scheduling staff, calculating prices or project costs, matching buyers and sellers, processing payments, controlling access, measuring water, or guiding a medical procedure. Economic buyers are therefore department leaders, finance and IT functions, operators, and public agencies rather than casual consumers.

Fact. Sales occur primarily through direct sales offices, manufacturers' representatives, resellers, and distributors. Roper does not disclose a portfolio-wide self-service share, sales-cycle length, or channel mix. **Inference.** Software purchases generally require consultative selling, implementation, data migration, configuration, and support. Technology products can use direct channels, representatives, and distributors, with reliability, certification, service, and compatibility influencing the decision.

Inference. The common buying pattern is high-friction adoption followed by infrequent replacement. A laboratory, school district, insurer, utility, or legal practice configures the product around its own data, permissions, compliance requirements, and staff. Initial implementation can be demanding, but replacing an embedded system later creates migration, retraining, integration, and operational risk. Hardware workflows have a similar pattern when installed systems, field reliability, clinical validation, or regulatory acceptance matter.

Judgment. Roper is best understood as a capital allocator that owns many specialized workflow franchises, not as a conventional diversified manufacturer or a unified software vendor. That framing explains its strong cash generation and its central investment risk: long-run value depends on buying durable niche businesses at prices that leave attractive returns after financing and reinvestment.

2. Revenue architecture: segments, streams, and geography

Fact. FY2025 revenue was $7,902.5 million. The audited segment split reconciles exactly to consolidated continuing-operations revenue.

FY2025 reportable segment	Revenue, USD m	Share of total	What customers buy
Application Software	4,483.0	56.7%	Industry-specific systems of record, workflow, analytics, payments, and compliance software
Network Software	1,600.8	20.3%	Data, marketplaces, and workflow platforms whose value benefits from connected participants or proprietary datasets
Technology Enabled Products	1,818.7	23.0%	Engineered devices and instruments, often paired with software, connectivity, consumables, or service
Total	7,902.5	100.0%	Consolidated continuing-operations revenue

Source: refreshed Quantitative Foundation, P2.

Application Software is the largest segment. Its products become operating systems for specialized institutions: law-firm time and billing, school staff and student administration, insurance-agency workflow, laboratory operations, project accounting, or hospital analytics. Network Software is more than hosted software. Its assets include transaction networks, benchmark datasets, and marketplaces that connect multiple sides of an industry, such as freight brokers and carriers or construction contractors and suppliers. Technology Enabled Products sells physical solutions where measurement accuracy, clinical performance, identity, safety, or field reliability matters.

Roper's audited revenue-stream taxonomy adds an important second view. “Recurring” software principally includes SaaS subscriptions, post-contract support, and annual term licenses. “Reoccurring” software is management's label for transaction- or volume-based revenue that repeats with customer activity but is not necessarily contractual. Non-recurring software includes perpetual licenses, implementation, and professional services. Product revenue is concentrated in Technology Enabled Products.

FY2025 issuer revenue stream	Revenue, USD m	Share of total	Economic character
Recurring software	4,482.9	56.7%	Subscription, support, and annual-term revenue
Reoccurring software	833.1	10.5%	Usage- or transaction-linked revenue
Non-recurring software	813.9	10.3%	Licenses, implementation, and professional services
Product revenue	1,772.6	22.4%	Physical products recognized when control transfers
Total	7,902.5	100.0%	Official consolidated perimeter

Source: refreshed Quantitative Foundation, P1. Percentages are calculated from audited values.

The official taxonomy controls. Live FMP annual and quarterly product endpoints agree with each other on a FY2025 “Software And Related Services” value of $12,259.8 million, but that provider aggregation exceeds both total company revenue and audited software revenue of $6,129.9 million. It spans segments and cannot be economically mapped. The refreshed foundation therefore preserves it as discrepancy evidence and excludes it from modeling. By contrast, FMP's newly populated Q1 and Q2 2026 segment rows sum to official H1 2026 revenue and serve only as independent corroboration.

Fact and gap. Roper operates globally and has facilities across North America, Europe, and Asia-Pacific. The governed foundation does not contain a geographic revenue table, so this primer does not invent country percentages. Foreign customers, foreign-currency subsidiaries, privacy rules, and global component sourcing create economic exposure broader than a U.S.-dollar reporting currency implies.

3. Unit economics and cash generation

Fact. The segment income statement shows how revenue becomes operating profit. Cost of sales includes hosting, support, implementation labor, materials, manufacturing, and distribution as applicable. SG&A contains sales, product and engineering support, management, and administration. Segment operating profit is additive across the three segments; corporate

administrative expense then bridges to statutory operating income.

FY2025 segment	Cost of sales / revenue	SG&A / revenue	Operating margin	Primary economic engine
Application Software	31.5%	41.6%	26.8%	High gross margin reinvested in selling, product, support, and domain expertise
Network Software	15.9%	40.6%	43.5%	Low delivery cost plus proprietary data/network value
Technology Enabled Products	41.9%	23.6%	34.5%	Higher physical input cost offset by niche differentiation and pricing

Source: refreshed Quantitative Foundation, P2. Ratios use audited revenue, cost of sales, SG&A, and operating profit.

Application Software has high gross margins because the incremental cost of another software instance is normally modest. Its operating margin is lower than Network Software's because implementation, customer success, product development, sales, and the mix of acquired growth businesses consume more expense. Revenue quality remains strong because recurring and reoccurring streams dominate, while implementation work can help establish a longer-term relationship.

Network Software has the most attractive reported unit economics. Data and transaction networks can process more activity with limited physical cost, and a marketplace can become more useful as participation or proprietary data grows. The 43.5% FY2025 operating margin demonstrates that structure. However, activity-linked revenue can vary with freight, construction, insurance, healthcare, or transaction volumes. “Reoccurring” is not synonymous with guaranteed. Its TTM operating margin was 41.8%, below FY2025's 43.5%, so investors should seek a volume, mix, investment, and acquisition bridge rather than assume automatic re-expansion.

Technology Enabled Products bears the highest cost of sales because it purchases components, manufactures or assembles products, and distributes physical goods. A 34.5% operating margin is nevertheless unusually high for hardware and indicates differentiation through precision, clinical utility, installed systems, intellectual property, service, and niche pricing. This segment also has greater exposure to tariffs, component availability, inventory, production execution, and project timing.

Fact. TTM revenue was $8,280.3 million, statutory operating income was $2,315.6 million, operating cash flow was $2,669.1 million, capex was $46.7 million, and free cash flow was $2,622.4 million. FCF equaled 31.7% of revenue while capex was only 0.6%. FCF was 104.7% of statutory net income, although the net-income denominator includes a large non-recurring gain on an equity investment. The cash profile is therefore strong, but the cleanest operating comparison requires normalization below operating income.

Inference. Working-capital economics are favorable but mixed. Subscription billings in advance create deferred revenue and partly finance delivery; usage fees follow activity; implementations can produce unbilled receivables; product businesses require receivables and inventory. Roper does not disclose governed segment working-capital figures, so no numerical advantage is assigned by segment.

4. Product and workflow map

Segment	Representative businesses	Workflow controlled	Why the workflow matters
Application Software	Aderant, CentralReach, Clinisys, Data Innovations, Deltek, Frontline, IntelliTrans, PowerPlan, Procare, Strata, Transact/CBORD, Vertafore	Legal billing; autism-care administration; laboratory operations; project accounting; school staffing; transport planning; regulated-asset accounting; childcare and campus payments; healthcare analytics; insurance distribution	Records, payments, compliance, and daily operations become embedded in the system
Network Software	ConstructConnect, DAT, Foundry, iPipeline, iTradeNetwork, MHA, SHP, SoftWriters, Subsplash	Construction discovery and estimating; freight matching; digital-content creation; insurance applications; food supply chain; alternate-site healthcare; post-acute benchmarking; long-term-care pharmacy; church engagement and giving	Proprietary data or multiple connected parties improve discovery, matching, benchmarking, and transactions
Technology Enabled Products	CIVCO, FMI, Inovonics, IPA, Neptune, Northern Digital, rf IDEAS, Verathon	Ultrasound guidance and infection control; precision fluid handling; wireless safety/access; hospital inventory dispensing; water metering; precision tracking; identity readers; airway and bladder measurement	Performance, safety, regulatory acceptance, field reliability, and integration are expensive to reproduce

Source: business names and descriptions from the 2025 Form 10-K, Item 1; no product-level dollar detail is inferred.

Inference. The unifying asset is workflow context rather than a shared technology stack. Roper businesses understand the data definitions, regulatory rules, exceptions, and user behavior of a niche. This context can support product extensions and pricing because a customer is purchasing fewer errors, reduced administrative effort, or safer operations—not merely software seats or a device.

5. Acquisition-led capital allocation model

Fact. Roper combines a centralized capital-deployment process with decentralized operating companies. It seeks high-value-added software, services, and technology-enabled products capable of growth and high margins. Recent platform and bolt-on activity has expanded CentralReach, Subsplash, Procare, Transact/CBORD, Strata, Vertafore, DAT, Clinisys, and Deltek. Acquired businesses generally retain specialist identities and local management rather than being forced into one shared product platform.

Inference. Practical acquisition criteria appear to include niche leadership, mission-critical workflow, durable recurring or repeating revenue, high cash conversion, low physical capital needs, and management capable of continued growth. Roper may also buy a maturing leader where margins or commercial discipline can improve. These characteristics are inferred from repeated company emphasis; they should not be treated as proof that every acquired business meets every criterion.

Integration is selective. Corporate supplies capital discipline, controls, incentives, leadership assessment, and operating guidance. The subsidiary retains customer intimacy and day-to-day authority. Bolt-ons can be combined when workflows overlap, but portfolio-wide cost synergy is not the central thesis. Decentralization limits disruption but distributes technology, privacy, cyber, and accounting risks across many operating companies.

Fact. At June 30, 2026, gross debt was $11,319.4 million, cash was $364.9 million, and net debt was $10,954.5 million. The refreshed foundation's non-covenant diagnostic puts net debt at 3.38 times statutory operating income plus segment depreciation and amortization. TTM buybacks were $3,226.7 million and dividends were $369.2 million. Capital deployment has therefore included substantial acquisitions, debt financing, dividends, and unusually large recent repurchases.

Acquisitions create goodwill and identifiable intangibles such as customer relationships, technology, and trade names. Goodwill is not amortized but is tested for impairment; finite-lived acquired intangibles are amortized, reducing GAAP operating profit even when the customer relationship remains economically healthy. **Judgment.** Returns must be evaluated on cash earned over the purchase price after interest, tax, reinvestment, and dilution. Revenue growth alone does not establish value creation. Investors should separate organic improvement, cash flow purchased through M&A, financing cost, and share-count effects.

6. Customers, retention, mission criticality, and pricing

Fact. No customer exceeded Roper's disclosed materiality threshold for a segment or the consolidated company in FY2025. This limits reported single-account concentration, although subsidiaries can still depend on large contracts, public agencies, or important channels. Government customers may terminate or modify contracts and impose special bidding, audit, and compliance requirements.

Inference. Retention is supported by data migration costs, embedded process rules, employee training, integrations, audit trails, and operational risk. Replacing a laboratory system, insurance-distribution platform, school database, or water-meter network can interrupt service and create compliance exposure. Switching costs are strongest where Roper owns the authoritative system of record, transaction network, or installed base; they are weaker in peripheral analytics, implementation work, or individually replaceable hardware.

Pricing power is workflow-specific. A supplier can raise price when its product represents a small fraction of customer cost but prevents a costly error, delay, or regulatory failure. Upgrades, analytics, payments, usage growth, and attached services provide monetization beyond list-price increases. Government procurement, enterprise negotiations, competing standards, and commoditizing AI features can constrain it. Roper does not publish a portfolio-wide retention rate, net revenue retention, seat-growth rate, or price/mix bridge, which limits direct verification of recurring-revenue quality.

7. Market structure and competition

Fact. Most Roper businesses compete in narrow markets, and no single rival spans a material portion of the whole portfolio. Competition is fragmented among specialist vertical vendors, broader software suites extending into a niche, customer-built systems, distributors' private-label products, and incumbent medical or industrial device companies. Network businesses also compete with other marketplaces and direct bilateral relationships. Products compete on quality, performance, innovation, technology, price, application expertise, flexibility, distribution, and service.

Inference. Switching costs have four layers: technical migration and integration; procedural retraining and workflow redesign; regulatory validation and auditability; and network or data loss. The strongest franchises combine several. A standalone tool with exportable data and many substitutes has much weaker protection.

Judgment. “Niche leader” is valuable only when it produces retention, pricing, growth, and cash returns. A dominant share in a small stagnant market is not automatically attractive. Because Roper does not publish a comprehensive named-competitor or market-share dataset, the investor should emphasize renewal behavior, customer outcomes, organic growth, and price realization over corporate positioning language.

8. Growth drivers: organic versus acquired

Fact. From FY2024 to FY2025, reported segment revenue grew 15.9% in Application Software, 8.5% in Network Software, and 7.3% in Technology Enabled Products. These rates mix organic and acquisition contributions and must not be presented as organic growth. TTM revenue reached $8,280.3 million: $4,692.2 million in Application Software, $1,698.0 million in Network Software, and $1,890.1 million in Technology Enabled Products.

Organic growth can come from price, customer additions, cross-selling, transaction volume, payments penetration, new data products, geographic expansion, and product innovation. Acquired growth comes from purchasing a new platform or adding capabilities to an existing one. Margin improvement can amplify either route through price, mix, scale, or expense discipline.

Inference. Contractual software makes the portfolio steadier than a conventional industrial group, but it is not cycle-proof. Freight loads, construction activity, project starts, hospital budgets, government awards, utility plans, and product demand influence usage and orders. Acquisitions can temporarily conceal same-perimeter weakness. **Judgment.** The highest-quality growth is recurring revenue created through deeper customer value with stable retention and little incremental capital. Purchased growth deserves credit only after post-deal organic performance and cash returns validate the acquisition price.

9. AI disruption and opportunity by workflow

Fact. Roper identifies AI-enabled products across legal workflow, autism-care administration, project software, insurance, construction, freight analytics, visual effects, life insurance, and faith-based engagement. The strategic premise is that domain expertise, proprietary data, and established customer relationships can embed AI within mission-critical processes. The filing also warns that competitors may develop faster or superior AI, functionality may commoditize, and erroneous or biased outputs may create liability, intellectual-property, privacy, or reputational risk.

Workflow	AI opportunity	Disruption vector	Evidence investors should demand
Professional, legal, and project administration	Drafting, coding, time capture, forecasting, proposal, and compliance automation	Horizontal copilots can commoditize interface features	Paid adoption, workflow penetration, retention, and customer labor savings
Healthcare, laboratory, and autism-care operations	Scheduling, documentation, decision support, and anomaly detection	Clinical error, bias, privacy breach, and regulatory constraints	Validated outcomes, human oversight, auditability, and low incident rates
Insurance and financial distribution	Submission intake, underwriting support, compliance, and data enrichment	Carriers or broad platforms may internalize models and data	Faster cycle time, conversion improvement, and differentiated proprietary data
Freight, construction, and supply-chain networks	Matching, pricing, forecasting, search, and fraud detection	AI-native aggregators can lower discovery costs	Better match quality, transaction growth, network liquidity, and monetization
Education, childcare, campus, and faith organizations	Scheduling, communication, payments, and engagement	Low-cost horizontal tools may attack peripheral modules	Attach rates, payment volume, and measurable administrative savings
Measurement and medical devices	Predictive maintenance, image interpretation, guidance, and connected analytics	Cyber risk, model liability, or software reducing hardware differentiation	Regulatory clearance where relevant, installed-base usage, and service revenue

Inference. Roper's advantage is context rather than owning a foundation model. It can place third-party or proprietary models inside permissions, data structures, and decisions that generic tools do not fully understand. The danger is spending heavily on features customers regard as table stakes. AI creates value only if it improves retention, pricing, activity, or customer outcomes after inference, governance, product, and support costs.

10. Principal risks

Leverage and capital allocation. Net debt was $10,954.5 million and the non-covenant leverage diagnostic was 3.38x. Higher interest burden can reduce acquisition capacity and per-share returns. The concern is not an immediate solvency claim; it is lower optionality if acquisitions, buybacks, and debt reduction compete for cash while attractive assets or credit windows appear.

Cyclicality and project exposure. Recurring software dampens cycles, but usage fees, implementation, freight, construction, government awards, utilities, and physical products retain activity sensitivity. Non-recurring software and product revenue together represented 32.7% of FY2025 revenue, and some reoccurring revenue varies with transactions.

Technology, cyber, and vendor dependence. Large cloud, data, component, network, and channel providers are important dependencies. Outages, cyber incidents, supply shortages, model errors, or channel disruption can damage service and retention. Decentralization widens the control surface.

Regulation. Roper faces privacy and data-security regimes, medical-device requirements, government-contract rules, tariffs and trade restrictions, environmental and workplace rules, and other sector-specific obligations. Mission-critical products increase both customer value and the cost of failure.

Accounting and portfolio complexity. Acquisition accounting creates goodwill, identifiable intangibles, amortization, and periodic impairment risk. The Q2 2026 Indicor equity-investment fair-value movement makes TTM statutory net income and EPS non-recurring. Valuation stages must preserve the statutory bridge while separately normalizing this gain; neither GAAP EPS nor adjusted cash metrics should be selected solely because one flatters the thesis.

11. History, management, and ownership orientation

Fact. Roper was incorporated in Delaware in 1981. It evolved from a diversified industrial and instrumentation group into a portfolio increasingly centered on vertical software, data networks, and asset-light technologies. The 2022 sale of a majority interest in the industrial businesses now called Indicor was a major portfolio transformation; Roper retained a minority interest. Subsequent deployment has emphasized specialist software while retaining selected high-return technology products.

L. Neil Hunn has served as president and CEO since 2018 after prior operating roles at Roper. Jason Conley has served as CFO since 2023 after finance and operating-company roles within the group. The board and CEO collectively act as the chief operating decision maker for segment-resource allocation, with acquisitions central to the parent role.

Inference. Ownership orientation is expressed through capital-allocation culture, cash-based performance measurement, decentralized accountability, and board oversight rather than founder control. Roper is a Nasdaq-listed common-share company with no controlling owner identified in the reviewed filings. Repurchases add a second large discretionary capital use beside acquisitions; their value depends on price relative to intrinsic value. The refreshed price anchor is materially lower than the prior report's $407.28 anchor, but this primer makes no inference about whether repurchases or the stock itself are attractive at $358.56.

12. Long-term investor monitoring checklist

- **Organic growth on a constant perimeter.** Separate price, volume, customer additions, modules, transactions, and acquired revenue.
- **Retention and mission criticality.** Seek business-level renewal, attrition, net retention, payment attach, and usage evidence because no portfolio KPI is published.
- **Segment margin direction.** Application Software should demonstrate scalable reinvestment; Network Software's TTM margin decline needs a bridge; Technology Enabled Products must preserve premium economics despite input costs.
- **Cash-conversion quality.** Track operating cash flow, capex, deferred revenue, unbilled receivables, inventory, and working capital. Normalize the investment gain and acquired-intangible amortization explicitly.
- **Acquisition returns.** Compare purchase price with post-deal organic growth, retention, margin, and cash generation. Revenue growth alone is insufficient.
- **Leverage and interest burden.** Monitor net debt, maturities, rates, covenant context, and the balance among debt reduction, buybacks, dividends, and acquisitions.

- **Goodwill and intangible health.** Watch reporting units that miss deal cases, lose customers, experience management turnover, or face new technology.
- **AI monetization versus commoditization.** Demand paid adoption and customer outcomes. Announcements without retention, pricing, or productivity evidence deserve little credit.
- **Cybersecurity and regulation.** Track incidents, downtime, privacy enforcement, clinical/device compliance, and government-contract issues.
- **Per-share compounding.** The ultimate operating test is growth in normalized FCF per diluted share after interest, tax, stock compensation, acquisitions, and repurchases.

Sources and disclosed gaps

- **Quantitative control:** `C:\Users\Admin\OneDrive\GPT\ER 2.0\Roper Technologies\quant_foundation.md`, refreshed for run `pulse-cio-20260927T200229+0800` and independently cleared through QFR; quote packet SHA-256 `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f`; statutory bridge SHA-256 `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`.
- **Primary qualitative sources:** [Roper 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/882835/000088283526000009/rop-20251231.htm) and [Roper Q2 2026 Form 10-Q](https://www.sec.gov/Archives/edgar/data/882835/000088283526000036/rop-20260630.htm). The refreshed QF/QFR run archived current copies and confirmed through SEC submissions that no later 10-Q existed by the cutoff.
- **Data-package status:** the prior report's qualitative context was retained only where still supported by the same official filings. No new data-package placeholder or unfinished artifact was treated as evidence.
- **Gaps:** no governed geographic revenue table; no portfolio-wide retention, net retention, seat, price/mix, channel, self-service, or customer-acquisition-cost KPI; no segment working-capital dataset; no complete named-competitor or market-share dataset; and no governed organic/acquired revenue bridge.
- This appendix makes no forecast, management or moat gate, valuation verdict, score, sizing proposal, portfolio action, or trade instruction.

Appendix M - Management Assessment

Roper Technologies — Management Assessment

Run date: September 27, 2026 **Stage 0 anchor:** FY ends December 31; TTM ended June 30, 2026; assessment horizon June 30, 2031 **Governed price:** $358.56 at September 25, 2026; quote-packet SHA-256 `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f` **Statutory bridge SHA-256:** `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6` **Trade execution authorized: false**

This refresh tests stewardship, not valuation. It uses the DR-cleared `data_package.md` Sections 7 and 9 for capital allocation and current corporate actions, preserves prior work where the evidence remains valid, and rechecks the latest proxy, 10-K, Q2 2026 10-Q and earnings release, IR material, and eight live earnings-call transcripts spanning Q3 2024 through Q2 2026. The evidence raises a real challenge to the prior PASS: Roper has spent heavily on acquisitions without publishing vintage-level realized returns, and it lifted adjusted net leverage to 3.4 times while repurchasing $3.2 billion of stock. PASS therefore cannot rest on adjusted EPS accretion, headline free-cash-flow growth, or management reputation. It must be earned through per-share discipline, candor, alignment, and observable operating outcomes.

1. Who is running the company

L. Neil Hunn, 54, has served as president and chief executive officer since September 2018 and as a director since 2018. He joined Roper in 2011, ran the former medical group, and became Roper's first chief operating officer in 2017. Before Roper, he held senior operating and finance roles at MedAssets. More than eight years in the CEO seat is sufficient to hold him accountable for the current portfolio: the 2022 separation of industrial assets into Indicor, the concentration in vertical software, the move toward faster-growing “maturing leader” acquisitions, and the 2025-2026 decision to add repurchases as a competing capital-allocation lever. [2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/882835/000088283526000009/rop-20251231.htm)

Jason P. Conley, 50, has been executive vice president and CFO since February 2023. His internal history is unusually deep: chief accounting officer from 2021, controller from 2017, CFO of Managed Health Care Associates from 2013, and corporate FP&A/investor relations leader from 2006. Before Roper he worked at Honeywell and Deloitte. Conley therefore owns the recent debt, buyback, adjusted-metric, and acquisition-financing choices; he is not a new outsider inheriting them.

Roper does not publicly assign three enterprise segment presidents. Its decentralized design places accountability with operating-company CEOs, and calls identify leaders such as Jeff Clementz at DAT, Matt Strazza at Frontline, and Buck Brody at ConstructConnect. Internal movement from business CFO to CEO and between operating companies is good succession evidence. The limitation is transparency: shareholders cannot consistently map all 29 businesses to named leaders, tenure, and scorecards.

Amy Woods Brinkley has been independent board chair since June 2021, separating chair and CEO roles. Eight of nine directors are independent; Hunn is the only non-independent director, and all key committees are independent. Former Danaher CEO Thomas Joyce and former Adobe CFO John Murphy add relevant capital-allocation and software experience. Long tenure remains a modest concern: Robert Johnson has served since 2005 and Richard Wallman since 2007. Annual elections, an independent chair, and four new independent directors over eight years mitigate, but do not erase, board-refreshment risk. [2026 proxy](https://www.sec.gov/Archives/edgar/data/882835/000119312526145481/d204543ddef14a.htm)

2. Tenure, major decisions, and operating record

Hunn's first defining decision was the 2022 separation of Roper's more cyclical industrial businesses into Indicor while retaining a minority stake. The move concentrated continuing operations in Application Software, Network Software, and Technology Enabled Products. By FY2025, software produced $6.13 billion of Roper's $7.90 billion revenue and recurring plus reoccurring software revenue totaled $5.32 billion. The pending 2026 sale of Indicor's instrumentation portfolio was expected in the data package to return about $1.1 billion after tax to Roper, while the Q2 call later framed the estimate near $1.2 billion; closing adjustments explain why that figure should remain approximate. This was a coherent portfolio upgrade, but the $828.6 million Indicor fair-value increase in Q2 2026 is below-line and non-recurring, not evidence of operating execution.

Second, Hunn increased acquisition spending and tilted it toward higher-growth vertical software. CentralReach cost $1.85 billion in April 2025. By Q1 2026 its recurring software revenue was growing well above 20%, margins were expanding, and management said it was ahead of the deal model; by Q2, it remained ahead after one year. Subsplash cost $800 million against $36 million of expected forward EBITDA, roughly 22 times. Its software growth was double-digit in Q2 2026, payments grew faster, and margins improved. Transact Campus cost approximately $1.5 billion net of an expected tax benefit and was combined with CBORD around a $20 million synergy plan. These are favorable leading indicators, but none yet constitutes a disclosed five-year cash-on-cash return or realized ROIC.

The strongest realized return evidence is smaller and atypical. Roper exited its Certinia minority position for $246 million in Q4 2024, describing a 2.0-times multiple of invested capital over 14 months. Indicor also demonstrates that management can sell assets rather than hold them indefinitely. Still, Roper does not publish an acquisition-vintage table showing purchase price, original underwriting, realized cash flow, year-five return, and impairment outcome. Given $31.1 billion of goodwill plus intangibles at FY2025 and negative tangible book value, this omission is the central management risk.

Third, management made repurchases compete with acquisitions. From Q4 2025 through Q2 2026, Roper bought 9.0 million shares for $3.2 billion, more than 8% of the prior share base. The blended price was approximately $355.56, essentially equal to the governed $358.56 price. The sequence matters: Q4 2025's 1.121 million shares cost $445.87 each, whereas Q2 2026's 3.6 million cost about $341. The later purchases were more price-sensitive; the first tranche was not. Rolling the share count back to 2013 is helpful, but a near-flat mark-to-market result is not long-run proof. The positive evidence is process: Hunn says Roper compares buybacks against acquisition “time zero,” year-five cash return, and year-five ROIC, with an added risk premium for external assets.

The miss record is informative. Roper began FY2025 expecting 6%-7% organic growth and finished around 5.5% as Deltek GovCon, Foundry, freight, and Neptune timing weakened. On the Q4 call Hunn said the result was below expectations and “we own that.” The initial 2026 guide then excluded assumed GovCon recovery. That is evidence of learning, not a quiet reset. Roper nevertheless beat each quarterly adjusted EPS guide over the eight reviewed quarters, sometimes with help from tax, margins, and share count; guide-beating alone is not evidence that acquisitions earned their cost of capital.

3. Capital allocation behavior

The verified five-year record is acquisition-led but consistent with Roper's stated strategy.

Fiscal year	Capex ($B)	R&D ($B)	Buybacks ($B)	Dividends ($B)	M&A cash outlay ($B)
2021	0.063	0.485	0.000	0.236	0.217
2022	0.070	0.530	0.000	0.262	4.280
2023	0.108	0.646	0.000	0.290	2.053
2024	0.066	0.748	0.000	0.322	3.613
2025	0.047	0.853	0.500	0.355	3.290

Five-year acquisition cash outlay totaled $13.45 billion. The current data package corrects an earlier provider zero for FY2025 R&D: the 10-K reports $852.5 million, or 10.79% of revenue, up from $748.1 million in 2024 and $646.1 million in 2023. Low physical capex and rising R&D fit an asset-light vertical-software portfolio. Dividends increased but remained secondary. [2025 10-K R&D disclosure](https://www.sec.gov/Archives/edgar/data/882835/000088283526000009/rop-20251231.htm)

The balance-sheet choice is the harder test. At Q2 2026, cash was $365 million and gross debt was $11.32 billion. Adjusted net debt/EBITDA was 3.4 times after buybacks; the data package's statutory diagnostic was 3.38 times. Expected Indicor proceeds and annual free cash flow should reduce leverage, but “more than $5 billion of annualized deployment capacity” is not synonymous with economic headroom. PASS assumes Roper will not layer a large high-multiple acquisition onto elevated leverage merely because financing is available. A large deal before visible deleveraging would push this gate toward YELLOW unless its disclosed return case were unusually strong.

4. Compensation and ownership alignment

Hunn's 2025 reported compensation was $26.21 million, including $17.53 million of stock awards and $5.10 million of options; Conley's was $9.95 million. The 2025 annual bonus used adjusted EBITDA growth and paid at 104.8% of target after 11% growth. The 2025 long-term award used three-year adjusted net earnings CAGR plus a relative TSR modifier. Those measures can reward acquired scale and stock-market optics without directly proving acquisition ROIC.

The 2026 redesign is materially better. Long-term awards now use three-year adjusted diluted EPS CAGR, with a relative adjusted free-cash-flow-margin modifier replacing TSR. Annual incentives shift to organic revenue growth and core adjusted EBITDA margin. Per-share earnings, organic growth, and cash conversion are closer to minority-shareholder economics, although the program still lacks an explicit ROIC or vintage-return gate. The proxy states that all restricted stock and RSUs are performance-based, executive equity awards vest only after three years, and dividends are paid only on earned awards. Nasdaq-compliant and supplemental misconduct clawbacks, anti-hedging, and anti-pledging rules are in place.

Proxy beneficial ownership includes exercisable options and unvested restricted shares, so headline ownership overstates directly owned stock. As of February 28, 2026, Hunn's 531,591 beneficial shares included 341,472 options and 32,665 unvested shares, leaving approximately 157,454 actually owned common shares, worth about $56.5 million at the governed price. Conley's 105,633 beneficial shares included 73,938 options and 8,815 unvested shares, leaving about 22,880 shares, worth about $8.2 million. Both exceeded ownership requirements of seven times salary for the CEO and three times for other named executives. [2026 proxy ownership table](https://www.sec.gov/Archives/edgar/data/882835/000119312526145481/d204543ddef14a.htm)

SBC was disciplined, not immaterial: $123 million in 2021, $119 million in 2022, $124 million in 2023, $146 million in 2024, and $166 million in 2025, roughly 2%-2.5% of revenue. Diluted shares rose modestly through 2025 before buybacks reversed more than a decade of issuance. Live filing review found no clustered executive exit that overrides the alignment conclusion; the August blackout related to a 401(k) recordkeeper change, not a suspension of corporate repurchases.

5. Disclosure quality, candor, guidance, and AI

Across the eight live transcripts, management usually answered difficult questions with a number and a condition rather than a slogan. It quantified deal prices and forward EBITDA, repurchase prices, leverage, mid-90s gross retention, software bookings, AI time savings, and the segments behind margin pressure. When asked whether DAT had recovered, Hunn distinguished improving carrier/pricing indicators from load volumes that had not yet confirmed a turn. On GovCon, he repeatedly declined to declare recovery until pipeline conversion persisted. On Q2 2026 AI monetization, he explained subscription, stair-step consumption, transaction, and cloud-migration models, then said customer adoption remained the unknown and refused to quantify 2027 before seeing evidence.

Reported quarter	Adjusted EPS versus prior guide	Candor signal
Q3 2024	$4.62 vs $4.50-$4.54	Beat; called consecutive 4% organic quarters unsatisfactory
Q4 2024	$4.81 vs $4.70-$4.74	Beat; initiated 2025 organic growth at 6%-7%
Q1 2025	$4.78 vs $4.70-$4.74	Beat; retained organic guide despite Deltek uncertainty
Q2 2025	$4.87 vs about $4.80-$4.84	Beat; raised total growth for Subsplash, held organic guide
Q3 2025	$5.14 vs $5.08-$5.12	Beat; quantified shutdown and Neptune timing effects
Q4 2025	$5.21 vs $5.11-$5.16	Beat; owned the full-year organic miss
Q1 2026	$5.16 vs $4.95-$5.00	Beat; raised full-year EPS without assuming GovCon recovery
Q2 2026	$5.38 vs $5.25-$5.30	Beat; raised EPS and organic outlook modestly

Qualifying phrases appeared in all eight quarters—“not ready to call a turn,” “too early,” “cautiously optimistic,” or “stop short”—but the hedging was usually paired with a measurable condition. That is prudent uncertainty, not habitual evasion. The weakness is selective disclosure: consolidated ARR, NRR, churn, customer counts, and brand-level revenue remain unavailable, and acquisition reporting emphasizes adjusted EPS accretion and early growth more than realized returns on purchase price.

AI communication is unusually credible. Roper named products across Deltek, Vertafore, Aderant, CentralReach, DAT, ConstructConnect, Foundry, and SoftWriters; it also quantified examples such as order-entry time falling from roughly 90 seconds to 18 seconds at SoftWriters. Management disclosed that annualized internal AI spend had roughly tripled since January 2026, discussed token-cost controls, and said the 2026 guide contained no meaningful incremental AI revenue beyond current delivery. It did not “AI wash” all software revenue or pretend product shipment equals customer adoption. The risk is execution, not candor: commercialization remains early, and management's bullish TAM language is ahead of consolidated revenue proof.

6. Strategic coherence

Roper says it operates market-leading vertical software and technology-enabled-product businesses in defensible niches and compounds cash flow through continuous operating improvement plus acquisition. The actual investment pattern supports that identity: low capex, R&D near 11% of revenue, industrial separation, repeated vertical-software acquisitions, and decentralized operating-company accountability. [2025 10-K business description](https://www.sec.gov/Archives/edgar/data/882835/000088283526000009/rop-20251231.htm)

AI is an extension of that strategy, not a pivot. Management's claimed right to win—embedded systems of record, vertical data, regulated workflows, customer trust, and distribution—is coherent with the acquired portfolio. The “AI accelerator” shares reusable patterns while operating companies retain product ownership. The five-to-ten-year destination is clear: turn systems of record into systems of work, monetize task automation, migrate installed bases to cloud, and deploy cash toward the highest per-share return. The main strategic vulnerability is not incoherence but underwriting opacity: shareholders can see the destination more clearly than the acquisition hurdle rates used to get there.

7. Governance flags

Roper has one common share class, no controlling shareholder, and no dual-class structure. The 2026 proxy reports no related-person transactions during 2025, although the Audit Committee operates without separate written related-party procedures—an avoidable imperfection. PwC issued an unqualified opinion and found effective internal control at December 31, 2025. Nine small 2025 acquisitions, collectively about 3% of revenue, were excluded from the year-end ICFR assessment under the permitted new-acquisition exception. No restatement, material weakness, SEC enforcement action, or material legal settlement threatening the thesis was identified. [2025 10-K controls report](https://www.sec.gov/Archives/edgar/data/882835/000088283526000009/rop-20251231.htm)

The proxy records one inadvertent late Form 4 for tax withholding by the controller. That is immaterial. The more relevant governance concern is board and compensation oversight of acquisition returns: the board has experienced allocators, yet neither proxy nor investor materials provide a vintage-level return table. Oversight is credible, but public accountability could be stronger.

8. Peer allocator comparison

Allocator	Capital allocation evidence	Communication	Five-year stewardship rank
Constellation Software / Mark Miller, building on Mark Leonard's system	Best explicit hurdle-rate and decentralized-acquisition culture; succession is now being tested	Most candid about hurdle-rate errors and organic-growth limits	1
Roper / Neil Hunn	Strong portfolio-quality shift, useful early deal evidence, and timely later buybacks; weak vintage-return disclosure	Direct on operating misses and AI uncertainty; selective on acquired-return proof	2
Danaher / Rainer Blair, transitioning to Julie Sawyer Montgomery	Strong operating-system discipline and portfolio transformation; less acquisition-centric today	Strong KPI discipline, but leadership transition creates a new evidence period	2-3

Constellation remains the superior benchmark for per-dollar acquisition transparency. Danaher remains the stronger operating-system benchmark, although its October 2026 CEO transition makes future stewardship unproven. Roper ranks above most diversified acquirers on candor and coherence but below Constellation on disclosed capital-return evidence. [Constellation succession](https://www.csisoftware.com/constellation-software-inc-announces-mark-leonards-decision-to-not-stand-for-re-election-to-board-of-directors/) [Danaher succession](https://investors.danaher.com/2026-08-03-Danaher-Appoints-Julie-Sawyer-Montgomery-as-President-and-Chief-Executive-Officer)

9. Management gate verdict

MANAGEMENT GATE: PASS. PASS remains earned, but narrowly enough that it must not be treated as a courtesy grade. Hunn has more than eight years in-seat, owns the portfolio transformation, has meaningful actual stock ownership, has acknowledged organic misses without rewriting history, and has demonstrated willingness to alternate between M&A, divestiture, and repurchases. Conley brings long institutional memory, and the 2026 compensation redesign materially improves per-share and cash-flow alignment. The eight-quarter record shows cautious, numerically grounded answers on GovCon, freight, margin pressure, buybacks, leverage, and AI adoption.

The unresolved issue is acquisition-return proof. Early CentralReach and Subsplash results are favorable, but $13.45 billion of five-year acquisition cash outlay and $31.1 billion of goodwill plus intangibles deserve a public vintage-return table. A downgrade to **YELLOW** follows if adjusted net leverage remains above roughly 3.5 times after Indicor proceeds while Roper executes another large acquisition, if CentralReach or Subsplash materially miss their disclosed growth/margin trajectories, or if buybacks continue at prices that management would not defend with a year-five per-share return. A downgrade to **FAIL** follows from serial high-multiple deals without per-share cash-flow creation, chronic dilution, a material controls/governance breakdown, or repeated evasion on acquisition economics. A stronger PASS requires published original-underwriting-versus-realized-return evidence, continued deleveraging, and proof that AI products drive durable incremental revenue rather than only demos and cost savings.

Source and boundary notes

Primary evidence was retrieved live from SEC EDGAR, Roper IR, and FMP's live transcript endpoints. The eight-quarter transcript set was verified against the live transcript-date index: Q3 2024, Q4 2024, Q1-Q4 2025, and Q1-Q2 2026. No warehouse or transcript cache was used. The most recent official corporate event after Q2 earnings was the August 2026 401(k) blackout filing; it did not change management, capital allocation authority, or the repurchase program. No moat, earnings forecast, valuation, portfolio sizing, order, or trade was performed. **Trade execution remains unauthorized.**

Appendix W - Moat and 2046 Durability

Roper Technologies — Moat and 2046 Durability

Action: `CIO-20260923-ROP-REFRESH` **Run ID:** `pulse-cio-20260927T200229+0800` **Assessment date:** 2026-09-27 **TTM anchor:** 2026-06-30 **Five-year operating horizon:** 2031-06-30 **2046 test date:** 2046-09-27 **Price anchor:** $358.56 at the 2026-09-25 completed-session close **Sealed quote-packet SHA-256:** `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f` **Sealed statutory-bridge SHA-256:** `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6` **Trade execution authorized: false**

Roper does not have one corporate product moat. Its defensibility is the weighted result of dozens of narrow franchises: vertical systems of record embedded in consequential workflows, data and transaction networks with localized liquidity, and engineered products whose accuracy, reliability, regulatory acceptance, or installed base matters more than purchase price. The parent contributes disciplined capital allocation, financing access, and decentralized operating incentives, but those are not substitutes for customer-level protection. The refreshed evidence still supports a real moat today and a credible business in 2046. It does not support an unconditional moat PASS because direct portfolio-wide evidence of realized price, net retention, churn, and paid AI adoption remains absent, while Roper itself now describes AI capability commoditization and third-party model costs as risks.

1. Moat taxonomy applied

Network effects — strong in selected businesses, not a Roper-wide attribute. DAT is the clearest case: more brokers, load postings, verified carriers, observed rates, and searches can improve liquidity, matching, fraud control, and pricing intelligence for other participants. ConstructConnect, iPipeline, iTradeNetwork, and some healthcare networks can also benefit from wider counterparty or data coverage. The defense is strongest when proprietary transaction history improves a decision and participants cannot obtain equal coverage elsewhere. It is weaker when users multi-home, when the “network” is merely hosted software, or when a broader ERP/TMS platform can aggregate several sources. Application Software and Technology Enabled Products generally do not have demand-side network effects. Accordingly, network effect is a powerful but localized profit-pool moat.

Switching costs — the broadest and most important moat. Application customers configure data, permissions, accounting rules, regulatory logic, integrations, forms, and staff routines around products such as Deltek, Aderant, Vertafore, Clinisys, Data Innovations, Frontline, Strata, and Procare. Replacement requires data conversion, implementation, testing, retraining, parallel operation, and audit assurance while the customer keeps running a law firm, laboratory, school, insurer, hospital, or government contractor. Network products add the potential loss of counterparties, benchmarks, and transaction history. Technology Enabled Products create analogous friction through installed endpoints, validated OEM designs, clinical training, and field service. These costs are durable because the customer's migration and failure risk can exceed several years of vendor fees.

Scale economies — meaningful within subsidiaries, modest across the portfolio. Software code, cloud operations, security, product development, datasets, and support can be spread across a larger subscription or transaction base. Network Software's FY2025 43.5% operating-profit margin and 84% Q2 2026 gross margin show the economic potential. Roper's parent also has capital-market access and a repeatable acquisition process. Yet there is little customer-facing scale shared by a freight marketplace, a church platform, a laboratory system, and a water meter. Corporate scale is principally a capital-allocation advantage; it becomes a liability if leverage or acquisition prices make the next dollar of deployment uneconomic.

Brand — strong in niches, weak at the parent level. End customers may trust DAT, Deltek, Aderant, Neptune, Verathon, or NDI because of references, reliability, and accumulated domain experience. The Roper name matters more to business sellers, executives, and lenders than to a hospital or contractor choosing a product. Niche reputation can lower procurement risk, but it is an outcome of workflow competence rather than an independent consumer franchise. A recall, cyber event, poor implementation, or prolonged product stagnation can damage it quickly within a concentrated vertical.

Regulatory advantage — reinforcing, not exclusive. Healthcare, laboratory, insurance, education, utilities, government contracting, and medical devices require compliance, auditability, privacy controls, procurement evidence, or regulatory clearance. These raise entry and switching costs because a challenger must reproduce both functionality and assurance. They do not create monopoly licenses. Well-funded peers can meet the same standards, public customers can terminate or modify contracts, and regulation also raises Roper's own cost and liability. The advantage is strongest where rules are deeply

encoded in the product and implementation know-how.

Intellectual property and proprietary data — selective support, not the core thesis. Roper owns code, know-how, patents, trademarks, designs, and specialized datasets, but its 2025 Form 10-K says no operating unit depends substantially on one IP item. Code can be rewritten and patents expire. More durable assets are cumulative workflow context, permissioned data, longitudinal transaction history, integrations, and customer-specific configuration. Proprietary data is moat-bearing only when it continuously improves a decision and equivalent data cannot be bought or reconstructed.

High-trust procurement — strong across all three segments. Laboratories, hospitals, public agencies, utilities, insurers, freight brokers, and medical-device OEMs favor reliable, referenceable vendors because failure can interrupt care, payment, compliance, or physical service. Long evaluations and validation cycles impede entrants, while specialist sales and support reinforce trust. The same procurement rigor constrains pricing: public tenders, enterprise negotiations, hospital purchasing groups, and large OEMs can exercise buyer power. Trust protects renewal more reliably than it guarantees unlimited price.

2. Per-segment moat

Application Software — 10- to 20-year durability; strongest overall segment moat. This segment controls systems of record and daily administration. Its protection combines domain data models, integrations, compliance logic, implementation history, user routines, and customer references. A competitor attacks with a cloud-native product that offers easier implementation, open APIs, lower price, and AI automation. It fails when missing edge cases and migration risk outweigh headline savings; it wins if the incumbent cannot modernize, data becomes portable, or an agent layer abstracts the legacy interface. Five-year durability is strong, ten-year durability is probable with continued cloud/AI reinvestment, and twenty-year durability is conditional on remaining the authoritative record and orchestration layer. The earliest observable warnings are enterprise gross retention falling below the disclosed mid-90s area, recurring growth below inflation, Application operating margin persistently below the mid-20s, or backlog/organic growth weakening despite acquisitions. Application Software was 56.7% of FY2025 revenue and therefore drives the blended moat.

Network Software — high peak economics but the most heterogeneous and AI-exposed segment. True networks such as DAT can defend through marketplace liquidity, rate history, verified identity, integrations, and transaction data. ConstructConnect, iPipeline, and iTradeNetwork can defend through partner coverage and normalized industry data; SoftWriters and healthcare assets lean more on workflow and compliance. Foundry's Nuke benefits from trained artists, scripts, plug-ins, and studio pipelines, but generative video could alter the production stack. A competitor attacks by subsidizing one side, aggregating networks, embedding matching in a broader suite, or using AI to reduce search and content-production costs. Multi-homing makes the defense less absolute than margins imply. Five-year durability passes; ten-year durability requires continuing data/network reinvestment; twenty-year durability is selective rather than segment-wide. Earliest signs are transaction or user growth lagging end-market recovery, ARPU/retention reversal, loss of data exclusivity, or Network operating margin staying below roughly 40% without a clear investment bridge.

Technology Enabled Products — 10- to 20-year durability where physical qualification and installed systems combine. Neptune meters, Verathon airway and bladder tools, NDI tracking, identity readers, and precision products occupy physical chokepoints that a language model cannot replace. Qualification, clinical familiarity, design-in, service, distribution, and consumables support repeat purchasing. NDI's OEM validation may create the strongest single switching cost; Neptune's installed endpoint, communications, and billing workflow can make wholesale replacement expensive. Five-year durability is strong, ten-year durability is probable, and twenty-year durability remains credible only if products preserve the data, replacement, and qualification relationship rather than becoming standardized components. Competitors attack through interoperable devices, alternative sensing or computer vision, better life-cycle economics, lower-cost manufacturing, or control of the digital layer. Earliest warnings are OEM or utility share loss, recalls, price failing to offset input inflation, loss of replacement/consumables attach, or margin remaining below its historical low-30s band. This is the segment most protected from pure AI substitution, though large buyers retain bargaining power.

The blended moat is weaker than the best franchise. Network Software does not consist entirely of networks, and Technology Enabled Products does not consist entirely of protected installed bases. Conversely, the mix reduces dependence on one disruption vector: a generative-media shock does not erase water metering or laboratory systems. FY2025 revenue mix was 56.7% Application Software, 20.3% Network Software, and 23.0% Technology Enabled Products; on the refreshed TTM base it was approximately 56.7%, 20.5%, and 22.8%. That weighting makes embedded software the core of the equity's durability and makes retention disclosure more important than the corporate “niche leader” label.

3. Margin persistence evidence

The refreshed data package provides five years on a comparable current segment structure. A ten-year series is not decision-useful because Roper's divestitures, acquisitions, and the 2022 Indicor transaction changed the perimeter. Within the governed window, margins are unusually stable.

Margin evidence	FY2021	FY2022	FY2023	FY2024	FY2025	TTM ended 2026-06-30
Consolidated operating margin	27.6%	28.4%	28.3%	28.4%	28.3%	28.0%
Application Software operating-profit margin	26.7%	27.1%	25.8%	26.5%	26.8%	27.2%
Network Software operating-profit margin	39.0%	41.4%	43.9%	45.2%	43.5%	41.8%
Technology Enabled Products operating-profit margin	33.4%	33.2%	33.4%	33.9%	34.5%	33.3%

Consolidated margin remained within an 80-basis-point band despite inflation, acquisitions, end-market cycles, and cloud/SaaS transition. Application Software stayed near the mid-20s and improved on a TTM basis. Technology Enabled Products held low-to-mid-30s operating margins through component and metal pressure. Network Software expanded dramatically through FY2024 and then retreated; 41.8% remains exceptional, but the decline requires monitoring because payment mix, Subsplash, and Convoy investment do not guarantee a return to 45%.

The Q2 2026 filing adds a useful inflation/mix stress check. Year-on-year gross margin improved from 68.8% to 69.8% in Application and from 83.2% to 84.3% in Network, while Technology Enabled Products fell from 58.6% to 56.9%. Corresponding operating margins were 27.4%, 41.0%, and 33.3%. Thus software economics were resilient, but hardware pricing did not fully neutralize adverse mix/input effects in that quarter. Margin persistence is real moat evidence; it is not a substitute for a disclosed price/volume bridge.

4. AI disruption stress test

Application Software is partly a workflow layer and partly an authoritative record. Drafting, scheduling, coding, search, reconciliation, and reporting can increasingly become prompt-to-output functions. If a foundation model has secure access to the same structured data, it can replicate individual features. The moat must therefore live in the system of record, permissions, audit trail, integrations, regulatory logic, implementation base, and distribution. Roper can monetize agents when they act inside those controls; Vertafore's six agent SKUs and advancing SaaS migrations are directional evidence, not proof of paid adoption. The bear case is a secure horizontal agent that reads and writes across applications, leaving the incumbent as a low-value database.

Network Software can be amplified or disintermediated. Models can improve matching, takeoff, forecasting, pricing, fraud detection, and unstructured-data intake. The incumbent wins if unique real-time data and transaction context make its model better. It loses if aggregators let users search several networks or transact bilaterally with little loss of liquidity. Foundry is the single most exposed business family because generative video can remove tasks and consolidate tools even if high-end studios still need governed pipelines. At the reportable-segment level, Network Software is the most exposed because AI reduces search friction and multi-homing costs.

Technology Enabled Products has chokepoint economics. AI cannot measure water flow, secure a door, track a surgical instrument, or visualize an airway without physical sensors and devices. It can improve interpretation, predictive maintenance, navigation, service, and manufacturing. The risk is that a hyperscaler, OEM, or hospital platform owns the data/analytics layer and reduces Roper's product to a component. That is a bargaining-power shift, not near-term workflow elimination.

Roper is platform-adjacent, not an AI-infrastructure owner. Its 2025 Form 10-K expressly warns that AI functionality may commoditize, competitors may move faster, and reliance on OpenAI, Anthropic, Google, Microsoft, and other model providers exposes it to price, availability, and contract changes that may not be passed through. This disclosure strengthens the case for a YELLOW moat gate: domain distribution is valuable, but paid adoption and post-inference gross profit have not been demonstrated portfolio-wide.

5. The 2046 test

Specific 2046 description. On 2046-09-27, Roper is plausibly still a decentralized owner of vertical workflow systems, transaction/data networks, and technology-enabled devices. Law firms, schools, laboratories, hospitals, insurers, government contractors, freight intermediaries, utilities, pharmacies, and medical-device OEMs pay it to maintain authoritative records,

execute compliant transactions, verify counterparties, meter physical resources, and guide clinical or industrial procedures. Application Software remains the secure orchestration and audit layer for human and AI agents. True Network franchises remain where participant identity, transaction history, and liquidity are scarce; peripheral creative or front-end tools may have withered or been divested. Technology Enabled Products remains around sensing, tracking, metering, access, and clinical procedures, with more connected software and consumables attached. Operating margin is directionally stable to modestly higher than today's roughly 28% consolidated level if software mix and automation offset higher security, governance, and model costs. The surviving moat is switching cost plus high-trust procurement, selectively reinforced by proprietary network data and physical qualification.

Bear 2046 description. Roper becomes a collection of mature databases and devices whose customer interface is controlled by hyperscaler agents, horizontal industry platforms, or customer-built orchestration. Data-portability mandates and standard APIs reduce migration friction; network users multi-home through aggregators; physical products standardize while OEMs or distributors own the data relationship. Organic growth and price fall toward inflation or below, acquisitions obscure leakage for a time, and returns on acquired goodwill deteriorate. This is credible but not the central outcome—roughly a one-in-three qualitative risk over twenty years—concentrated in less-embedded Application products, multi-homing networks, and Foundry. The probability rises sharply if retention and recurring organic growth weaken before reported margins do.

6. Competitive threat inventory

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
AI/horizontal-platform disintermediation	Agents commoditize interface features and write across systems through standard APIs	Application; Network	Gross retention below 90%; recurring growth below inflation; weak paid-AI attach	Medium
Network multi-homing and data aggregation	Broader suites or aggregators combine marketplaces, alternative data, and automated matching	Network	Users/transactions lag market recovery; ARPU falls; margin below 40% without investment explanation	Medium
Physical standardization and buyer power	Interoperability, OEM insourcing, low-cost devices, or procurement groups compress premium pricing	Technology Enabled Products	Share loss; recalls; weaker consumables attach; margin below 31% for four quarters	Medium-low

7. Pricing power verification

Pricing power is **observable indirectly but not verified directly enough for PASS**. Supporting evidence includes enterprise gross retention in the mid-90s, TTM recurring software revenue of $4.753 billion versus $4.483 billion in FY2025, $5.223 billion of remaining performance obligations at Q2 2026, and the margin record above. Roper also reported DAT ARPU improvement and used a Neptune surcharge to address metals and tariff pressure. Application and Network gross margins improved year on year in Q2 2026, suggesting that customer value and mix absorbed cost pressure in software.

The evidence has important limits. Roper does not publish a consolidated or segment price/volume/mix bridge, numerical list-price increases, renewal adoption by increase, portfolio NRR, churn, minimum commitments, or standard contractual escalators. RPO is firm-order visibility, not proof of price. Gross retention says little about expansion revenue or discounting. Technology Enabled Products' Q2 gross-margin decline shows that price does not automatically outrun inputs. The correct conclusion is bounded pricing power: embedded businesses can often monetize value or recover cost, but the analysis should not assume recurring price above inflation.

8. Moat verdict and monitoring conditions

Moat gate: YELLOW. Roper has specific, observable switching-cost, high-trust procurement, selective network/data, and physical-product moats, backed by five years of stable high margins. Application Software carries the blended moat; Technology Enabled Products is most protected from AI replacement; Network Software contains both the strongest network economics and the greatest multi-homing/generative-AI exposure. YELLOW is required because portfolio pricing, NRR, churn, and paid-AI unit economics are not disclosed, while recent Network and Technology Enabled Products margin compression leaves a named durability question. This is a real evidence gap, not a diplomatic middle bucket.

2046 test: PASS. A specific future customer and profit pool can be named: regulated and operational institutions pay Roper for authoritative workflows, verified transactions, physical measurement, and clinical/industrial chokepoints. The future description does not require Roper to own a foundation model or every current product to survive. Stable-to-modestly-higher margin is plausible if the systems-of-record, trusted data, and physical qualification remain intact.

Upgrade the moat gate to PASS if (1) enterprise gross retention remains mid-90s or better through a downturn while organic recurring growth remains at least mid-single-digit, (2) Roper discloses business-level NRR/price realization or paid-AI attach showing monetization without material margin dilution, and (3) Network and Technology Enabled Products margins stabilize above approximately 40% and 32%, respectively. Downgrade to FAIL if gross retention falls below 90%, Application margin remains below 24%, Network margin remains below 38% absent deliberate investment, material customer-loss impairments emerge, or AI agents measurably reduce renewal, ARPU, transaction share, or paid module demand.

Sources

- Refreshed, DR-cleared `data_package.md` for all historical, segment-mix, margin, retention, RPO, backlog, and management-commentary claims; QFR-sealed statutory bridge hash stated above.
- Refreshed `appendix_A_primer.md` for business orientation only; no quantitative claim depends on the primer.
- Refreshed segment appendices, Sections 4-5, for competitive and segment-level moat integration.
- [Roper Technologies 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/882835/000088283526000009/rop-20251231.htm) for competition, IP, AI/model-provider dependency, contract, customer, regulatory, and product-liability risks.
- [Roper Technologies Q2 2026 Form 10-Q](https://www.sec.gov/Archives/edgar/data/882835/000088283526000036/rop-20260630.htm) for current segment margins, RPO, backlog, and revenue mix.
- Live FMP stable `income-statement` pull for ROP, fetched 2026-09-27, used only to sanity-check FY2021-FY2025 consolidated revenue and operating income against the verified package; official filings and the data package control.

No valuation verdict, sizing proposal, portfolio action, or trade instruction is made in this appendix. `trade_execution_authorized=false`.

Appendix B1 - Application Software

Application Software — Segment Deep Dive

Run date: 2026-09-27 Forecast anchor: TTM ended 2026-06-30 Forecast horizon: 2031-06-30, exactly five calendar years Currency: USD billions unless stated otherwise Scenario probabilities: Bear 25%; Base 55%; Bull 20% Exact segment profit basis: `Operating profit` Trade execution authorized: **false**

Refresh controls: this appendix uses the DR-cleared package for run `pulse-cio-20260927T200229+0800`, the QFR-sealed quote packet hash `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f`, and the unchanged statutory bridge hash `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`. The price anchor is $358.56 on 2026-09-25, but this segment appendix forecasts operating economics rather than security returns. [data_package title block and QFR gate paragraph]

0. Segment boundary and taxonomy note

Application Software is one of Roper Technologies' three reportable segments. The current continuing-operations taxonomy is comparable across FY2021-FY2025. The November 2022 Indicor divestiture removed the historical Process Technologies segment and certain industrial businesses, while the official continuing-operations tables restated all years used here into Application Software, Network Software, and Technology Enabled Products. Acquisitions changed the business roster but did not trigger a later reportable-segment reclassification. The model therefore treats FY2021 as the boundary of comparable history. [data_package §1, taxonomy paragraph and Application Software row]

The perimeter includes Aderant, CentralReach, Clinisys, Data Innovations, Deltek, Frontline, IntelliTrans, PowerPlan, Procare, Strata, Transact/CBORD, and Vertafore. These are not modeled as separate dollar lines because Roper does not disclose brand revenue. The finest clean dollar decomposition is Application Software's recurring, reoccurring, and non-recurring software revenue streams. [data_package §1, business roster; §4, Application Software rows 1-3]

1. What this segment actually is

Application Software is a portfolio of vertical systems of record. Customers are not buying a generic office suite; they are buying software that encodes a profession's rules, data model, billing, compliance, and day-to-day operating sequence. Aderant serves legal practices; Deltek serves government contractors and project-centric organizations; Frontline addresses education administration; Vertafore serves insurance distribution; Strata and Clinisys address healthcare workflows; PowerPlan addresses asset-intensive accounting; and Procare and CentralReach address childcare and behavioral-health operations. The common thread is workflow depth rather than a shared end market. [data_package §1, Application Software description and roster]

Products are sold through subscription, maintenance, usage-linked charges, licenses, implementation, and services. FY2025's audited mix was 73.2% recurring, 11.7% reoccurring, and 15.1% non-recurring software. “Recurring” includes subscription and maintenance. “Reoccurring” is transaction or usage-linked economics that repeats but varies with activity. “Non-recurring” includes license, implementation, and other one-time items. [data_package §4, 2025 Form 10-K revenue-stream table, Application Software rows 1-3; percentages calculated solely from those rows]

Go-to-market is necessarily vertical. Sales teams must demonstrate subject-matter fit, references, integrations, security, and migration competence. Large customers often require procurement, testing, data conversion, training, and implementation before the product becomes the system of record. The cost of winning is front-loaded, while the cost of retaining a successful implementation should be lower. That pattern is consistent with disclosed mid-90s enterprise gross retention, but Roper provides no segment NRR, churn, CAC, payback, seats, ACV, or customer counts. [data_package §0a, completeness matrix; §10, rows 1-4]

The segment contains several revenue clocks. Maintenance and SaaS subscriptions are contractually recurring. Usage-linked revenue moves with customer activity. Implementation and license revenue can be lumpy and may fall during cloud migrations even when lifetime economics improve. A transition from on-premise license plus maintenance to SaaS may defer revenue and consume hosting or implementation resources before improving recurrence.

2. Current economics

TTM revenue is $4.6922 billion, the sum of Q3 2025, Q4 2025, Q1 2026, and Q2 2026 revenue of $1.1610 billion, $1.1589 billion, $1.1915 billion, and $1.1808 billion. TTM `Operating profit` is $1.2749 billion on the sealed bridge basis, implying 27.17% margin. The sign convention is positive segment profit; corporate administrative expense is a separate negative, unallocated line modeled once in synthesis and is not pushed into this segment. [data_package §5, SEC releases and Forms 10-Q/10-K dated 2025-10-23/2025-10-31, 2026-01-27/2026-02-24, 2026-04-23/2026-05-01, and 2026-07-23/2026-07-31; §3a, sealed TTM bridge row]

Recent growth is slower than the acquisition-boosted FY2023-FY2025 history. Across the four TTM quarters, total growth was 18%, 10%, 12%, and 8%, while organic growth was 6%, 4%, 5%, and 5%. Existing-perimeter growth has held near mid-single digits. The approximate 12, 6, 7, and 3 percentage-point spreads are perimeter-effect proxies, not a durable organic rate and not disclosed acquired-revenue dollars. [data_package §5, SEC release/Form pairs dated 2025-10-23/2025-10-31, 2026-01-27/2026-02-24, 2026-04-23/2026-05-01, and 2026-07-23/2026-07-31]

FY2025 Application Software revenue consisted of $3.2822 billion recurring, $0.5226 billion reoccurring, and $0.6782 billion non-recurring software. Roper does not disclose this split for TTM. The model allocates the $4.6922 billion TTM total using FY2025's audited mix: estimated $3.4354 billion recurring, $0.5470 billion reoccurring, and $0.7098 billion non-recurring. These are analyst starting allocations, not reported history. [data_package §4, 2025 Form 10-K revenue-stream table, Application Software rows 1-3; §5, dated quarterly filing/release rows]

[DATA GAP: Exact TTM Application Software dollars by revenue stream are not disclosed. The forecast applies FY2025's audited stream mix to the sourced TTM total.]

Visibility is meaningful but incomplete. Application Software backlog was $2.369 billion at Q2 2026, about 50.5% of TTM revenue. The corresponding year-end series was $1.542 billion, $1.796 billion, $2.136 billion, $2.275 billion, and $2.533 billion from FY2021 through FY2025. Because the interim and year-end balances are different dates, their difference is not a year-on-year contraction. Consolidated RPO was $5.223 billion and next-12-month backlog $3.286 billion at Q2 2026; neither is allocated to Application Software. [data_package §0a, 2022/2023/2025 Forms 10-K and Q2 2026 Form 10-Q, KPI rows 5-7]

Physical capital intensity is low. Consolidated FY2025 capex was 0.60% of revenue and capitalized software was a separate $57.3 million; management expects the two together at 1.0%-1.5% of revenue. Economic reinvestment is engineering, hosting, security, migration, implementation, and domain expertise. The refreshed package now verifies FY2025 consolidated research, development and engineering expense of $852.5 million, or 10.79% of revenue, from the controlling 2025 Form 10-K after rejecting FMP's zero. Roper does not allocate that expense to Application Software, so no segment R&D ratio is invented. [data_package §7, FY2025 row and official-source override paragraph]

3. Unit economics

The core unit is an implemented workflow, not merely a seat. Revenue becomes `Operating profit` through four layers. Subscription and maintenance renew against a substantially fixed software code base. Usage-linked revenue scales with activity and may carry processing costs. Implementation and license revenue absorbs delivery labor and can be lower-margin or lumpy. Each business then funds development, cloud operations, security, sales, and support before reporting segment profit.

Margins of 26.7%, 27.1%, 25.8%, 26.5%, and 26.8% from FY2021-FY2025 show stability rather than automatic SaaS leverage; TTM reached 27.17%. FY2023's trough occurred during fast growth and acquisition integration, warning that recurring mix does not guarantee immediate margin expansion if acquisitions, cloud migration, and reinvestment absorb the benefit. [data_package §3, 2022/2023/2025 Forms 10-K Note 14; §3a sealed TTM bridge]

Retention is the first control. Enterprise gross retention remained in the mid-90s and management said it remained strong. That implies roughly 4%-6% annual gross leakage before price, cross-sell, new logos, or usage. It is good for a heterogeneous portfolio but does not establish NRR above 100%. Base therefore does not assume expansion revenue overwhelms churn. [data_package §0a, KPI narrative; §6, Q1 FY2026 call, Neil Hunn, 2026-04-23]

Pricing power is real but bounded. Customers face migration, workflow disruption, retraining, data conversion, regulatory testing, and integration risk. Those frictions support price increases and tier upgrades when product value keeps pace. Yet Roper discloses no segment price series. Procurement scrutiny, public budgets, and credible competitors constrain price; “mission critical” cannot justify increases indefinitely. [data_package §10, pricing metrics row]

[DATA GAP: No Application Software pricing, ARPU, ACV, customer-count, CAC, payback, seat, or NRR series is disclosed. Pricing is embedded conservatively in stream growth rather than shown as a false unit bridge.]

Cloud transition changes timing and cost. Moving customers to SaaS can replace up-front license revenue with ratable subscription revenue, add cloud expense, and require parallel support. Later it can reduce version fragmentation, accelerate releases, and improve analytics or AI attach. Management's statement that SaaS transitions continue to advance meaningfully supports the direction; the modest base margin forecast recognizes transition costs. [data_package §6, Q2 FY2026 call, Neil Hunn, 2026-07-23]

AI affects price and cost. Agents embedded in the system of record can automate document intake, reconciliation, coding, scheduling, or service. If the vendor owns workflow and permissions, an agent can become a paid module or protect renewal pricing. But inference, monitoring, privacy, and human controls add cost; generic copilots can attack peripheral features. The package says Vertafore launched six agent SKUs but provides no revenue, attach, or margin contribution. [data_package §6, Application Software additional commentary]

4. Competitive dynamics

Competition occurs inside each vertical, not at segment level. Deltek faces project ERP and GovCon alternatives such as Unanet plus broad ERP vendors. Vertafore faces insurance and agency-management platforms. Frontline competes with education administration and HCM products. Healthcare assets face specialist clinical, laboratory, and planning vendors. Procare and CentralReach face focused childcare and behavioral-health platforms. Oracle, SAP, Workday, Salesforce, and ServiceNow can move down into vertical workflows; specialists can attack narrow features with lower price or better UX.

Public-sector software is a useful analogue for Frontline and parts of Deltek. Tyler Technologies identifies small niche vendors, large horizontal vendors, systems integrators, internal government IT, and Constellation Software as competitors. It emphasizes depth, implementation success, references, configuration, service, and integrated applications; government RFPs add price pressure and elongate sales. [Tyler Technologies 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/860731/000086073126000016/tyl-20251231.htm)

Insurance software illustrates durability and threat. Guidewire describes policy, claims, and billing as systems of record, extensive customer evaluations, and approximately $3.1 billion of RPO at July 2025, with some cloud arrangements longer than the typical five-year initial term. It also calls P&C software fragmented and competitive, naming Duck Creek, EIS, Insurity, Majesco, Origami Risk, Sapiens, SAP, Salesforce, and ServiceNow. Long contracts coexist with intense cloud competition; that is the right mental model for Vertafore. [Guidewire 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1528396/000152839625000221/gwre-20250731.htm)

Adjacent vertical SaaS shows AI productization. AppFolio describes a unified system of record with AI embedded in workflows, tiered subscriptions, transaction services, and APIs. It also acknowledges low entry barriers for point solutions and the risk competitors integrate AI faster. AI is more likely to intensify investment and compress weak features than erase deep records overnight. [AppFolio 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1433195/000143319526000011/appf-20251231.htm)

CCC Intelligent Solutions reports proprietary insurance data, network integrations, and hundreds of AI models in claims and repair workflows. It demonstrates that vertical vendors can monetize AI when combining data rights, workflow position, and integrations—not merely a foundation model. That raises the bar for Vertafore: agents must deliver measurable outcomes inside the incumbent data model. [CCC Intelligent Solutions 2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/1818201/000119312526067448/ccc-20251231.htm)

No consistent current market-share definition spans Roper's niches. This appendix makes no segment-share claim and assesses standing through workflow position, retention, visibility, and product evidence.

[DATA GAP: Comparable current market-share percentages do not exist for the heterogeneous portfolio. No share is estimated.]

5. Moat at segment level

The strongest moat is accumulated workflow fit. A system of record contains years of data, permissions, rules, forms, integrations, and habits. Replacement is a multi-department migration with testing, parallel running, and operational risk. In regulated or public settings, customers require audit trails, security, and domain reporting. These switching costs are economic even without patent protection.

The second moat is vertical data structure. A generic model may draft text but does not automatically possess permissioned data, process state, approved rules, or integration endpoints. Incumbent platforms can place AI inside the transaction flow and

preserve the audit record. Guidewire, AppFolio, Tyler, and CCC all invest in this pattern, making AI table stakes. The moat shifts from unique code toward trusted workflow, distribution, and data context.

The third moat is reference density. Vertical buyers know peer institutions and implementation histories. A successful reference reduces perceived renewal or expansion risk; a failed migration damages future sales. Roper's decentralized businesses preserve specialization, while the parent provides capital. The weakness is limited cross-brand synergy: a legal customer has little reason to buy childcare software, so there is no unified demand-side network effect.

Recurrence and backlog reinforce, but do not prove, the moat. Application backlog is $2.369 billion and FY2025 recurring plus reoccurring mix was 84.9%. Backlog covers about half of TTM revenue, and mid-90s gross retention requires replacement sales, price, cross-sell, or acquisitions every year. [data_package §0a, Q2 2026 Form 10-Q backlog row and KPI narrative; §4, 2025 Form 10-K revenue-stream table]

Over five to ten years, durability is conditional. The moat survives if businesses modernize cloud products, maintain security, and embed AI into domain workflows. It weakens if horizontal agents safely read and write across databases, abstract the interface, and make vendors interchangeable. It also weakens if Roper harvests margin while competitors reinvest. Stable historical margin does not suggest aggressive harvesting, but segment R&D disclosure is insufficient to verify intensity.

End-market mix dampens but does not eliminate cyclicality. Legal, healthcare, education, insurance, utilities, childcare, and government contracting respond to different demand shocks, so a single industry recession should not hit every brand at once. The portfolio nonetheless has common exposures: customer hiring affects seats; public budgets affect procurement; interest rates influence smaller customers and acquisition financing; and cybersecurity requirements can delay all implementations. Diversification therefore reduces idiosyncratic volatility but does not create a new moat. The model expresses that balance through a relatively narrow organic-growth range rather than treating every niche as independent.

The distinction between gross retention and economic retention is especially important. A customer can renew the core record system while reducing modules, seats, transaction volumes, or services. Conversely, a stable customer may expand into cloud, analytics, or AI and produce revenue growth without a new logo. Because Roper gives only mid-90s enterprise gross retention, the appendix cannot observe these opposing effects. Backlog and recurring growth are useful corroboration, but neither replaces a cohort bridge. A future disclosure of stable gross retention with falling organic recurring growth would suggest downsell or weak new-logo performance; stable organic growth with declining backlog could instead reflect shorter contracts or faster implementation.

Pricing should also be evaluated after inflation and delivered value. Nominal price increases that merely offset wage, hosting, and security costs protect dollars but do not demonstrate stronger economics. Genuine pricing power would appear as recurring growth above customer activity, stable gross retention, and resilient `Operating profit` margin after reinvestment. The base case assumes only enough pricing and module attach to keep recurring growth near 6%, not repeated outsized increases. Bull requires paid AI functionality or measurable customer savings; Bear assumes customers demand bundled functionality or concessions.

Finally, decentralized ownership is both strength and constraint. Local management can preserve domain knowledge, customer intimacy, and product roadmaps that a centralized conglomerate might dilute. Yet decentralization can duplicate cloud tooling, security controls, AI infrastructure, and go-to-market effort. Roper can create supply-side advantage by sharing standards and capital while leaving product decisions local, but the data package does not quantify such savings. None is inserted as a separate margin benefit. This keeps the bull case dependent on observable product economics rather than an assumed conglomerate synergy.

6. Historical growth rates

All dollars come from the DR-cleared package. FY2023-FY2025 gives three observations and a two-year CAGR; the table labels the compounding interval explicitly. Rates are calculated only from cited package dollars; no external or Appendix A figure is used.

Product / sub-segment	FY2023 revenue	FY2024 revenue	FY2025 revenue	FY2023-FY2025 CAGR (2 years)	FY2025 YoY	Specific source via data package
Application Software total	$3.1869 [data_package §3, revenue row]	$3.8683 [data_package §3, revenue row]	$4.4830 [data_package §3, revenue row]	18.6% [same row]	15.9% [data_package §3, YoY row]	2022/2023/2025 Forms 10-K, Note 14 [data_package §3]
Recurring software	$2.4543 [data_package §4, App row 1]	$2.8800 [data_package §4, App row 1]	$3.2822 [data_package §4, App row 1]	15.6% [row 1]	14.0% [row 1]	2025 Form 10-K revenue-stream table [data_package §4, App row 1]

Product / sub-segment	FY2023 revenue	FY2024 revenue	FY2025 revenue	FY2023-FY2025 CAGR (2 years)	FY2025 YoY	Specific source via data package
Reoccurring software	$0.1378 [data_package §4, App row 2]	$0.3539 [data_package §4, App row 2]	$0.5226 [data_package §4, App row 2]	94.7% [row 2]	47.7% [row 2]	2025 Form 10-K revenue-stream table [data_package §4, App row 2]
Non-recurring software	$0.5948 [data_package §4, App row 3]	$0.6344 [data_package §4, App row 3]	$0.6782 [data_package §4, App row 3]	6.8% [row 3]	6.9% [row 3]	2025 Form 10-K revenue-stream table [data_package §4, App row 3]

Arithmetic checks: $3.8683 × 1.159 = $4.4834 billion versus $4.4830 billion, a 0.01% difference. $2.8800 × 1.140 = $3.2832 billion versus $3.2822 billion, 0.03%. $0.3539 × 1.477 = $0.5227 billion versus $0.5226 billion, 0.02%. $0.6344 × 1.069 = $0.6782 billion, effectively exact. Every row is within the required 2%. No historical dollar was back-solved.

Reoccurring revenue's 94.7% CAGR is not sustainable; the small line is affected by acquisitions, mix, and classification. The segment's 18.6% CAGR also includes acquired growth while latest organic growth is 5%. Brand rate disclosures—Aderant mid-teens FY growth, CentralReach recurring well north of 20%, and Vertafore mid-single-digit revenue—inform forecast shape but are not converted into dollars. [data_package §4, FMP Q4 FY2025 transcript dated 2026-01-27 and Q1 FY2026 transcript dated 2026-04-23; §5, Application rows]

7. Management guidance

- **Q3 FY2025, Neil Hunn, Deltek/GovCon:** “fundamentals remain strong” [data_package §6, Application row 1]. Shutdown timing was distinguished from structural demand. The model remains cautious because fundamentals do not establish pipeline conversion timing.

- **Q4 FY2025, Neil Hunn, GovCon:** “not included any benefit in our 2026 guidance” [data_package §6, Application row 2]. Base does not require a GovCon rebound; recovery is upside rather than hidden year-one growth.

- **Q1 FY2026, Neil Hunn, retention:** “gross retention remained strong” [data_package §6, Application row 3]. The package identifies enterprise GRR in the mid-90s. This supports durability but is not NRR.

- **Q2 FY2026, Neil Hunn, cloud:** “SaaS transitions continue to advance meaningfully” [data_package §6, Application row 4]. Migration supports recurrence and delivery, but may defer license or implementation revenue and raise hosting cost.

Additional package commentary says Aderant cloud adoption remained strong; CentralReach was ahead of its acquisition model; Vertafore continued ARR growth and launched six agent SKUs; Deltek private-sector demand was solid; and management wanted several quarters of conversion before calling a GovCon turn. Second-half Application organic growth was expected at mid-single-digit-plus. [data_package §6, FMP calls dated 2026-01-27 through 2026-07-23]

[DATA GAP: No quantified FY2027 segment guide, ARR dollars, segment NRR, or brand revenue outlook is disclosed.]

8. Forward growth assumptions

The estimated TTM stream allocations compound for exactly five years. Unannounced acquisitions contribute zero in every scenario. The available evidence does not provide a segment-specific purchase price, financing schedule, integration cash cost, acquired revenue, acquired `Operating profit`, or vintage return, and the parent-level deployment-capacity statement is not a segment commitment. This prevents acquisition-boosted history from being relabeled organic or treated as free growth while synthesis assumes deleveraging and buybacks.

Base assumptions

Product	FY2023-FY2025 CAGR (2 years)	FY2025 YoY	Management/context anchor	Base CAGR TTM to TTM+5y	Justification
Recurring software	15.6%	14.0%	Segment H2 organic: mid-single-digit-plus	6.0%	Normalizes toward current organic growth; cloud, retention, price, and attach offset maturation.

Product	FY2023-FY2025 CAGR (2 years)	FY2025 YoY	Management/context anchor	Base CAGR TTM to TTM+5y	Justification
Reoccurring software	94.7%	47.7%	No stream-level guide	6.5%	Historical rate is mix/acquisition distorted; usage grows modestly above subscription.
Non-recurring software	6.8%	6.9%	SaaS-transition direction only	1.3%	Cloud shifts economics to subscription while implementations keep the line positive.
Unannounced acquisition contribution	n/a	n/a	No segment commitment or funding/return bridge	$0.000B terminal	Framework rule: zero without a source-bound purchase, financing, integration, and vintage-return bridge.

Base growth is 5.8%, 5.5%, 5.4%, 5.3%, and 5.0%. Terminal revenue is $6.104 billion, a 5.4% CAGR, entirely from the existing perimeter. No unannounced acquisition revenue is credited.

Bull assumptions

Product	FY2023-FY2025 CAGR (2 years)	FY2025 YoY	Management/context anchor	Bull CAGR TTM to TTM+5y	Justification
Recurring software	15.6%	14.0%	Segment H2 organic: mid-single-digit-plus	7.0%	Cloud, retention, AI modules, and Deltek recovery sustain higher growth with annual deceleration.
Reoccurring software	94.7%	47.7%	No stream-level guide	8.3%	Digital usage expands faster than subscription but far below distorted history.
Non-recurring software	6.8%	6.9%	SaaS-transition direction only	2.8%	Strong implementation and migration outweigh license substitution.
Unannounced acquisition contribution	n/a	n/a	No segment commitment or funding/return bridge	$0.000B terminal	Parent capacity alone cannot support segment revenue; the contribution is zero.

Bull growth is 7.5%, 7.0%, 6.6%, 6.1%, and 5.7%. It does not extrapolate reported 15.9% or CentralReach's above-20% rate. Terminal revenue is $6.447 billion, a 6.6% existing-perimeter CAGR; unannounced acquisitions remain zero.

Bear assumptions

Product	FY2023-FY2025 CAGR (2 years)	FY2025 YoY	Management/context anchor	Bear CAGR TTM to TTM+5y	Justification
Recurring software	15.6%	14.0%	Segment H2 organic: mid-single-digit-plus	3.1%	Churn absorbs price and new logos as AI and competitors narrow feature gaps.
Reoccurring software	94.7%	47.7%	No stream-level guide	3.2%	Activity grows slowly and take-rate resistance prevents historical mix gains recurring.
Non-recurring software	6.8%	6.9%	SaaS-transition direction only	-1.0%	Cloud migration and budget delays reduce licenses and implementation.
Unannounced acquisition contribution	n/a	n/a	Capacity is not a commitment	$0.000B terminal	No qualifying segment funding/return bridge exists, including in Bear.

Bear growth is 3.2%, 2.8%, 2.5%, 2.1%, and 2.1%. Backlog and switching costs prevent a sudden collapse, but churn, weak price, GovCon delays, and cloud substitution compound. Terminal revenue is $5.317 billion, a 2.5% existing-perimeter CAGR; unannounced acquisitions remain zero.

Five-year annual cadence: existing perimeter and zero unannounced acquisitions

Bear cadence

Horizon date	Recurring	Reoccurring	Non-recurring	Existing perimeter	Acquired contribution	Segment revenue	Total YoY
2027-06-30	$3.573	$0.574	$0.696	$4.843	$0.000	$4.843	3.2%
2028-06-30	$3.698	$0.597	$0.682	$4.977	$0.000	$4.977	2.8%

Horizon date	Recurring	Reoccurring	Non-recurring	Existing perimeter	Acquired contribution	Segment revenue	Total YoY
2029-06-30	$3.809	$0.615	$0.675	$5.099	$0.000	$5.099	2.5%
2030-06-30	$3.904	$0.628	$0.675	$5.206	$0.000	$5.206	2.1%
2031-06-30	$4.002	$0.640	$0.675	$5.317	$0.000	$5.317	2.1%

Base cadence

Horizon date	Recurring	Reoccurring	Non-recurring	Existing perimeter	Acquired contribution	Segment revenue	Total YoY
2027-06-30	$3.659	$0.588	$0.717	$4.964	$0.000	$4.964	5.8%
2028-06-30	$3.886	$0.629	$0.724	$5.239	$0.000	$5.239	5.5%
2029-06-30	$4.119	$0.670	$0.735	$5.524	$0.000	$5.524	5.4%
2030-06-30	$4.358	$0.710	$0.746	$5.814	$0.000	$5.814	5.3%
2031-06-30	$4.597	$0.749	$0.757	$6.104	$0.000	$6.104	5.0%

Bull cadence

Horizon date	Recurring	Reoccurring	Non-recurring	Existing perimeter	Acquired contribution	Segment revenue	Total YoY
2027-06-30	$3.710	$0.602	$0.731	$5.043	$0.000	$5.043	7.5%
2028-06-30	$3.988	$0.656	$0.753	$5.397	$0.000	$5.397	7.0%
2029-06-30	$4.268	$0.708	$0.776	$5.752	$0.000	$5.752	6.6%
2030-06-30	$4.545	$0.761	$0.795	$6.102	$0.000	$6.102	6.1%
2031-06-30	$4.818	$0.815	$0.815	$6.447	$0.000	$6.447	5.7%

9. Forward `Operating profit` margin assumptions

Roper discloses `Operating profit` only at segment level, not by stream or brand. No product margin is invented. The model applies one segment margin cadence and tests cloud mix, AI cost, acquisition integration, and pricing. Corporate expense remains outside this segment.

Case	TTM margin	2027	2028	2029	2030	2031	Mechanism
Bear	27.17%	26.5%	25.8%	25.2%	24.8%	24.5%	Weak price, cloud duplication, AI/security spend, remediation, and lower implementation absorption reduce margin 267 bps.
Base	27.17%	27.1%	27.3%	27.5%	27.7%	27.8%	Recurring mix and existing-perimeter scale offset migration; 63 bps expansion avoids heroic leverage.
Bull	27.17%	27.6%	28.1%	28.5%	28.8%	29.0%	AI monetization, cloud efficiency, price, and support leverage create 183 bps expansion with reinvestment.

Bear's greater-than-100-basis-point change reflects parallel on-premise/cloud environments, inference and controls, limited price, and lower project utilization. Bull requires paid AI or service savings, less release fragmentation, value-based price, and support leverage across the existing perimeter. It is not a cost-cutting plug.

[DATA GAP: Application gross margin, stream `Operating profit`, cloud hosting cost, AI revenue/attach, and acquisition-cohort margin are not disclosed.]

Acquisition cross-subsidy and incremental returns

Future unannounced acquisitions contribute zero in Bear, Base, and Bull. Parent-level deployment capacity does not identify this segment's target, purchase price, financing, integration cash cost, or vintage return. Crediting revenue without those items would conflict with simultaneous deleveraging and buyback assumptions. Q2 2026 net debt was $10.955 billion and reported adjusted leverage was 3.4x after repurchases, reinforcing the need for a complete funding bridge before any future deal is added. [data_package §8, Q2 2026 Form 10-Q and 2026-07-23 release balance-sheet narrative]

Segment acquisition returns cannot be calculated because purchase price, acquired revenue, acquired `Operating profit`, and cohort cash flow are not allocated. Accordingly, the modeled contribution is zero. A future announced deal may enter only after a source-bound schedule reconciles consideration, financing, integration cash cost, revenue, `Operating profit`, and vintage return to the consolidated debt, cash, buyback, and deleveraging bridge.

[DATA GAP: Segment acquisition purchase price, revenue, multiple, incremental `Operating profit`, and realized ROIC are undisclosed; no acquisition IRR is claimed.]

10. Segment rollup

Case	2031 recurring	2031 reoccurring	2031 non-recurring	Existing perimeter	Acquired contribution	TTM+5y revenue	`Operating profit` margin	`Operating profit`
Bear	$4.002	$0.640	$0.675	$5.317	$0.000	$5.317	24.5%	$1.303
Base	$4.597	$0.749	$0.757	$6.104	$0.000	$6.104	27.8%	$1.697
Bull	$4.818	$0.815	$0.815	$6.447	$0.000	$6.447	29.0%	$1.870

Bear: $4.002 + $0.640 + $0.675 + $0.000 = $5.317 billion; unrounded profit is $1.3026 billion. Base unrounded revenue is $6.1037 billion and profit $1.6968 billion. Bull unrounded revenue is $6.4474 billion and profit $1.8698 billion. Display residuals are rounding only and under 0.1%, within the 1% requirement.

Probability-weighted terminal revenue is $5.976 billion and weighted `Operating profit` $1.633 billion. Weighted profit divided by weighted revenue gives 27.33%; this is not an arithmetic average of margins.

11. Key risks and wildcards

- **Bear — AI abstraction.** Horizontal agents may act across APIs, weakening interface differentiation and price even if the record remains.
- **Bear — leakage hidden by acquisitions.** Mid-90s GRR is good, not perfect. Deals can mask churn if investors watch only reported growth.
- **Bear — GovCon becomes structural.** Persistent procurement or budget disruption can slow Deltek projects for years.
- **Bear — cloud cost exceeds monetization.** Parallel environments, hosting, security, and implementation can compress `Operating profit`.
- **Base — acquisition cross-subsidy.** Deals may add revenue while lowering margins or raising leverage without strong incremental returns.
- **Base — backlog conversion.** Backlog covers about half of TTM revenue; slower bookings or implementations can weaken growth before retention reveals it.
- **Bull — paid AI modules.** Vertafore's agents can improve price and attach, but revenue, renewal, and inference-cost proof is required.
- **Bull — cloud expands reach.** Faster deployments and releases can improve new-logo conversion and reduce support fragmentation.
- **All cases — cyber/regulatory failure.** Sensitive legal, health, education, government, and insurance data magnifies breach and unsafe-AI consequences.
- **All cases — no market-share denominator.** Monitor organic growth, GRR, backlog, wins, and price rather than fabricated share.

Summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	$5.317B	Operating profit	24.5%	$1.303B	25%
Base	$6.104B	Operating profit	27.8%	$1.697B	55%
Bull	$6.447B	Operating profit	29.0%	$1.870B	20%

The segment is attractive because recurrence, switching costs, and vertical depth support retention and price. The forecast refuses to carry forward acquisition-boosted history: existing-perimeter CAGR is 2.5%, 5.4%, and 6.6% in Bear, Base, and Bull, with unannounced acquisitions at zero. The decisive evidence is whether Roper sustains mid-single-digit organic growth, monetizes AI in trusted workflows, and maintains backlog and `Operating profit` without relying on corporate cross-subsidy.

No trade, order, sizing, portfolio action, or execution workflow was initiated. `trade_execution_authorized=false`.

Appendix B2 - Technology Enabled Products

Roper Technologies — Technology Enabled Products Segment Deep Dive

Run date: 2026-09-27 Run ID: `pulse-cio-20260927T200229+0800` Information cutoff: 2026-09-27 20:02:29 SGT Forecast anchor: TTM ended 2026-06-30 Forecast horizon: 2031-06-30, exactly five calendar years Currency: USD billions unless stated otherwise Scenario probabilities: Bear 25%, Base 55%, Bull 20% Exact segment profit basis: `Operating profit` Sealed quote: $358.56 on 2026-09-25; quote packet SHA-256 `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f` Trade execution authorized: **false**

0. Segment boundary and taxonomy note

Technology Enabled Products is one of Roper Technologies' three reportable segments. The DR-cleared data package says the current continuing-operations taxonomy is comparable from FY2021 through FY2025; the November 2022 Indicor divestiture removed the former Process Technologies segment and industrial businesses that had sat within Measurement & Analytical Solutions, while subsequent acquisitions changed business membership without causing a reportable-segment reclassification. This appendix therefore compares only the restated current-basis Technology Enabled Products figures from FY2021 onward. It does not splice pre-divestiture Measurement & Analytical Solutions dollars into the present segment. The businesses identified in the cleared taxonomy are CIVCO Medical Solutions, FMI, Inovonics, IPA, Neptune, Northern Digital, rf IDEAS, and Verathon. Brand-level revenue is not disclosed, so no brand-level historical or forecast dollars are invented. [data_package §1, reporting structure and taxonomy]

The refreshed data package SHA-256 is `05ec736c6d61ebda1a28e7f10e17185f161048870b504542a754d2e1d4bb29ee`, and Section 3a contains `STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING`. The sealed statutory packet SHA-256 is `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`. It identifies one additive issuer metric, `Operating profit`, for all three segments. This appendix forecasts only that exact metric. Corporate administrative expense and every below-line item remain outside the segment; the synthesis stage will project them once.

1. What this segment actually is

Technology Enabled Products is a portfolio of narrowly focused physical and digitally enabled products sold into water utilities, hospitals, medical-device OEMs, security and access-control installations, laboratory and industrial equipment, and other mission-critical workflows. Its common economic thread is not one end market. It is a collection of installed products that measure, locate, authenticate, visualize, dispense, or control something important, with software, accessories, service, or consumables attached in varying degrees.

Neptune sells water-metering and related technology to utilities. The utility buys meters and communications hardware as part of an automated or advanced metering deployment, then uses associated software and connectivity to turn readings into billing and operating information. Demand is therefore supported by water-infrastructure replacement, accuracy, labor efficiency, leakage management, billing quality, and the shift from manual reads to connected systems. The buying process can be long and project-based because a municipal utility may specify, fund, tender, and roll out a system over multiple budget cycles. That creates visibility but also quarter-to-quarter lumpiness.

The medical cluster spans airway visualization and single-use bronchoscopy, ultrasound guidance, infection-prevention and related procedural products, and precision tracking supplied to medical-device OEMs. Verathon combines reusable visualization platforms with disposable or single-use products such as BFlex bronchoscopes. CIVCO's products support image-guided procedures. Northern Digital provides optical and electromagnetic position-tracking components that can be designed into surgical navigation, robotic, cardiac, neurologic, orthopedic, and other systems. The commercial model varies: an installed device or OEM design win creates a base for replacement parts, procedure-linked consumables, software, accessories, and service, while purely reusable equipment has a longer capital-replacement cycle.

The industrial and access-control businesses sell precision fluid-handling components, wireless sensors, credential readers, and specialized automation products. FMI's pumps and dispensers address applications where accuracy, chemical compatibility, or repeatability matter more than lowest price. Inovonics and rf IDEAS sit inside security and identity workflows where reliability, integration with existing control systems, certifications, and installed credentials can matter more than raw

component cost. IPA serves automation and workflow needs in specialized environments. These products compete against both broad global manufacturers and focused niche vendors.

Go-to-market is therefore mixed. Utility projects tend to involve direct selling, specifications, distributors, integrators, and long municipal decision cycles. Medical products use direct clinical selling, distributors, hospital value-analysis processes, and OEM design-in relationships. Security and industrial products can involve OEM channels, distributors, system integrators, and embedded-component sales. Pricing is normally based on the value of reliability, workflow efficiency, regulatory suitability, and total installed-system economics, but the product content means raw materials, electronics, freight, labor, and tariffs can still move margins.

The segment is overwhelmingly physical-product revenue on the issuer's disclosed revenue-stream taxonomy. Software is strategically important because it can make hardware more useful and sticky, but it is financially small in the clean historical disclosure. That distinction matters: Technology Enabled Products should not be modeled like Roper's high-recurring-revenue software segments. Its 33%-plus `Operating profit` margin is excellent for a product portfolio, yet revenue visibility and working-capital exposure are structurally different from subscription software.

2. Current economics

The four quarters in the cleared package—Q3 2025, Q4 2025, Q1 2026, and Q2 2026—sum to TTM revenue of $1.8901 billion. TTM `Operating profit` is $0.6291 billion in the sealed bridge, producing a 33.28% margin on the exact issuer basis. The last four quarterly revenue growth rates were 7%, 6%, 9%, and 7%, with organic growth of 6%, 5%, 7%, and 7%. Quarterly `Operating profit` margins were 33.9%, 33.5%, 32.4%, and 33.3%. [Roper Q3 2025, Q1 2026, and Q2 2026 Forms 10-Q and SEC-filed earnings releases; Roper 2025 Form 10-K; data_package §5 TEP rows; sealed bridge `ttm_statutory_calculation`]

Those observations show two things at once. Demand has been resilient and recently accelerated versus management's softer initial expectations, but the revenue acceleration did not produce immediate margin expansion. The cleared package attributes the latest mix pressure to faster-growing consumables and Neptune's mechanical-meter input costs and volume normalization. This is a useful warning against applying software-like incremental margins to all growth. A procedure-driven disposable can improve recurrence and visibility while carrying a lower gross margin than a mature capital device; similarly, a water-meter project can grow revenue while absorbing commodity, installation, or logistics costs.

The clean FY2025 revenue-stream disclosure was $0.0461 billion of software revenue and $1.7726 billion of product revenue, together equaling the $1.8187 billion segment total. Software was only 2.5% of that year's segment revenue. No brand dollars, product units, selling prices, backlog by business, installed-base counts, consumable attach rates, or service revenue dollars were disclosed. [Roper 2025 Form 10-K revenue-stream tables; data_package §4 TEP Software revenue and Product revenue rows]

For the forward model, the TTM segment total is split into two analytical opening buckets by applying those FY2025 audited shares to the $1.8901 billion TTM total. This yields a $0.0479 billion software allocation and a $1.8422 billion product allocation. These are explicitly model-allocation assumptions, not issuer-disclosed TTM stream dollars. The split preserves the disclosed FY2025 mix and exactly sums to the package's TTM segment total. It is preferable to fabricating Neptune, Verathon, NDI, or other business-level dollars.

Segment backlog for delivery over the next twelve months was $0.335 billion in FY2021, $0.609 billion in FY2022, $0.527 billion in FY2023, $0.315 billion in FY2024, $0.313 billion in FY2025, and $0.309 billion at Q2 2026. [Roper 2022/2023/2025 Forms 10-K and Q2 2026 Form 10-Q backlog tables; data_package §0a TEP backlog row] The decline from the FY2022 peak is consistent with the unwinding of unusually elevated project visibility and shows that backlog is not a steadily compounding software-style asset. At roughly one-sixth of TTM revenue, the latest number supplies some near-term coverage, but a large portion of sales still depends on book-and-ship demand, procedure volumes, distributor activity, and project pacing.

Capital intensity is low at the Roper consolidated level: FY2025 capital expenditures were $0.047 billion, capitalized software expenditure was $0.0573 billion, and management expects the two together to equal 1.0%-1.5% of consolidated revenue. [data_package §7, capital allocation history and explanatory paragraph] Technology Enabled Products is likely more inventory-, receivables-, tooling-, and manufacturing-intensive than the two software segments, but a segment capex or working-capital series is not disclosed. `[DATA GAP: Technology Enabled Products capex, inventory, working capital, and asset turns are not separately disclosed in the cleared package.]` This prevents a clean segment ROIC calculation and is important because excellent operating margin alone does not prove high incremental returns.

3. Unit economics

The revenue-to-profit bridge begins with differentiated hardware rather than commodity volume. A water meter, clinical visualization system, tracking camera, sensor, credential reader, or precision pump must meet accuracy, reliability, compatibility, and often regulatory or customer-validation requirements. Once designed into an OEM platform or deployed throughout a utility or hospital, the product may gain an installed-base advantage. However, the strength of that advantage differs by line and should not be generalized across the segment.

Neptune economics are shaped by the balance between meters, communications hardware, software, and deployment activity. A large project can increase unit shipments but mix toward lower-margin mechanical meters, pass-through content, or installation-related activity. Connected-meter penetration should raise the value per endpoint and create cloud or software revenue over time, but the cleared package shows only a small segment-wide software bucket. The model therefore assumes software grows faster without letting a tiny base transform segment economics unrealistically within five years.

The utility replacement cycle is long but not precisely disclosed. Meters are durable assets; replacement is driven by age, accuracy degradation, mandate, leakage economics, communications upgrades, and funding rather than annual customer churn. That makes the opportunity structurally durable but produces lumpy orders and elongated procurement. A delayed tender can move revenue between years without changing long-run share. Conversely, a major project win can produce a temporary spike that should not be capitalized as a permanent growth rate. The backlog history reinforces this cycle sensitivity.

Medical products divide into capital equipment, OEM components, and consumables. Capital systems require clinical selling, training, regulatory clearance, and budget approval. Once installed, they can support accessories, service, replacement devices, or disposable procedure volume. Single-use products convert utilization into repeated sales and can improve revenue durability, though they also expose the supplier to manufacturing yield, resin, electronics, sterilization, freight, and hospital purchasing pressure. The cleared package specifically identifies BFlex and GlideScope consumables as growth drivers and notes strong NDI demand in cardiac, neurological, and orthopedic applications. [data_package §6, Technology Enabled Products additional verified commentary]

Northern Digital's economics are closer to a specialized OEM component platform. Accuracy, latency, form factor, software interfaces, verification, and integration support are important. A design win can be sticky because replacing a tracking subsystem may require engineering work and renewed validation. Yet the OEM controls the finished system, can negotiate price, and may dual-source or internalize technology over time. Surgical-robotics growth is therefore an attractive demand tailwind but not a guarantee that the component supplier captures all downstream value.

Industrial instrumentation and access products have short-cycle elements. A precision pump or sensor can be designed into equipment, but customer production schedules still move orders. Credential readers and wireless sensing benefit from installed-system compatibility and replacement, though open standards and large security vendors constrain price. These products need continual engineering and channel support. Gross margin rises when differentiated products, proprietary interfaces, software, and consumables grow; it falls when standard hardware, low-value project content, tariffs, or raw-material costs dominate.

Operating expenses include engineering, regulatory, quality, sales, field support, software development, and acquisition-related amortization within the issuer's segment accounting. The historical `Operating profit` margin increased from 33.4% in FY2021 to 34.5% in FY2025, but the TTM margin receded to 33.28%. That record supports modest long-run leverage, not an automatic march to software margins. Product cost and mix can overwhelm fixed-cost leverage in a given year.

Pricing power exists where the product is mission-critical and a failure or switch is costly relative to the component price. It is weaker in competitive bids and standardized hardware. The model does not assume a separately disclosed price increase because the package says individual business pricing metrics are a true non-disclosure. Instead, price is embedded in scenario growth and margin: Base assumes pricing broadly offsets ordinary input inflation; Bull assumes richer connected, precision, and consumable mix plus favorable execution; Bear assumes price realization lags input costs and utility customers resist premium content.

4. Competitive dynamics

Water metering and Neptune

Neptune competes with sophisticated water and utility technology providers such as Badger Meter, Itron, and Xylem's Sensus. These competitors offer combinations of meters, radios, communications networks, data platforms, and services. Competition therefore occurs at the system level: measurement accuracy, endpoint battery life, network reliability, interoperability, cybersecurity, software usability, deployment support, and total cost all matter.

The attempted Itron annual-report pull did not produce an archivable local source after two bounded retries. Itron is therefore retained only as external competitor context; no Itron dollar, backlog, growth, or product claim enters the historical record, forecast assumptions, or margin arithmetic. The Neptune model instead relies on Roper's own disclosed project timing, backlog history, cloud-billing commentary, and mechanical-meter cost pressure in the DR-cleared data package.

The attempted Badger Meter results pull returned a Cloudflare challenge rather than the source content. Badger Meter is therefore retained only as external competitor context; no unarchived Badger claim enters the model. The investment conclusion does not depend on it: Roper's own backlog history, Neptune project timing, cloud-billing growth, and mechanical-meter cost pressure already show that deployment cadence and project mix can move revenue and margin independently of long-run water-infrastructure demand.

Neptune's moat is strongest where its installed endpoints, utility workflows, field familiarity, and billing integrations make a wholesale switch inconvenient. It is weaker at the next competitive tender, particularly if rival communications, ultrasonic technology, or analytics offer better life-cycle economics. The Base case therefore assumes mid-single-digit product growth after the current acceleration, not permanent high-single-digit growth.

Medical products and procedure-linked consumables

Verathon competes with reusable and single-use airway and endoscopy vendors, including Ambu and large medtech companies. Ambu's FY2024/25 annual report estimated the single-use endoscopy market could grow around 20% annually from 2025 to 2030 as procedures grow and customers convert from reusable scopes; Ambu also targeted 15%-20% five-year organic growth for Endoscopy Solutions. These are Ambu's own market estimates and aspirations, so they are not treated as neutral market forecasts. [Ambu Annual Report 2024/25](https://www.ambu.com/Files/Files/Ambu/Financial%20Reports/2024-2025/Ambu-Annual-Report-2024-25.pdf) They do establish that Verathon faces an aggressive specialist competitor in a fast-growing category.

The competitive question is not simply whether single-use procedures grow. It is whether Verathon's visualization platform and BFlex offering gain share, defend price, and achieve manufacturing economics as competitors expand portfolios. Hospitals weigh infection control, immediate availability, procedure performance, training, sustainability, waste, reprocessing cost, and purchase price. Consumables create recurring demand but can draw procurement scrutiny because every procedure carries a visible unit cost.

CIVCO and related procedural products face competition from broad medical-supply companies and specialists. A procedural accessory can become embedded in a clinician's workflow through compatibility, ease of use, safety, and training, but tendering and distributor economics remain important. Regulatory and quality systems raise entry barriers; they also create downside asymmetry because a recall or supply interruption can damage trust quickly.

Navigation, robotics, and precision tracking

The demand backdrop for NDI is attractive. Stryker launched Mako RPS in July 2026 and described a portfolio spanning handheld and robotic-arm assisted orthopedic workflows, with more than 2.5 million Mako procedures in 47 countries. [Stryker Mako RPS release](https://www.stryker.com/us/en/about/news/2026/stryker-expands-mako-robotics-portfolio.html) This external evidence shows that robotic and navigation-enabled surgery is moving into more procedures and care settings. It does not reveal NDI content, customers, or revenue and is not used to invent any.

NDI competes against alternative optical, electromagnetic, inertial, imaging, and computer-vision approaches, as well as OEM internal development. Its advantages are likely precision, reliability, breadth of integration tools, and accumulated validation experience. Its risks are customer concentration at the OEM level, pricing pressure from large device companies, architectural shifts, and a customer choosing an integrated proprietary tracking stack. The growth model therefore includes strong medical demand but does not assign a separate NDI growth rate or dollar base.

Access control, sensing, and industrial instrumentation

Inovonics and rf IDEAS compete with Honeywell, Johnson Controls, ASSA ABLOY/HID, Allegion, and other security and identity ecosystems. The installed base and integrations can be sticky, yet credentials increasingly include mobile devices and cloud-managed identity, which can change where value resides. A reader vendor wins by supporting many credential

technologies and enterprise applications; it loses when hardware becomes standardized or the platform owner captures the economics.

FMI and other precision products compete with specialized pump, flow-control, sensing, and automation vendors. Accuracy and design-in support can protect price, but industrial and laboratory demand is cyclical and customers may redesign around competing components. The segment's diversification reduces dependence on one cycle, but customer concentration is not disclosed. `[DATA GAP: No segment or business-level customer-concentration percentage is available in the DR-cleared package.]`

5. Moat at the segment level

The segment moat is real but heterogeneous. It is best understood as a collection of narrow application moats rather than one platform effect. The strongest elements are installed systems, regulatory or OEM validation, integration into mission-critical workflows, specialized intellectual property and know-how, trusted accuracy, and recurring accessories or consumables.

Neptune benefits when a utility standardizes endpoints, communications, data collection, and billing workflows. Replacing a system can require new procurement, field installation, staff training, and data integration. That gives the incumbent an advantage during expansion and replacement, but not an unbreakable monopoly. Municipal budget constraints and competitive tenders limit pricing.

Verathon, CIVCO, and other medical products benefit from clinical familiarity, regulatory approvals, evidence, training, and installed equipment. A hospital does not switch a trusted airway or image-guidance workflow casually. At the same time, large medtech competitors have deep sales forces and can bundle products. Single-use devices also invite direct price comparison, so innovation and procedure performance must continue.

NDI may have the strongest design-in switching cost. An OEM that has engineered and validated a tracking component inside a regulated surgical or diagnostic system faces time and cost to substitute it. That advantage can last through a product generation. The counterweight is concentration: a few large OEM platforms can have substantial bargaining power, and the cleared package provides no customer shares.

Inovonics, rf IDEAS, and FMI possess protocol, application, and channel know-how. Their products can be small relative to the customer's system yet essential to reliability. This is an attractive value-pricing position. However, standards evolve, and large adjacent competitors can integrate similar functionality. Their moat depends on continuous engineering rather than passive installed-base harvesting.

Over five to ten years, the moat should preserve above-average segment profitability if Roper continues to invest in product performance, software, integrations, quality, and distribution. The 33%-34% historical `Operating profit` margin is evidence of differentiation. It is not proof that every business can sustain that level independently, because Roper does not disclose brand margins. The Bear case explicitly tests a 279-basis-point margin contraction from TTM; the Bull case requires a 224-basis-point expansion and therefore assumes meaningful mix and execution benefits.

AI is more likely to complement than replace this segment over the five-year horizon. Meter, sensor, image, identity, and position data are physical inputs that AI systems need. Surgical robotics and computer-assisted procedures can expand demand for accurate tracking. Utility analytics can raise the value of connected endpoints. AI may improve manufacturing, service, image interpretation, anomaly detection, and product usability. The threat is architectural: computer vision or integrated OEM software could reduce demand for a stand-alone component, while large platform vendors could capture the analytics layer. Because disclosed segment software is small, the model assigns no broad AI revenue premium. AI upside appears only through faster product/software growth in Bull, while Bear allows substitution and price pressure.

6. Historical growth rates

The table reproduces the finest audited segment and stream dollars in the cleared package. The displayed CAGRs and latest YoY rates are arithmetic calculated solely from those rows; there are no back-solved historical dollars and no Appendix A figures.

Product / sub-segment	FY2023 revenue	FY2024 revenue	FY2025 revenue	FY2023-FY2025 CAGR	Most recent YoY	Data package cite
Technology Enabled Products total	$1.5515B [§3 TEP Revenue row]	$1.6953B [§3 TEP Revenue row]	$1.8187B [§3 TEP Revenue row]	8.26% [calculated from same row]	7.28% [calculated from same row]	Roper 2022/2023/2025 Forms 10-K, Note 14; data_package §3
Software revenue	$0.0188B [§4 TEP Software row]	$0.0261B [§4 TEP Software row]	$0.0461B [§4 TEP Software row]	56.58% [calculated from same row]	76.63% [calculated from same row]	Roper 2025 Form 10-K revenue-stream tables; data_package §4

Product / sub-segment	FY2023 revenue	FY2024 revenue	FY2025 revenue	FY2023-FY2025 CAGR	Most recent YoY	Data package cite
Product revenue	$1.5327B [§4 TEP Product row]	$1.6692B [§4 TEP Product row]	$1.7726B [§4 TEP Product row]	7.54% [calculated from same row]	6.20% [calculated from same row]	Roper 2025 Form 10-K revenue-stream tables; data_package §4

Arithmetic tie-outs: $1.5515B × 1.0927 = $1.6953B, then $1.6953B × 1.0728 = $1.8187B, within rounding. $0.0188B × 1.3883 = $0.0261B, then $0.0261B × 1.7663 = $0.0461B. $1.5327B × 1.0891 = $1.6692B, then $1.6692B × 1.0620 = $1.7727B, a $0.0001B rounding difference from reported $1.7726B. Every row is within the required 2% internal check.

The software CAGR is mathematically correct but economically misleading if treated as a segment driver: it starts from less than $20 million and ends at only $46.1 million. Even a sustained double-digit rate cannot dominate a $1.8 billion segment within five years. Product revenue controls the outcome. The total's 8.26% two-interval CAGR includes a 14.6% FY2023 increase, then decelerates to 9.3% and 7.3%; the forward model gives greatest weight to the 5%-7% recent organic cadence and management's FY2026 guidance.

7. Management guidance

Every Technology Enabled Products forward quote in the cleared package is included below; transcripts were not re-fetched.

- Q3 FY2025, Neil Hunn: “organic growth in the low single-digit area.” [data_package §6, Technology Enabled Products table, Q3 FY2025 row] This referred to the Q4 outlook and reflected Neptune timing plus a difficult comparison. It anchors the downside and shows that individual quarters can undershoot the long-run category growth.

- Q4 FY2025, Neil Hunn: “segment organic growth in the mid-single-digit range.” [data_package §6, Technology Enabled Products table, Q4 FY2025 row] This is the clearest full-year FY2026 anchor. Base should stay near mid-single digits rather than extrapolate the later 7% quarters.

- Q1 FY2026, Neil Hunn: “mid-single-digit range.” [data_package §6, Technology Enabled Products table, Q1 FY2026 row] Management reiterated the balance-of-year view even after 7% Q1 organic growth. The cautious stance suggests mix and Neptune timing remained uncertain.

- Q2 FY2026, Neil Hunn: “high singles range.” [data_package §6, Technology Enabled Products table, Q2 FY2026 row] This referred to second-half organic growth. Strong NDI and Verathon demand plus Neptune normalization support near-term acceleration, but the quote is a half-year cadence, not a five-year target.

Additional package commentary says NDI demand was strong in cardiac, neurological, and orthopedic applications; Verathon's single-use BFlex and GlideScope products supported recurring consumables; Neptune's mechanical-meter input costs and volume normalization pressured margin while cloud billing software grew; and management expected Neptune metering to return to growth in the second half. [data_package §6, Technology Enabled Products additional verified commentary] These claims establish the first forecast year's directional setup.

There is no five-year segment guide, no disclosed brand revenue, no unit-volume guide, no price guide, and no segment margin guide. `[DATA GAP: Management did not disclose a five-year Technology Enabled Products revenue or Operating profit margin target in the cleared package.]`

8. Forward growth assumptions

The model starts from the $1.8901 billion TTM segment total. The opening $0.0479 billion software and $1.8422 billion product buckets are analytical allocations using FY2025 disclosed mix. Forecast growth is organic/perimeter-constant: unannounced acquisitions are excluded. Any acquisition already inside the TTM perimeter is present in the opening total, but separate acquired and organic dollars are unavailable. This prevents acquisition dollars from masquerading as organic growth.

This refresh rebuilds every scenario from the verified TTM anchor rather than extending a fiscal-year endpoint. The opening stream allocation is $1.8901 billion multiplied by the audited FY2025 mix: 2.535% software and 97.465% product. Each annual cadence below is compounded for five steps ending 2031-06-30; the terminal CAGRs are outputs of those explicit paths. The refreshed evidence did not change the TTM revenue, stream mix, recent growth, or `Operating profit` anchor, so a faithful recalculation produces the same scenario endpoints rather than creating a cosmetic forecast change.

Base-case growth assumptions

Product	FY2023-FY2025 historical CAGR	Latest FY YoY	Management FY+1 guide	Base CAGR TTM to TTM+5y	Justification
Software revenue	56.58%	76.63%	Segment mid-single digit; no software-specific guide	12.00%	Tiny base and Neptune cloud billing support outgrowth, but the recent rate is not scalable and no ARR dollars are disclosed.
Product revenue	7.54%	6.20%	Segment mid-single digit; second-half high singles	6.02%	Medical consumables, NDI and Neptune normalization sustain growth; utility timing and mature hardware keep it near mid-single digits.

Bull-case growth assumptions

Product	FY2023-FY2025 historical CAGR	Latest FY YoY	Management FY+1 guide	Bull CAGR TTM to TTM+5y	Justification
Software revenue	56.58%	76.63%	Segment mid-single digit; no software-specific guide	16.00%	Connected-meter software and embedded digital tools scale from a small base without assuming brand-level dollars.
Product revenue	7.54%	6.20%	Segment second-half high singles	8.39%	Neptune project execution, single-use procedure growth, and surgical-navigation adoption remain strong across the horizon.

Bear-case growth assumptions

Product	FY2023-FY2025 historical CAGR	Latest FY YoY	Management FY+1 guide	Bear CAGR TTM to TTM+5y	Justification
Software revenue	56.58%	76.63%	Segment mid-single digit; no software-specific guide	5.20%	Cloud attachment grows but competition, slow deployments, and a tiny absolute base limit contribution.
Product revenue	7.54%	6.20%	Segment mid-single digit; second-half high singles	1.69%	A Neptune air pocket, hospital purchasing pressure, industrial weakness, and OEM concentration overwhelm resilient consumables.

Five-year annual revenue cadence

Case	TTM 2026-06-30	2027-06-30	2028-06-30	2029-06-30	2030-06-30	2031-06-30
Bear software	$0.0479B	$0.0493B	$0.0518B	$0.0549B	$0.0582B	$0.0617B
Bear product	$1.8422B	$1.8238B	$1.8420B	$1.8788B	$1.9352B	$2.0029B
Bear total	$1.8901B	$1.8731B	$1.8938B	$1.9338B	$1.9934B	$2.0647B
Base software	$0.0479B	$0.0546B	$0.0617B	$0.0691B	$0.0767B	$0.0844B
Base product	$1.8422B	$1.9711B	$2.0993B	$2.2252B	$2.3476B	$2.4650B
Base total	$1.8901B	$2.0258B	$2.1610B	$2.2943B	$2.4243B	$2.5494B
Bull software	$0.0479B	$0.0565B	$0.0661B	$0.0767B	$0.0882B	$0.1006B
Bull product	$1.8422B	$2.0080B	$2.1887B	$2.3747B	$2.5647B	$2.7571B
Bull total	$1.8901B	$2.0645B	$2.2549B	$2.4515B	$2.6530B	$2.8577B

Base annual product growth decelerates deliberately from 7.0% to 5.0%, while software decelerates from 14% to 10%. That produces a 6.17% total CAGR. It gives credit to the second-half acceleration but converges toward the disclosed mid-single-digit full-year guide. Bull product growth runs 9.0%, 9.0%, 8.5%, 8.0%, and 7.5%, with software at 18%, 17%, 16%, 15%, and 14%; total CAGR is 8.62%. Bear product growth is -1%, 1%, 2%, 3%, and 3.5%, while software grows 3%, 5%, 6%, 6%, and 6%; total CAGR is 1.78%.

The cadence tests replacement and order cyclicality directly. Bear does not assume a permanent structural collapse; it assumes delayed utility projects and weak short-cycle orders, followed by recovery. Bull does not hold the current

high-single-digit segment outlook forever; it fades as project comparisons normalize. Base avoids a sharp comparable-free deceleration and is consistent with the observed 5%-7% organic rates.

Acquisition growth is zero in all cases. Roper has substantial enterprise deployment capacity, but the cleared package does not disclose Technology Enabled Products acquisition consideration, acquired revenue, acquired profit, or brand-level returns. `[DATA GAP: Incremental acquisition returns cannot be calculated for this segment from the cleared data package.]` A future acquisition should enter the model only when purchase price, incremental revenue, `Operating profit`, integration cost, and financing can be separately bridged. Until then, adding an acquisition premium would double count management optionality without evidence.

9. Forward `Operating profit` margin assumptions

The current anchor is TTM `Operating profit` of $0.6291 billion on $1.8901 billion revenue, a 33.28% margin. Stream margins are not disclosed historically. The following stream margins are explicit analyst forecast assumptions used only to compute the scenario totals. Software is assigned a higher margin because incremental delivery should be less product-content intensive, but its small revenue share prevents it from dominating the segment.

Bear-case `Operating profit` cadence

Stream	TTM margin	2027 margin	2028 margin	2029 margin	2030 margin	2031 margin
Software	Not separately disclosed	42.0%	42.0%	41.0%	40.0%	40.0%
Product	Not separately disclosed	31.5%	30.7%	30.2%	30.0%	30.2%
Segment blended `Operating profit`	33.28%	31.78%	31.01%	30.51%	30.29%	30.49%

Bear margin falls 279 basis points from the TTM anchor to 30.49%. The mechanisms are explicit: Neptune mechanical-meter input costs persist, volumes disappoint after project delays, medical customers exert price pressure, fixed engineering and regulatory spending is maintained, and lower production absorbs overhead poorly. The slight terminal recovery reflects volume normalization rather than heroic pricing. Software cannot offset the pressure because it remains only 3.0% of terminal revenue.

Base-case `Operating profit` cadence

Stream	TTM margin	2027 margin	2028 margin	2029 margin	2030 margin	2031 margin
Software	Not separately disclosed	46.0%	47.0%	48.0%	49.0%	50.0%
Product	Not separately disclosed	32.5%	32.9%	33.2%	33.4%	33.45%
Segment blended `Operating profit`	33.28%	32.86%	33.30%	33.65%	33.89%	34.00%

Base terminal margin is 34.00%, 72 basis points above TTM and below FY2025's 34.5%. The first-year dip recognizes the current consumable and Neptune mix pressure. Thereafter, input-cost normalization, modest pricing, production leverage, and software outgrowth restore margin without assuming a new structural peak. The result is conservative relative to a pure fixed-cost leverage story and more faithful to the observed quarterly margin path.

Bull-case `Operating profit` cadence

Stream	TTM margin	2027 margin	2028 margin	2029 margin	2030 margin	2031 margin
Software	Not separately disclosed	50.0%	52.0%	54.0%	56.0%	58.0%
Product	Not separately disclosed	33.5%	34.0%	34.5%	34.7%	34.7%
Segment blended `Operating profit`	33.28%	33.95%	34.53%	35.11%	35.41%	35.52%

Bull terminal margin is 35.52%, 224 basis points above TTM. Because this move exceeds 100 basis points, the mechanism must be concrete: Neptune returns to growth with better connected-product mix, medical platforms and recurring consumables scale efficiently, NDI benefits from high-value navigation applications, supply and input costs normalize, and software grows to 3.5% of revenue. The case does not assume software mix alone drives the result; product margin must also rise to 34.7%. If product margin does not improve, the Bull profit outcome fails even with strong software growth.

Capital intensity is not embedded inside `Operating profit`, but it matters to economic quality. Base assumes Roper continues funding engineering, regulatory work, tooling, and production capacity within the modeled operating-expense structure. Bull is not allowed to starve these investments to manufacture margin. Bear keeps them in place despite weak volume, which is why deleverage is material.

10. Segment rollup

The terminal rollup sums the two modeled streams and applies the stated stream margins. Each segment revenue total and `Operating profit` is reconstructable from Sections 8 and 9.

Case	Terminal stream	TTM+5y revenue	TTM+5y `Operating profit` margin	TTM+5y `Operating profit`
Bear	Software revenue	$0.0617B	40.0%	$0.0247B
Bear	Product revenue	$2.0029B	30.2%	$0.6049B
Bear	Segment total	$2.0647B	30.49%	$0.6296B
Base	Software revenue	$0.0844B	50.0%	$0.0422B
Base	Product revenue	$2.4650B	33.45%	$0.8245B
Base	Segment total	$2.5494B	34.00%	$0.8667B
Bull	Software revenue	$0.1006B	58.0%	$0.0583B
Bull	Product revenue	$2.7571B	34.7%	$0.9567B
Bull	Segment total	$2.8577B	35.52%	$1.0150B

Bear stream revenue sums to $2.0646 billion before display rounding versus the $2.0647 billion segment total; stream profit sums to $0.6296 billion. Base stream revenue sums to $2.5494 billion and profit to $0.8667 billion. Bull stream revenue sums to $2.8577 billion and profit to $1.0150 billion. All residuals are less than 0.01%, comfortably inside the 1% requirement.

The probability-weighted terminal revenue is $2.4899 billion, and probability-weighted terminal `Operating profit` is $0.8371 billion using the displayed 25%/55%/20% weights. These are arithmetic expectations, not an additional scenario. Base is the most probable outcome because the observed 5%-7% organic range, management's mid-single-digit full-year view, and the segment's diversified end markets support continued growth without requiring a utility supercycle or a medical-device downturn.

The profit sensitivity is asymmetric. Bear revenue is 19% below Base, but Bear profit is 27% below Base because volume and mix pressure compress margin. Bull revenue is 12% above Base, and Bull profit is 17% above Base because favorable mix and leverage expand margin. The model therefore identifies product margin—not software growth—as the highest-impact forecast variable.

11. Key risks and wildcards

- **Neptune utility timing and input costs — Bear/Base.** Large municipal projects can slip across fiscal periods, and mechanical meters expose the business to metals, electronics, logistics, tariffs, and labor. Revenue timing may recover without margin if project content is unfavorable.

- **Medical consumable adoption — Bull/Base.** Single-use airway and other procedural products can create repeat demand, but competitors are investing aggressively. Adoption could exceed the model if infection control and workflow benefits dominate; price competition, sustainability objections, or hospital budgets could slow it.

- **Surgical navigation and robotics — Bull/Bear.** More robotic and image-guided procedures support NDI-type tracking demand. The opposite risk is platform integration: an OEM may internalize tracking, choose another architecture, or pressure component pricing.

- **Customer concentration — Bear.** The cleared package does not disclose concentration. An apparently diversified set of businesses can still contain material OEM or utility relationships. Loss or insourcing by one large customer could move a small business sharply even if segment totals look stable.

- **Backlog conversion — Bear/Base.** The Q2 2026 next-twelve-month backlog of $0.309 billion supports visibility but is below earlier peaks. It does not protect the majority of annual revenue, and utility projects can be rescheduled.

- **Replacement cycles — Base/Bear.** Durable meters, readers, trackers, and capital devices do not recur annually. Growth depends on installed-base expansion, technology upgrades, and replacement timing. A pause after a deployment wave can reduce shipments without signaling permanent share loss.

- **Pricing versus input costs — Bear.** Mission-critical niches can support value pricing, but tenders and large OEM customers limit bargaining power. The Base case assumes price broadly offsets normal inflation; it does not assume a disclosed price increase.

- **AI complement versus substitution — Bull/Bear.** AI can increase the value of physical data and navigation, but computer vision or integrated platforms can displace discrete components. No AI revenue is separately modeled because the cleared package provides none.

- **Organic versus acquired growth — Base.** The forecast is perimeter-constant and excludes unannounced acquisitions. Future M&A could lift reported growth, but incremental returns cannot be verified without segment-level purchase price and profit evidence. Acquisition optionality is not free organic growth.

- **Capital intensity and quality investment — Bear.** Segment capex and working capital are undisclosed. Underinvestment could temporarily support margin while weakening products, regulatory compliance, or capacity; overinvestment could depress cash returns despite stable `Operating profit`.

- **Regulatory, quality, cybersecurity, and recall risk — Bear.** Medical, utility, identity, and connected products operate in high-trust settings. A quality issue, clinical recall, cyber vulnerability, or field failure can trigger remediation cost and customer loss disproportionate to the component's price.

- **Portfolio mix — Bull/Bear.** Faster software, connected endpoints, precision medical components, and high-value consumables support margin. Faster low-margin hardware, installation content, or pressured consumables can grow revenue while lowering profit. The quarterly record shows that this is already a live variable.

Summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	$2.0647B	Operating profit	30.49%	$0.6296B	25%
Base	$2.5494B	Operating profit	34.00%	$0.8667B	55%
Bull	$2.8577B	Operating profit	35.52%	$1.0150B	20%

Technology Enabled Products is a high-margin, differentiated product portfolio with attractive exposure to water infrastructure, medical procedures, surgical navigation, and specialized sensing. It is not a software segment in disguise: 97.5% of FY2025 revenue was product revenue, backlog is partial and cyclical, and TTM margin has been pressured by mix and input costs. The Base case gives credit to Neptune normalization, medical consumables, and NDI demand while fading growth toward a sustainable mid-single-digit rate. The decisive monitoring signal is product-stream margin. If organic growth holds near mid-single digits but `Operating profit` margin remains below 32% for several quarters after Neptune normalization, the Base case's recovery mechanism would be impaired.

No trade, order, sizing, portfolio action, or execution workflow was initiated. `trade_execution_authorized=false`.

Appendix B3 - Network Software

Roper Technologies — Network Software Segment Deep Dive

Forecast anchor: TTM ended June 30, 2026 **Forecast horizon:** June 30, 2031, exactly five calendar years **Currency:** USD billions unless stated otherwise **Exact segment profit basis:** `Operating profit` **Scenario probabilities:** Bear 25%; Base 55%; Bull 20% **Data discipline:** Roper historical figures, growth classifications, quotes, and accounting labels come only from the refreshed DR-cleared `data_package.md`, SHA-256 `05ec736c6d61ebda1a28e7f10e17185f161048870b504542a754d2e1d4bb29ee`, for action `CIO-20260923-ROP-REFRESH` and run `pulse-cio-20260927T200229+0800`. The sealed statutory bridge, SHA-256 `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`, fixes `Operating profit` as the additive segment metric. Live external sources are used only for competitive and product context. No brand-level revenue is invented.

Refresh conclusion: The refreshed package retains the same FY2021-FY2025 continuing-operations taxonomy and the same TTM ended June 30, 2026 operating anchor as the prior appendix: $1.6980 billion of Network Software revenue and $0.7102 billion of `Operating profit`. I rebuilt the Bear, Base, and Bull revenue-stream model from those sealed inputs rather than rolling forward the prior output. The terminal figures remain unchanged because the refreshed evidence did not alter any load-bearing segment historical, current margin, or forward-management anchor. New September 2026 product evidence strengthens the conclusion that domain AI is being embedded inside the installed workflows, but it does not justify a higher revenue or margin forecast by itself.

0. Segment boundary and taxonomy note

Network Software is one of Roper's three reportable segments. The current continuing-operations taxonomy is comparable from FY2021 through FY2025. The November 2022 Indicor divestiture removed the former Process Technologies perimeter, but the official tables restated the continuing businesses into Application Software, Network Software, and Technology Enabled Products for every year used here. Subsequent acquisitions changed the membership of Network Software without creating a reportable-segment reclassification. The segment contains ConstructConnect, DAT, Foundry, iPipeline, iTradeNetwork, MHA, SHP, SoftWriters, and Subsplash [data_package §1, reporting-structure narrative immediately below the segment table]. Therefore, all historical segment comparisons use the stable current basis; acquisitions are treated as changes within the perimeter, not as taxonomy changes.

1. What this segment actually is

Network Software is a portfolio of specialized software and information networks that connect participants in difficult vertical workflows. It is not a single technology stack and it should not be modeled as a homogeneous SaaS vendor. The common economic thread is that a customer gets more value when the software contains hard-to-recreate industry data, embeds counterparties or transactions, or sits inside a regulated workflow. Some businesses have genuine two-sided marketplace characteristics; others are vertical systems of record whose “network” is integration density rather than user-to-user interaction.

DAT is the clearest network business. Brokers and shippers post freight, carriers search for loads, and the platform supplies rate, capacity, credit, safety, tracking, and workflow data. DAT's live product page describes more than 291 million annual load-and-truck posts and access to more than 1.7 million trucks for brokers. Those figures are vendor claims, not Roper segment metrics, but they show the mechanism: more carriers improve coverage for brokers, more freight attracts carriers, and observed transactions improve lane-rate analytics. DAT sells subscriptions and analytics, while adjacent matching, tracking, factoring, and transaction products widen monetization. Customers can multi-home, so liquidity and data depth matter more than contractual exclusivity ([DAT load board](https://www.dat.com/load-boards), archived as `B_NETWORK_DAT_LOAD_BOARD`).

ConstructConnect supplies commercial-construction project intelligence, bid-management, estimating, and takeoff tools. General contractors, subcontractors, manufacturers, and project owners use the data and workflow to discover projects and prepare bids. The direct network effect is weaker than DAT's because users can consult multiple project databases, but the accumulated project corpus, estimator workflow, historical cost data, and integrations create data and switching advantages. ConstructConnect's September 2026 release notes show that Takeoff BOOST added AI-powered Auto Scale and Auto Name, while unlimited-page Auto Takeoff was made available in the relevant tier. That is credible evidence of continued product

velocity and AI being embedded as a feature, not evidence of separate revenue or guaranteed pricing power ([ConstructConnect On-Screen Takeoff release notes](https://help.constructconnect.com/product-reveal-release-notes-229/on-screen-takeoff-email-and-password-licensing-versions-release-notes-2783)).

Foundry sells professional visual-effects and post-production software, especially the Nuke family for node-based compositing, editorial, review, and studio pipelines. The commercial model includes annual subscriptions and rentals, with different feature tiers. Foundry's live Nuke page shows a scalable node graph, more than 200 nodes, support for OpenEXR, USD, OpenColorIO and ACES, plus Python and C++ extensibility. Those standards, scripts, artists' skills, and pipeline integrations make replacement costly at high-end studios. This is an ecosystem and workflow moat, not a two-sided transaction network. Exposure to film and television production makes bookings cyclical even when long-lived pipeline adoption is durable ([Foundry Nuke](https://www.foundry.com/products/nuke-family/nuke), archived as `B_NETWORK_FOUNDRY_NUKE`).

iPipeline digitizes life-insurance and annuity distribution between carriers, distributors, broker-dealers, advisers, and financial institutions. Its value comes from quoting, illustrations, e-application, underwriting, compliance, policy delivery, and the many carrier-specific connections required to move a case through the chain. Its current corporate page claims 100+ carrier/provider customers, 2,500+ distribution partners, and 500,000+ global agents and advisers; these are vendor context claims, not Roper-reported KPIs or market-share evidence. Integration density and regulatory workflow create a network-like barrier: a new entrant needs both distributor adoption and carrier connectivity, while an established customer faces implementation, compliance, and retraining costs ([iPipeline corporate overview](https://ipipeline.com/)).

iTradeNetwork connects suppliers, distributors, operators, and retailers in perishables and foodservice. It standardizes master data, orders, traceability, quality, and supply-chain workflows. Its current Cerena positioning spans order management, traceability, trade optimization, master data, e-commerce, and automation; its Order Agent converts inbound purchase orders into structured data for order-management and ERP systems. Here, normalized product data and trading-partner connections matter at least as much as the application interface. Competitors can attack individual modules, but replacing the shared data and connections is harder than replacing a standalone point tool ([iTradeNetwork](https://www.itradenetwork.com/)).

SoftWriters' FrameworkLTC is purpose-built pharmacy-management software for long-term-care pharmacies. Its live site claims 800 pharmacies, 49 states, two million patients served, and more than 15,000 daily users. These are current vendor claims and are not used as Roper financial inputs. The system coordinates prescriptions, billing, dispensing, inventory, delivery, and facility workflows. Clinical risk, claims connectivity, operational continuity, and staff training make the system sticky. The network effect is narrower than DAT's, but vertical specialization and embedded integrations are meaningful barriers ([SoftWriters](https://softwriters.com/)).

MHA and SHP add healthcare network and analytics exposure. MHA operates around alternate-site healthcare and pharmacy relationships, including contracting and business services; SHP supports post-acute care analytics and performance workflows. Both benefit from industry-specific datasets and embedded reporting, although reimbursement rules and provider consolidation can concentrate bargaining power. Roper does not disclose separate dollars, margins, customer counts, or retention for either business, so they remain qualitative drivers rather than forecast lines.

Subsplash is an integrated digital platform for churches and ministries spanning apps, websites, streaming, messaging, people management, events, giving, and payments. Its live pricing page claims trust from 20,000 churches and ministries, with software packages priced by size and usage. Giving carries explicit transaction fees: standard Visa and Mastercard pricing is shown at 2.99% plus $0.30, exclusive-partner pricing at 2.3% plus $0.30, and ACH at 1%, with lower advertised rates at higher volume. These published terms demonstrate why Subsplash introduces faster-growing but lower-margin payments mix: more donation and event volume produces more reoccurring revenue, yet payment processing carries direct network costs ([Subsplash pricing](https://www.subsplash.com/pricing); [Subsplash fee schedule](https://support.subsplash.com/en/articles/9101519-transaction-processing-fees)).

The segment's go-to-market is correspondingly varied. DAT and Subsplash can serve smaller customers through packaged subscriptions and digital onboarding; iPipeline, iTradeNetwork, MHA, SHP, and large ConstructConnect customers require enterprise selling, implementation, and integrations; Foundry sells to artists and studios through subscriptions and enterprise agreements. Pricing includes subscription seats, data and analytics packages, licenses and maintenance, implementation or services, usage, and transaction economics. The audited revenue-stream table—not brand revenue—is therefore the cleanest modeling unit.

2. Current economics

Network Software generated FY2025 revenue of $1.6008 billion and `Operating profit` of $0.6958 billion, a 43.5% margin. Revenue grew 8.5% in FY2025 after 2.5% in FY2024 and 4.4% in FY2023 [data_package §3 rows 102-107]. The segment's TTM revenue is $1.6980 billion, calculated in the cleared package from the four disclosed quarters—Q3 2025 $0.4134 billion, Q4 2025 $0.4261 billion, Q1 2026 $0.4276 billion, and Q2 2026 $0.4309 billion. TTM `Operating profit` is the sealed $0.7102 billion, or 41.83% of revenue [data_package §5 rows 214-217; §3a row 147]. The two percentage-point gap from FY2025 reflects recent Subsplash mix and Convoy investment, not an accounting-basis change.

The latest quarter grew 12% in total and 4% organically, following three quarters of 13%-14% total growth and 5%-6% organic growth. Acquisition contribution was therefore material to reported growth. A forecast that extrapolates 12%-14% would double-count the acquisition step-up; a forecast that assumes only 4% forever would ignore stronger organic recurring growth, Foundry recovery, and a potential freight turn. The appropriate anchor is the current TTM perimeter, with explicit organic and mix assumptions and no unannounced acquisition dollars.

The FY2025 revenue mix was recurring software of $1.1546 billion, reoccurring software of $0.3105 billion, and non-recurring software of $0.1357 billion [data_package §4 rows 183-185]. Recurring software was 72.1% of segment revenue, reoccurring software 19.4%, and non-recurring software 8.5%. The distinction matters. “Recurring” is subscription and maintenance revenue; “reoccurring” is transaction or usage revenue that repeats but varies with freight, insurance, healthcare, food, or giving activity. The latter is attractive when volumes rise but is not contractual ARR.

Roper does not publish segment ARR, brand revenue, customer count, seats, ACV, CAC, payback, or a consolidated Network Software retention series. It discloses only selected business commentary: Foundry net retention returned above 100%, Subsplash software grew double digits and payments faster, and enterprise gross retention remained in the mid-90s [data_package §6 rows 240-249; §10 rows 308-315]. Those points support durability but cannot be converted into invented ARR dollars or unit-economics ratios.

Visibility is good but incomplete. Network Software backlog expected to convert over the next twelve months increased from $0.448 billion in FY2021 to $0.578 billion in FY2025 and $0.608 billion at Q2 2026 [data_package §0a row 52]. The Q2 figure equals about 36% of TTM segment revenue. It supports near-term delivery but is not a full ARR proxy: renewals and short-duration subscriptions can be absent from backlog, while reoccurring volumes can move quickly. Consolidated remaining performance obligations were $5.223 billion at Q2 2026, but the package does not allocate RPO by segment; no segment RPO is inferred.

Capital intensity is low in physical terms. Roper reports consolidated capex plus capitalized software at roughly 1.0%-1.5% of revenue, but does not disclose Network Software capex separately [data_package §7 rows 270-278]. Economic reinvestment is primarily people and product development: engineers, domain specialists, data operations, cybersecurity, cloud infrastructure, sales, implementation, and payments or transaction costs. Accounting margins therefore look structurally high, while the more important reinvestment question is whether software development and acquisition goodwill continue to earn satisfactory incremental returns.

3. Unit economics and margin mechanics

At segment level, `Operating profit` margin rose from 39.0% in FY2021 to 41.4% in FY2022, 43.9% in FY2023, and 45.2% in FY2024 before easing to 43.5% in FY2025 and 41.83% in the TTM [data_package §3 rows 104-107; §3a row 147]. The initial expansion shows the benefit of recurring revenue, software gross margins, pricing, and operating leverage. The reversal demonstrates that mix and investment can overwhelm scale for a period.

Recurring subscription revenue has the cleanest incremental economics. Once a software product, data set, or network is built, renewal revenue carries limited incremental selling cost. Hosting, customer support, data acquisition, and ongoing development are real but usually grow slower than revenue when retention is strong. Price increases, module cross-sell, and conversion from license or maintenance to subscription can therefore expand profit. Conversely, forced migrations, elevated churn, cybersecurity remediation, or cloud-compute inflation reduce leverage.

Reoccurring revenue has different economics. Subsplash payments, freight-related activity, food-supply transactions, and insurance workflow volumes can grow faster than seats, but each dollar may carry processing, data, fraud, compliance, or partner costs. Higher payment volume can thus lift gross profit dollars while diluting percentage margin. DAT's transaction-sensitive products may have better contribution economics than commodity card acquiring, but load volumes, carrier additions, spot pricing, and customer financial health vary with the freight cycle. The base case assumes reoccurring growth contributes profit but does not earn the same terminal margin as subscription revenue.

Non-recurring software includes license, implementation, and other one-time revenue. It can be strategically useful because implementation embeds a customer and seeds future recurring revenue, yet services are labor intensive and licenses can be lumpy. Non-recurring revenue was almost flat across FY2023-FY2025, consistent with mature enterprise workflows and SaaS transitions. It is modeled as the slowest-growth and lowest-margin stream rather than as a hidden growth lever.

The segment has four main margin levers. First is revenue mix: recurring subscription and analytics growth is favorable, while payment-processing and other low-spread transactions can dilute. Second is scale: shared platform, data, hosting, and sales infrastructure can support more volume without proportional cost. Third is reinvestment: Convoy integration, AI-based takeoff, Nuke's new workflows, clinical AI, security, and cloud migration can depress current profit but protect retention and future pricing. Fourth is cycle: freight and media recoveries can raise high-contribution usage and seats, while downturns reduce revenue faster than the fixed engineering base.

The TTM margin also contains acquisition mix. Subsplash added revenue with payments exposure; management explicitly attributed lower reported margins to Subsplash mix and Convoy investment [data_package §6 row 249]. It would be wrong to call the full decline structural, but equally wrong to assume an immediate return to 45.2%. The model starts from 41.83% and allows case-specific stream margins to move gradually. Corporate administrative expense is excluded from the segment. The sealed bridge assigns that line once below the sum of reportable `Operating profit`; it must not be allocated here [data_package §3a rows 142-168].

4. Competitive dynamics

DAT competes with other digital load boards, broker transportation-management systems, private carrier networks, digital freight brokers, and increasingly automated matching within large logistics platforms. The strongest defense is marketplace liquidity plus proprietary rate history. More postings, searches, verified carriers, and observed prices improve match quality and analytics. The weakness is multi-homing: a broker or carrier can use several load boards, and the cost of trying a second service is low. Fraud or low-quality listings could damage trust rapidly. AI will improve matching and pricing, but it may also reduce interface differentiation because every serious platform can deploy recommendations. DAT's moat survives if its unique network data improves model quality; it weakens if customers shift transactions into closed TMS networks that do not require DAT discovery.

ConstructConnect competes with Procore, Autodesk Construction Cloud, Bluebeam, Dodge Construction Network, estimating specialists, and internally assembled workflows. Its project and bidding data creates a useful network, while embedded takeoff and estimating raise switching costs. Yet contractors often use multiple products, and project information can be sourced elsewhere. AI-based plan reading may expand value by saving estimator hours, and the September 2026 Auto Scale/Auto Name release is concrete evidence that the product is advancing. General vision models can still commoditize basic quantity extraction. Durable differentiation depends on proprietary project data, accuracy, workflow integration, and the feedback loop from actual bid activity—not the mere presence of an AI feature.

Foundry faces Adobe, Autodesk, Blackmagic Design, SideFX, Maxon and studio-built pipelines. Nuke's defense is its position in high-end compositing, trained artist base, scripts, plug-ins, open-standard support, and deeply integrated production pipelines. The current official Nuke page shows annual subscriptions from £2,909 for Nuke to £5,339 for Nuke Studio, as well as more than 200 nodes and Python/C++ extensibility. Those vendor terms indicate that professional workflow value can support premium pricing, but they are not Roper financial disclosures ([Foundry Nuke](https://www.foundry.com/products/nuke-family/nuke)). Film and television budgets remain cyclical; strikes or production pauses affect seats and expansions. Generative video and AI-assisted post-production are both opportunity and threat. Foundry can automate rotoscoping, cleanup, and virtual production inside a governed pipeline, but some lower-end work may disappear or migrate to integrated generative suites.

iPipeline competes with carrier portals, insurance core vendors, agency-management software, Salesforce-based implementations, and other quoting and e-application providers. Regulation and carrier-specific product rules make integrations difficult, and the platform's value grows with the number of connected carriers and distributors. However, large carriers can favor proprietary journeys, distributors can consolidate vendors, and AI document extraction may lower the cost of building workflow layers. The moat is strongest where iPipeline is the neutral connective tissue across many organizations and weakest where it is a replaceable front end.

iTradeNetwork competes with SPS Commerce, E2open, Blue Yonder, SAP and other supply-chain or EDI platforms. Food perishability, traceability, master-data normalization, and partner connectivity raise the cost of failure. Network breadth and normalized data can improve automation, but customers may prefer broader enterprise suites. AI order capture should lower manual processing and increase platform utility; it also makes unstructured-order ingestion easier for competitors. Retention

therefore depends on end-to-end reliability, partner reach, and trusted item data rather than solely on proprietary AI.

SoftWriters competes with pharmacy-management systems and healthcare IT vendors. Its narrow focus is an advantage: long-term-care pharmacy requires cycle-fill workflows, facility coordination, claims, packaging, delivery, clinical checks, and auditability. The vendor's scale claims imply a meaningful installed base. Switching a pharmacy's core dispensing system carries operational and patient-safety risk. The counterweight is customer concentration from pharmacy consolidation and the possibility that a larger healthcare platform bundles an adequate module. AI-driven prescription entry can deepen the product but must meet a high accuracy and governance bar.

Subsplash competes with Pushpay, Tithe.ly, Planning Center, Breeze, general website and streaming tools, and mainstream payment processors. Its suite can reduce vendor sprawl and create shared data across giving, communications, apps, and events. Published payments pricing also makes comparison easy; buyers can see the spread and may negotiate or switch. The platform has cross-sell and data integration benefits, but churches vary in budget and technical sophistication, and payment economics are exposed to card-network and processor pricing. Transaction growth can be excellent without creating equally strong incremental margins.

Across the segment, market-share figures are not disclosed on a comparable basis. Vendor claims such as DAT's scale or SoftWriters' installed base are useful evidence of participation, not audited market share. The analytical conclusion is a portfolio of strong niche positions rather than a single unassailable network monopoly. Pricing power is likely highest where replacement creates workflow, compliance, data, or counterparty disruption; it is weakest where users can multi-home or compare payment rates easily.

5. Segment-level moat

The moat is real but uneven. DAT has the most explicit two-sided network effect: carriers attract freight and freight attracts carriers, while transaction data strengthens rates and matching. iPipeline and iTradeNetwork have integration networks: each connection makes the system more useful and raises the coordination cost of replacement. ConstructConnect has a project-data and workflow ecosystem. Foundry has a professional standard, trained-user base, and pipeline compatibility. SoftWriters and SHP have vertical system-of-record switching costs. Subsplash has suite breadth and payments integration but also the clearest price transparency and easiest conceptual substitutes.

The strongest common protection is workflow embeddedness. Customers are not merely buying generic databases; they are running bids, policies, pharmacy dispensing, food orders, visual-effects pipelines, freight matches, healthcare reporting, or church engagement. Migration requires data conversion, integration rebuilding, staff retraining, compliance testing, and parallel operations. That supports retention and selective pricing. The disclosed mid-90s enterprise gross retention and Foundry's return above 100% net retention are consistent with this mechanism, though neither is a complete segment NRR series [data_package §0a row 55; §6 row 246].

Data advantages are the second protection. DAT's observed market activity, ConstructConnect's project corpus, iTradeNetwork's item and partner data, and SHP's vertical benchmarks can improve customer decisions. These advantages can compound if more usage improves the dataset. They can also decay if customers restrict data sharing, regulators tighten usage, or new platforms obtain equivalent feeds. AI magnifies both sides: proprietary domain data makes models more useful, but foundation models reduce the cost of building interfaces and extracting documents.

The moat should remain durable over five years in the base case, but a ten-year claim requires continuous reinvestment. A static incumbent can lose relevance even if switching costs are high. Roper's decentralized ownership model may preserve domain focus, while acquisitions can add adjacent capabilities. Yet acquired growth is not itself proof of organic moat strengthening. The right evidence is sustained organic recurring growth, retention, bookings, pricing, product adoption, and margins after integration. The segment passes a five-year durability test; it does not merit an assumption of perpetual double-digit organic growth.

6. Historical growth rates

The table reproduces the finest dollar-disclosed history in the cleared data package. “Three-point CAGR” is the annualized FY2023-to-FY2025 rate over two elapsed years. No brand dollars are back-solved. Each number is tied to the cited data-package row.

Product / sub-segment	FY2023 revenue	FY2024 revenue	FY2025 revenue	FY2023-FY2025 CAGR	Most recent YoY	Data package cite
Network Software total	$1.4394B [data_package §3 row 104]	$1.4756B [data_package §3 row 104]	$1.6008B [data_package §3 row 104]	5.5% [data_package §3 rows 104-105]	8.5% [data_package §3 row 105]	2025 Form 10-K, Note 14 segment table; `data_package.md` §3 rows 100-107
Recurring software	$1.0395B [data_package §4 row 183]	$1.0701B [data_package §4 row 183]	$1.1546B [data_package §4 row 183]	5.4% [data_package §4 row 183]	7.9% [data_package §4 row 183]	2025 Form 10-K, Note 14 revenue-stream-by-segment table; `data_package.md` §4 row 183
Reoccurring software	$0.2634B [data_package §4 row 184]	$0.2703B [data_package §4 row 184]	$0.3105B [data_package §4 row 184]	8.6% [data_package §4 row 184]	14.9% [data_package §4 row 184]	2025 Form 10-K, Note 14 revenue-stream-by-segment table; `data_package.md` §4 row 184
Non-recurring software	$0.1365B [data_package §4 row 185]	$0.1352B [data_package §4 row 185]	$0.1357B [data_package §4 row 185]	-0.3% [data_package §4 row 185]	0.4% [data_package §4 row 185]	2025 Form 10-K, Note 14 revenue-stream-by-segment table; `data_package.md` §4 row 185

Arithmetic checks. Segment total: $1.4394B × 1.025 = $1.4754B versus $1.4756B reported, and $1.4756B × 1.085 = $1.6010B versus $1.6008B reported. Recurring: $1.0395B × 1.029 = $1.0696B versus $1.0701B, and $1.0701B × 1.079 = $1.1546B. Reoccurring: $0.2634B × 1.026 = $0.2702B, and $0.2703B × 1.149 = $0.3106B. Non-recurring: $0.1365B × 0.990 = $0.1351B, and $0.1352B × 1.004 = $0.1357B. Every row ties within 0.1%, well inside the required 2% tolerance. There are no back-solved historical dollars.

The longer segment history is $1.2238 billion in FY2021, $1.3785 billion in FY2022, $1.4394 billion in FY2023, $1.4756 billion in FY2024, and $1.6008 billion in FY2025 [data_package §3 row 104]. That is a 6.9% FY2021-FY2025 CAGR, but the path is not smooth: acquisitions and cyclical businesses produced a 12.6%, 4.4%, 2.5%, and 8.5% sequence. The model therefore does not apply one backward-looking rate indiscriminately.

Foundry and Subsplash have rate-only disclosures. Foundry was expected to exit Q4 2025 with high-single-digit ARR growth and later returned to positive growth; Subsplash delivered double-digit software growth with payments faster [data_package §4 rows 196-197; §6 rows 244-249]. Because no brand-dollar base exists, these observations shape stream CAGRs and scenario narratives but are not separate forecast rows.

7. Management guidance from the data package

The relevant forward statements are reproduced from the cleared package, not re-fetched from transcripts.

- **Foundry, Q3 FY2025:** Neil Hunn said “Q4 exit ARR to grow year-over-year in the HSD area” [data_package §6 row 244]. This indicates a recovery trajectory after media disruption, but ARR growth is not brand revenue growth and later comparison periods can normalize.

- **DAT, Q4 FY2025:** management said there was “no meaningful improvement in the freight market” [data_package §6 row 245]. The starting forecast cannot depend on an immediate freight rebound. DAT must support the model through subscriptions, pricing, carrier additions, analytics, and share gains until volume improves.

- **Foundry, Q1 FY2026:** management said “Net retention returned above 100%” [data_package §6 row 246]. Expansion had resumed, supporting recurring growth above the FY2023-FY2025 segment-stream history in base and bull, but one business metric cannot be treated as segment-wide NRR.

- **DAT, Q2 FY2026:** management described the “setup becoming increasingly encouraging for '27” [data_package §6 row 247]. The base case therefore stages the more visible freight benefit in the second forecast year, while the bull case assumes a stronger, earlier recovery and the bear case assumes it fades.

- **Network Software outlook:** management said Subsplash software grew double digits and payments faster, ConstructConnect expanded AI-based takeoff, DAT carrier additions and spot pricing improved, but load volumes had not confirmed a full recovery. Second-half organic growth was expected at mid-single-digit-plus [data_package §6 row 249]. This supports a base forecast near the historical stream mix's mid-single-digit rate rather than reported low-teens growth.

- **Margin bridge:** management attributed the recent lower margin to Subsplash mix and Convoy investment, not a change in the segment-profit identity [data_package §6 row 249]. The base case permits gradual stabilization and modest recovery; it does not snap back to the FY2024 peak.

There is no segment-wide numerical five-year guide, ARR dollar target, NRR target, pricing guide, or margin target. The enterprise 2026 outlook calls for organic growth around 6%, but it covers all segments and is not imposed mechanically on Network Software [data_package §6 row 264].

8. Forward growth assumptions by disclosed revenue stream

The current TTM segment revenue of $1.6980 billion is allocated to the three streams using their audited FY2025 shares because no TTM stream-by-segment table is disclosed. This creates model anchors of $1.2247 billion recurring, $0.3294 billion reoccurring, and $0.1439 billion non-recurring. The allocation is an explicit forecast convention, not a historical disclosure and not a brand estimate. The sum equals TTM segment revenue exactly.

Bear case growth

Product / revenue stream	FY2023-FY2025 historical CAGR	Latest FY YoY	Management FY+1 anchor	Bear CAGR TTM to TTM+5y	Justification
Recurring software	5.4%	7.9%	Mid-single-digit-plus segment organic outlook	3.0%	Freight and media recovery fails; churn and weaker seat expansion offset modest price and niche workflow retention.
Reoccurring software	8.6%	14.9%	Subsplash payments faster; DAT loads not confirmed	1.0%	Freight volumes remain soft and payments slow; transaction sensitivity overwhelms platform cross-sell.
Non-recurring software	-0.3%	0.4%	SaaS and workflow investment, no numeric guide	0.0%	Cloud conversion and customer caution prevent license or implementation growth.

The bear segment revenue CAGR is 2.4%, below every recent quarterly organic rate. This requires a specific adverse path: DAT's promising 2027 freight setup does not convert to sustained load growth; media spending remains constrained; smaller churches and healthcare customers rationalize vendors; and competitors use bundled suites or AI-enabled point tools to limit pricing. It is not a generic maturation haircut. Recurring revenue still grows because the installed base and workflow costs prevent a collapse.

Base case growth

Product / revenue stream	FY2023-FY2025 historical CAGR	Latest FY YoY	Management FY+1 anchor	Base CAGR TTM to TTM+5y	Justification
Recurring software	5.4%	7.9%	Mid-single-digit-plus segment organic outlook	6.5%	Retention, module cross-sell, Foundry recovery, and DAT analytics support growth slightly above history without extrapolating acquisition-led reported growth.
Reoccurring software	8.6%	14.9%	Subsplash payments faster; DAT 2027 setup encouraging	5.0%	Payments and freight transactions grow, but normalize well below the latest acquisition- and mix-influenced rate.
Non-recurring software	-0.3%	0.4%	No numeric guide; SaaS transitions continue	1.0%	Implementation follows customer additions while subscription conversion limits license growth.

The base segment revenue CAGR is 5.8%. The annual path is intentionally smoother than the historical acquisition-driven sequence. It assumes current-perimeter organic execution, a modest freight benefit beginning in the second year, continued Foundry expansion, steady insurance and healthcare workflows, and Subsplash cross-sell. It includes no future acquisition revenue. Acquisitions would be upside only after a separately underwritten purchase price and integration case.

Bull case growth

Product / revenue stream	FY2023-FY2025 historical CAGR	Latest FY YoY	Management FY+1 anchor	Bull CAGR TTM to TTM+5y	Justification
Recurring software	5.4%	7.9%	Foundry retention above 100%; mid-single-digit-plus segment outlook	9.0%	Strong freight and media recovery combines with AI-enhanced products, pricing, and cross-sell; the rate is capped below recent total growth.
Reoccurring software	8.6%	14.9%	Subsplash payments faster; DAT 2027 setup encouraging	8.0%	Freight activity, payments, food and insurance transactions compound near history but below the latest YoY spike.
Non-recurring software	-0.3%	0.4%	No numeric guide	3.0%	Strong new-logo demand and implementation volume outweigh SaaS conversion, while remaining the slowest stream.

The bull segment CAGR is 8.3%. This is demanding but not an extrapolation of 12%-14% reported quarterly growth. It requires several favorable drivers at once: a durable freight upcycle, Foundry seat and pricing recovery, successful adoption of ConstructConnect and iTradeNetwork AI tools, Subsplash payments strength, and stable healthcare and insurance retention. Because no unannounced acquisitions are modeled, the bull case is primarily organic/current-perimeter upside.

Organic versus acquired growth and acquisition returns

The gap between recent 12%-14% total growth and 4%-6% organic growth shows why acquisition contribution must be separated. The TTM base already contains the acquired perimeter present during the four-quarter anchor. Forecast rates apply to that perimeter and do not assume Roper spends additional capital. Future deals could lift revenue and profit, but incremental acquisition return depends on purchase multiple, organic durability, interest cost, integration investment, and the acquired margin path. Roper's consolidated goodwill and intangibles are large, so revenue accretion alone is not sufficient evidence of value creation [data_package §8 rows 282-292].

The segment's best acquisition candidates would add proprietary data, dense integrations, or adjacent workflow modules that cross-sell into an existing network. A deal that merely buys generic SaaS growth at a high multiple would not strengthen the moat. The forecast assigns zero dollars to unannounced M&A, and downstream synthesis should model capital deployment separately rather than embedding acquisition growth inside Network Software organic assumptions.

9. Forward `Operating profit` margin assumptions

Roper does not disclose profit by revenue stream. To make the segment rollup reconstructable, the model allocates the sealed TTM `Operating profit` across streams with starting analytical margins of 45.0% for recurring, 39.0% for reoccurring, and 21.28% for non-recurring. Weighted by the FY2025-mix TTM anchors, these equal the exact TTM segment margin of 41.83% and $0.7102 billion of `Operating profit`. The allocation is a modeling convention, not issuer disclosure.

Case	Revenue stream	TTM model margin	TTM+5y `Operating profit` margin	Five-year mechanism
Bear	Recurring software	45.0%	42.5%	Discounting, weak seat expansion, cloud and security costs, and lost leverage reduce margin by 250 bps.
Bear	Reoccurring software	39.0%	35.5%	Low freight and payment volume plus processing and fraud costs reduce margin by 350 bps.
Bear	Non-recurring software	21.28%	19.0%	Labor inflation and poor utilization reduce services contribution by 228 bps.
Base	Recurring software	45.0%	45.5%	Pricing and scale offset AI, cloud, security, and product reinvestment for 50 bps expansion.
Base	Reoccurring software	39.0%	39.0%	Volume leverage is absorbed by Subsplash payment mix and ongoing network investment.

Case	Revenue stream	TTM model margin	TTM+5y `Operating profit` margin	Five-year mechanism
Base	Non-recurring software	21.28%	20.0%	SaaS transitions reduce high-margin licenses while implementation remains labor intensive.
Bull	Recurring software	45.0%	47.0%	Strong retention, pricing, and scale produce 200 bps expansion after funding product development.
Bull	Reoccurring software	39.0%	42.0%	Freight, giving, and other volume leverage produce 300 bps expansion despite processor costs.
Bull	Non-recurring software	21.28%	25.0%	Better implementation utilization and mix add 372 bps.

The bear case's 237-basis-point blended decline to 39.46% is driven by specific price, utilization, and mix pressure. It remains above FY2021's 39.0% because the portfolio is more recurring and the installed base remains sticky. The base case reaches 42.57%, a 74-basis-point improvement from TTM but still below the FY2024 peak of 45.2%. This is consistent with gradual Convoy investment maturation and recurring growth offset by Subsplash transaction mix. The bull case reaches 44.60%, 277 basis points above TTM but still roughly 60 basis points below FY2024, avoiding an assumption that a favorable cycle automatically restores the old peak.

No corporate or statutory-bridge item is embedded. Corporate administrative expense, interest, the non-recurring Indicor equity gain, other income or expense, and tax are downstream synthesis lines [data_package §3a rows 160-170]. This appendix forecasts only segment `Operating profit`.

10. Bottom-up segment rollup and five-year annual cadence

Terminal stream rollup

Case	Revenue stream	TTM anchor	Five-year CAGR	TTM+5y revenue	TTM+5y margin on `Operating profit`	TTM+5y `Operating profit`
Bear	Recurring software	$1.2247B	3.0%	$1.4198B	42.5%	$0.6034B
Bear	Reoccurring software	$0.3294B	1.0%	$0.3462B	35.5%	$0.1229B
Bear	Non-recurring software	$0.1439B	0.0%	$0.1439B	19.0%	$0.0273B
Bear	Segment total	$1.6980B	2.4%	$1.9099B	39.46%	$0.7536B
Base	Recurring software	$1.2247B	6.5%	$1.6780B	45.5%	$0.7635B
Base	Reoccurring software	$0.3294B	5.0%	$0.4203B	39.0%	$0.1639B
Base	Non-recurring software	$0.1439B	1.0%	$0.1513B	20.0%	$0.0303B
Base	Segment total	$1.6980B	5.8%	$2.2496B	42.57%	$0.9577B
Bull	Recurring software	$1.2247B	9.0%	$1.8844B	47.0%	$0.8857B
Bull	Reoccurring software	$0.3294B	8.0%	$0.4839B	42.0%	$0.2032B
Bull	Non-recurring software	$0.1439B	3.0%	$0.1669B	25.0%	$0.0417B
Bull	Segment total	$1.6980B	8.3%	$2.5352B	44.60%	$1.1306B

Every segment total is the sum of the three disclosed-stream forecast lines. Every margin is the revenue-weighted average of the stream margins. Every profit equals revenue times the exact weighted margin; reconciliation residuals are below $0.0001 billion and therefore comfortably inside the 1% requirement.

Refresh rebuild controls. I recomputed each terminal stream as `TTM stream anchor × (1 + case CAGR)^5`, then multiplied terminal stream revenue by its case-specific `Operating profit` margin. The TTM stream anchors were reallocated from the refreshed $1.6980 billion segment total using the audited FY2025 shares because the refreshed package still does not disclose TTM revenue by stream. The resulting anchors—$1.2247 billion recurring, $0.3294 billion reoccurring, and $0.1439 billion non-recurring—sum exactly to the segment anchor. No acquisition plug, corporate expense, interest, Indicor gain, tax, or other below-line item appears anywhere in the stream model. The unchanged terminal outputs therefore reflect unchanged cleared inputs and assumptions, not a stale copy-forward.

Bear annual cadence

Horizon date	Recurring revenue	Reoccurring revenue	Non-recurring revenue	Segment revenue	Operating profit margin	Operating profit
2026-06-30 TTM	$1.2247B	$0.3294B	$0.1439B	$1.6980B	41.83%	$0.7102B
2027-06-30	$1.2614B	$0.3326B	$0.1439B	$1.7380B	41.35%	$0.7187B
2028-06-30	$1.2993B	$0.3360B	$0.1439B	$1.7792B	40.88%	$0.7273B
2029-06-30	$1.3383B	$0.3393B	$0.1439B	$1.8215B	40.41%	$0.7360B
2030-06-30	$1.3784B	$0.3427B	$0.1439B	$1.8651B	39.93%	$0.7448B
2031-06-30	$1.4198B	$0.3462B	$0.1439B	$1.9099B	39.46%	$0.7536B

Base annual cadence

Horizon date	Recurring revenue	Reoccurring revenue	Non-recurring revenue	Segment revenue	Operating profit margin	Operating profit
2026-06-30 TTM	$1.2247B	$0.3294B	$0.1439B	$1.6980B	41.83%	$0.7102B
2027-06-30	$1.3043B	$0.3458B	$0.1454B	$1.7955B	41.98%	$0.7537B
2028-06-30	$1.3891B	$0.3631B	$0.1468B	$1.8990B	42.13%	$0.8000B
2029-06-30	$1.4794B	$0.3813B	$0.1483B	$2.0090B	42.27%	$0.8493B
2030-06-30	$1.5755B	$0.4003B	$0.1498B	$2.1257B	42.42%	$0.9018B
2031-06-30	$1.6780B	$0.4203B	$0.1513B	$2.2496B	42.57%	$0.9577B

Bull annual cadence

Horizon date	Recurring revenue	Reoccurring revenue	Non-recurring revenue	Segment revenue	Operating profit margin	Operating profit
2026-06-30 TTM	$1.2247B	$0.3294B	$0.1439B	$1.6980B	41.83%	$0.7102B
2027-06-30	$1.3349B	$0.3557B	$0.1483B	$1.8389B	42.39%	$0.7796B
2028-06-30	$1.4551B	$0.3842B	$0.1527B	$1.9919B	42.95%	$0.8556B
2029-06-30	$1.5860B	$0.4149B	$0.1573B	$2.1582B	43.51%	$0.9390B
2030-06-30	$1.7288B	$0.4481B	$0.1620B	$2.3389B	44.06%	$1.0304B
2031-06-30	$1.8844B	$0.4839B	$0.1669B	$2.5352B	44.60%	$1.1306B

The base cadence deliberately does not show a one-year acquisition spike. It starts near management's mid-single-digit-plus organic posture and compounds the existing perimeter. Freight recovery is represented in the reoccurring line without creating a separate DAT dollar estimate. The bear path shows margin contraction every year because weak demand limits leverage while product and security costs persist. The bull path shows faster leverage, but it still funds AI and platform work and does not exceed the historical peak margin within this horizon.

The probability-weighted terminal operating outcome is $2.2218 billion of revenue and $0.9412 billion of `Operating profit`, calculated from the 25% bear, 55% base, and 20% bull weights. The implied weighted margin of 42.36% is a diagnostic ratio of weighted profit to weighted revenue, not a fourth scenario.

The 55% base weight reflects the observed 4%-6% recent organic-growth range and management's mid-single-digit-plus second-half outlook. Bear receives 25% because DAT load volumes had not confirmed a freight recovery, transaction revenue is cyclical, and segment retention and brand-level economics remain partly undisclosed. Bull receives the lower 20% because it requires several favorable levers simultaneously—a durable freight upcycle, Foundry expansion, successful AI-product adoption, Subsplash payments strength, and margin leverage—rather than merely a continuation of the latest reported growth.

11. Key risks and wildcards

Freight-cycle and transaction sensitivity — Bear and Base. DAT subscriptions, spot-rate analytics, load activity, matching, tracking, and adjacent transactions are influenced by carrier capacity, broker health, and shipment volumes. Management saw better carrier additions and spot pricing but not yet a fully confirmed load-volume recovery [data_package §6 row 249]. A durable freight recession would pressure both recurring customer counts and reoccurring usage; a 2027 turn is a meaningful base/bull catalyst.

Network effects may be shallower than advertised — Bear. Customers can multi-home across load boards, project databases, payment processors, and insurer portals. Large brokers, carriers, distributors, or enterprise suites can create private networks. Published scale is valuable only if it produces unique liquidity, data, or workflow outcomes. Engagement, exclusive postings, data quality, match conversion, and renewal evidence matter more than gross registered-user claims.

Customer concentration and bargaining power — Bear. Roper does not disclose a customer-concentration percentage for Network Software [data_package §10 row 315]. The portfolio spans many verticals, but brand-level customer concentration could still be material, especially in media studios, distributors, insurance carriers, pharmacy chains, or health systems. Consolidation can increase customer leverage even when end markets differ.

Media-production cyclicality — Bear and Bull. Foundry's recovery follows strike-affected weakness. Production budgets, project timing, and studio consolidation influence seats and expansions. A robust slate supports the bull case; another disruption or aggressive cost rationalization supports the bear. Retention above 100% is encouraging but not enough to remove cycle risk.

Platform substitution and AI — All cases. AI can improve ConstructConnect takeoff, iTradeNetwork order ingestion, SoftWriters prescription entry, DAT matching, and Foundry workflows. It can also commoditize document extraction, estimating, basic compositing, and workflow interfaces. The winning products will combine domain data, accuracy, auditability, integrations, and user control. The model treats AI as a reinvestment requirement with potential cross-sell, not as free margin.

Payments mix — Base and Bear. Subsplash's faster payments growth can lift reoccurring revenue while diluting margin because card and ACH processing have direct costs. Donor-covered fees and volume rebates affect customer economics, not necessarily Roper's spread one-for-one. A shift toward general payment processors or aggressive church-software competitors could pressure both adoption and pricing.

Healthcare regulation and pharmacy consolidation — Bear. iPipeline, MHA, SHP, and SoftWriters operate in regulated workflows. Rules create switching costs but also force development, compliance, and support spending. Carrier, distributor, or pharmacy consolidation can reduce customer count and increase negotiating leverage. Policy changes can alter transaction volumes without reducing the software's technical quality.

Food-supply platform competition — Bear and Base. iTradeNetwork's normalized data and integrations are valuable, but broader supply-chain suites can bundle competing functionality. Traceability mandates can stimulate demand while creating expensive implementation obligations. AI order capture helps only if accuracy and integration reliability remain superior.

Pricing and retention opacity — Bear. There is no disclosed segment NRR series, ARR base, seat count, ACV, or individual-business pricing metric [data_package §10 rows 308-314]. Mid-90s gross retention is favorable but leaves room for downsell, and selected brand commentary may not represent the entire segment. Downstream monitoring should require recurring organic growth, bookings, backlog, and margin evidence rather than assume pricing power.

Backlog and RPO interpretation — Base. Network backlog rose to $0.608 billion at Q2 2026, but backlog represents only a portion of annual revenue and consolidated RPO is not allocated to the segment [data_package §0a rows 49-53]. It supports visibility, not certainty. A flattening backlog combined with weakening organic recurring growth would invalidate the base cadence.

Acquisition return risk — All cases. Roper's model can add high-quality vertical software, but purchase prices, debt, integration spend, and goodwill determine shareholder returns. The segment model deliberately excludes unannounced deals. Any later synthesis that adds acquired earnings should show incremental purchase price, financing, and return rather than treating deployment capacity as automatic value creation.

Cybersecurity, reliability, and data rights — Bear. These platforms touch freight identity and credit, insurer data, patient and pharmacy workflows, food traceability, media assets, and donations. A breach or outage can cause direct remediation expense, customer loss, regulatory scrutiny, and reduced network trust. Security investment is structurally necessary and limits unconstrained margin expansion.

Data gaps and monitoring priorities

- [DATA GAP: Roper does not disclose brand-level revenue dollars. No dollar forecast is assigned to DAT, Foundry, ConstructConnect, iPipeline, iTradeNetwork, MHA, SHP, SoftWriters, or Subsplash.]

- [DATA GAP: Segment ARR, net-new ARR, NRR, churn, customer count, seats, ACV, CAC, payback, and magic number are not disclosed.]
- [DATA GAP: Network Software profit by revenue stream is not disclosed. Stream margins are explicit analytical allocations calibrated to exact TTM `Operating profit`, not historical facts.]
- [DATA GAP: Segment-specific RPO is not disclosed; only Network Software next-twelve-month backlog is available.]
- [DATA GAP: Individual-business pricing metrics and customer-concentration percentages are not disclosed.]

The most useful monitoring set is organic recurring growth, total versus organic growth, Network backlog, enterprise gross retention, selected business NRR, DAT load volume and carrier additions, Foundry ARR or retention, Subsplash software versus payments mix, and segment `Operating profit` margin. Base-case confidence should fall if recurring organic growth stays below 4%, backlog declines persistently, or margin falls below 40% without a clearly time-bounded investment explanation. Confidence should rise if DAT's 2027 setup converts to volume, Foundry sustains expansion, and segment margin recovers while funding AI and security.

Scenario summary

Case	Segment TTM+5y Revenue	Exact profit metric	Segment TTM+5y Profit Margin	Segment TTM+5y Profit	Probability
Bear	$1.9099B	`Operating profit`	39.46%	$0.7536B	25%
Base	$2.2496B	`Operating profit`	42.57%	$0.9577B	55%
Bull	$2.5352B	`Operating profit`	44.60%	$1.1306B	20%

No trade, order, sizing, portfolio action, or execution workflow was initiated. `trade_execution_authorized=false`.

Appendix S - Earnings Synthesis

Roper Technologies — Synthesis (Combined Earnings Model)

Run ID: `pulse-cio-20260927T200229+0800` Queue action: `CIO-20260923-ROP-REFRESH` Mode: Production Forecast perimeter: existing TTM operating perimeter; zero unannounced-acquisition contribution Trade execution authorized: **false**

This appendix mechanically consolidates the three reviewed segment forecasts into statutory operating income, pretax income, net income, diluted listed-unit EPS, and the ER2 P/E-15 entry-price gate. It does not reclassify historical accounting, re-fetch sources, or create a balancing plug. The exact common issuer segment-profit metric is `Operating profit`. Corporate administrative expense remains outside segment profit; interest and other income remain below statutory operating income; tax remains below pretax income.

The model begins with the TTM ended 2026-06-30 and ends on 2031-06-30, exactly five calendar years later. FY2025 is used only as a historical cross-check. The P/E-15 gate is controlled by Base. Scenario probabilities are Bear 25%, Base 55%, and Bull 20%, consistent with the reviewed appendices. Roper is not a P&C insurer or reinsurer, so the insurer lane is not triggered.

1. Anchors and validated packets

- Today: **2026-09-27**.
- Fiscal year end: **December 31**.
- TTM anchor: **2026-06-30**.
- TTM quarters: **Q3 2025 + Q4 2025 + Q1 2026 + Q2 2026**.
- Latest completed fiscal year: **FY2025**, for historical tie-out only.
- Horizon: **2031-06-30**, exactly 5.0 calendar years after the TTM end.
- Listing and unit: **XNAS:ROP common share**, ISIN `US7766961061`.
- Valuation price: **USD 358.56 per listed common share**, raw exchange close for 2026-09-25.
- Raw price SHA-256: `ff1b1e20f5b259f47ac367d299714bd6210081f4a213c763a303b2f1200725ad`.
- Quote packet SHA-256: `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f`.
- Actionability expiry: **2026-09-29T04:00:00+08:00**.
- Reporting and quote currency: **USD / USD**.
- Financial-statement and quoted share class: the same common share; depositary ratio 1.0 and class factor 1.0.
- Split bridge: 100.6 million financial-statement diluted shares at 2026-06-30 × 1.0 split factor = 100.6 million quote-basis diluted financial shares. No intervening split occurred.
- Listed-unit bridge: 100.6 million quote-basis shares / 1.0 depositary-class factor = 100.6 million listed-unit equivalents.
- FX bridge: USD 1.0 quote currency per USD 1.0 reporting currency, dated 2026-09-25.
- Statutory bridge SHA-256: `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`.
- Durable DR gates: `STATUTORY BRIDGE VERIFIED — CLEARED FOR FORECASTING` and `DATA PACKAGE VERIFIED — CLEARED FOR WAVE 2`.

At 2026-09-27 21:24:53 SGT, the strict quote validator returned `QUOTE_PACKET_VALID` with the expected hash and the statutory validator returned `STATUTORY_BRIDGE_VALID` with the expected hash. The quote was unexpired. The horizon independently reconciles: 2026-06-30 plus exactly five calendar years equals 2031-06-30.

The security-unit arithmetic remains explicit even though all conversion factors are one. A USD issuer EPS per common share can be compared with the USD common-share price only after reproducing that identity bridge. No ADR factor, cross-class conversion, split factor, or FX adjustment is hidden.

2. Segment-level forward assumptions

The table reproduces reviewed terminal outputs. Product and stream build-ups remain in the reviewed appendices.

Segment	Exact profit metric	TTM revenue (USD B)	Bear TTM+5y revenue	Base TTM+5y revenue	Bull TTM+5y revenue	Bear margin	Base margin	Bull margin
Application Software	`Operating profit`	4.6922	5.3170	6.1037	6.4474	24.50%	27.80%	29.00%
Network Software	`Operating profit`	1.6980	1.9099	2.2496	2.5352	39.46%	42.57%	44.60%
Technology Enabled Products	`Operating profit`	1.8901	2.0647	2.5494	2.8577	30.49%	34.00%	35.52%

Sources are Sections 8-10 of `appendix_B_application_software.md`, `appendix_B_network_software.md`, and `appendix_B_technology_enabled_products.md`. All three are `reviewed_clear` in the Wave 2 gate, and the common metric matches the sealed bridge.

Application Software compounds its existing recurring, reoccurring, and non-recurring streams to USD 5.3170 billion, USD 6.1037 billion, and USD 6.4474 billion in Bear, Base, and Bull. Terminal `Operating profit` is USD 1.3026 billion, USD 1.6968 billion, and USD 1.8698 billion. Base expects modest 63-basis-point margin expansion from the 27.17% TTM anchor; it does not require acquisition-influenced historical growth or a Deltek government-contracting rebound.

Network Software compounds to USD 1.9099 billion, USD 2.2496 billion, and USD 2.5352 billion, producing `Operating profit` of USD 0.7536 billion, USD 0.9577 billion, and USD 1.1306 billion. Base reflects recurring growth, staged freight benefit, and gradual stabilization after Subsplash and Convoy investment. Its 42.57% terminal margin remains below the FY2024 peak.

Technology Enabled Products compounds to USD 2.0647 billion, USD 2.5494 billion, and USD 2.8577 billion, with `Operating profit` of USD 0.6296 billion, USD 0.8667 billion, and USD 1.0150 billion. Base terminal margin of 34.00% is below FY2025 and assumes input-cost normalization and operating leverage without suppressing engineering, regulatory, or production investment.

Unannounced acquisitions contribute USD 0.000 billion in every segment and scenario. Parent deployment capacity is not a segment purchase commitment and cannot supply purchase price, financing, integration cash cost, revenue, `Operating profit`, or vintage return. Announced Indicor disposal proceeds appear only in the capital-structure discussion, never in operating revenue, segment profit, or normalized other income.

3. Combined revenue build

There are no disclosed corporate revenue eliminations in the reviewed forecast perimeter.

Line	Bear	Base	Bull
Application Software revenue (USD B)	5.3170	6.1037	6.4474
Network Software revenue (USD B)	1.9099	2.2496	2.5352
Technology Enabled Products revenue (USD B)	2.0647	2.5494	2.8577
Sum of segment TTM+5y revenue (USD B)	9.2916	10.9027	11.8403
Corporate eliminations (USD B)	0.0000	0.0000	0.0000
Combined TTM+5y revenue (USD B)	**9.2916**	**10.9027**	**11.8403**
TTM 2026-06-30 to 2031-06-30 CAGR	2.33%	5.66%	7.41%

Horizon date	Bear revenue (USD B)	Base revenue (USD B)	Bull revenue (USD B)
TTM 2026-06-30	8.2803	8.2803	8.2803
2027-06-30	8.4541	8.7853	8.9464
2028-06-30	8.6500	9.2990	9.6438
2029-06-30	8.8543	9.8273	10.3617
2030-06-30	9.0645	10.3640	11.0939
2031-06-30	9.2916	10.9027	11.8403

First-forward-year growth is 2.10% Bear, 6.10% Base, and 8.04% Bull from USD 8.2803 billion TTM. All remain within 10% of the latest reproducible run-rate. Base best matches management's roughly 6% enterprise organic-growth posture without pretending that acquired growth repeats. Bear is an adverse path, not an abrupt collapse; Bull requires several favorable segment drivers but remains below recent acquisition-influenced reported growth.

4. Combined statutory operating-income build

The sealed bridge contains one corporate/unallocated operating line: `Corporate administrative expenses`. No operating adjustment exists between the consolidated segment-profit metric and statutory operating income.

Corporate expense was USD 290.2 million, or 3.67% of revenue, in FY2025 and USD 298.6 million, or 3.61%, in the TTM. Bear uses 3.80% because slower growth and continued public-company, security, AI-governance, and acquisition-oversight costs create deleverage. Base uses 3.60%, essentially the recent ratio. Bull uses 3.40% because scale creates modest leverage but does not remove central investment. These are explicit drivers, not balancing figures.

Line	Bear	Base	Bull
Application Software `Operating profit` (USD B)	1.3026	1.6968	1.8698
Network Software `Operating profit` (USD B)	0.7536	0.9577	1.1306
Technology Enabled Products `Operating profit` (USD B)	0.6296	0.8667	1.0150
Sum of segment TTM+5y `Operating profit` (USD B)	2.6858	3.5212	4.0154
Corporate administrative expense ratio	3.80%	3.60%	3.40%
Corporate administrative expenses (USD B)	(0.3531)	(0.3925)	(0.4026)
Consolidated segment-profit metric (USD B)	2.3327	3.1287	3.6128
Operating bridge adjustments (USD B)	0.0000	0.0000	0.0000
Combined statutory TTM+5y operating income (USD B)	**2.3327**	**3.1287**	**3.6128**
Statutory operating margin	**25.11%**	**28.70%**	**30.51%**

Base statutory margin rises about 73 basis points from the 27.96% TTM anchor. This comes from segment mix and modest leverage, partly offset by corporate cost held near its recent ratio. Bull requires higher margins in all segments and some corporate leverage. Bear combines weaker segment growth, lower segment margins, and higher corporate intensity. No interest, investment gain, tax, cash proceeds, buyback, or debt item enters operating income.

The management appendix supports this capex discipline. FY2025 R&D was USD 852.5 million and management expects capex plus capitalized software at 1.0%-1.5% of revenue. Those investments remain inside the reviewed margin paths. Profit is not manufactured by capitalizing ordinary cost or starving product investment.

5. Net income and listed-unit EPS build

The TTM bridge contains an exceptional USD 1.0558 billion equity-investment gain driven by Indicor remeasurement. It is non-recurring, sits below operating income, and is set to zero at the horizon in every scenario. Other income or expense is immaterial: Bear uses USD 10 million expense, Base zero, and Bull USD 10 million income.

Terminal net interest expense is tied to the explicit debt paths in Section 5a. Bear retains higher debt and cost, producing USD 450 million. Base deleverages to USD 300 million. Bull uses stronger cash generation to reduce interest to USD 222 million. Tax assumptions reproduce the forecast-driver ledger: 22.0% Bear, 21.0% Base, and 20.5% Bull.

Line	Bear	Base	Bull
Combined statutory operating income (USD B)	2.3327	3.1287	3.6128
Interest expense, net (USD B)	(0.4500)	(0.3000)	(0.2220)
Equity investments gain, net (USD B)	0.0000	0.0000	0.0000

Line	Bear	Base	Bull
Other income / expense, net (USD B)	(0.0100)	0.0000	0.0100
Pretax income (USD B)	1.8727	2.8287	3.4008
Tax rate	22.00%	21.00%	20.50%
Income tax expense (USD B)	(0.4120)	(0.5940)	(0.6972)
Net income (USD B)	**1.4607**	**2.2347**	**2.7037**
Quote-basis diluted financial shares at TTM+5y (M)	99.4286	95.9425	92.4563
EPS in USD per quote-basis financial share	14.6911	23.2918	29.2426
Financial shares per listed unit	1.0000	1.0000	1.0000
EPS in USD per listed unit	14.6911	23.2918	29.2426
FX: quote USD per reporting USD	1.0000	1.0000	1.0000
EPS in quote currency per listed unit	**14.6911**	**23.2918**	**29.2426**

The required identity is `NI / quote-basis diluted financial shares × financial shares per listed unit × FX`. Base illustrates it: USD 2.234675212 billion / 95.942481 million = USD 23.291822 per quote-basis share; × 1.0 × 1.0 = USD 23.291822 per listed common share. Bear and Bull reproduce identically on their own net income and share counts.

5a. Return-method and capital-structure inputs

S supplies method inputs but does not select the primary shareholder-return method. Normalized NOPAT is statutory operating income multiplied by one minus the scenario cash-tax rate. The current balance-sheet anchor is USD 0.365 billion cash and USD 11.319 billion gross debt at 2026-06-30. Scenario debt paths are anchored to expected after-tax Indicor proceeds of about USD 1.1 billion, organic cash generation, explicit buybacks, and zero unannounced M&A. Indicor proceeds enter deleveraging once and are not separately added to terminal equity value.

Input	Bear	Base	Bull
Statutory operating income (USD B)	2.3327	3.1287	3.6128
Normalized cash-tax rate	22.00%	21.00%	20.50%
Normalized NOPAT (USD B)	1.8195	2.4717	2.8722
Terminal cash (USD B)	0.4000	0.6000	0.8000
Terminal gross debt (USD B)	9.5000	7.0000	5.2000
Terminal net debt (USD B)	9.1000	6.4000	4.4000
Lease liabilities	Unavailable	Unavailable	Unavailable
Preferred equity	Unavailable; not assumed zero	Unavailable; not assumed zero	Unavailable; not assumed zero
Minority interest	Unavailable; not assumed zero	Unavailable; not assumed zero	Unavailable; not assumed zero
Other senior claims	Unavailable	Unavailable	Unavailable
Separately valued non-operating assets	0.0000	0.0000	0.0000
Diluted listed-equivalent shares (M)	99.4286	95.9425	92.4563

Date	Bear gross debt (USD B)	Base gross debt (USD B)	Bull gross debt (USD B)
2026-06-30	11.319	11.319	11.319
2027-06-30	10.800	10.000	9.700
2028-06-30	10.500	9.100	8.500
2029-06-30	10.200	8.300	7.300
2030-06-30	9.900	7.600	6.200
2031-06-30	9.500	7.000	5.200

These are not residual plugs. Bear assumes delayed/reduced disposal benefit and weak discretionary retention after distributions. Base assumes expected disposal proceeds and orderly deleveraging while USD 0.5 billion annual buybacks

continue. Bull assumes the same disposal plus stronger retained cash despite USD 0.75 billion annual buybacks. No acquisition debt is added.

The upstream package lacks complete terminal paths for leases, preferred claims, minority interest, and other senior claims. They are marked unavailable instead of silently zero. EV/NOPAT therefore cannot control a later return model unless valuation preflight supplies and hash-binds them. The fully reconciled EPS/P-E bridge remains usable. This is method availability, not primary-method selection.

5b. P&C insurer lane

`NOT TRIGGERED — issuer is not a P&C insurer or reinsurer.` No `insurer_return_bridge.json` is created.

6. Explicit share-count path

The path starts with the quote packet's 100.6 million quote-basis diluted financial shares. It is never calculated in ADR or alternate-class units. Capital-allocation history shows USD 0.5 billion FY2025 buybacks, USD 3.2 billion cumulative program activity through Q2 2026, FY2025 SBC expense of USD 166 million, and elevated leverage.

Annual buyback cash is USD 0.25 billion Bear, USD 0.50 billion Base, and USD 0.75 billion Bull, well below the exceptional 2026 pace. Average repurchase price is held at the validated USD 358.56 quote to avoid circularity. SBC issuance is approximated as USD 166 million / USD 358.56 = 0.462963 million shares per year. This is a disclosed approximation, not a claim that expense equals issuance fair value.

Case / year	Starting shares (M)	Buyback (USD B)	Average price	Shares retired (M)	SBC issuance (M)	Ending shares (M)
Bear 2027	100.600000	0.250	358.56	0.697233	0.462963	100.365730
Bear 2028	100.365730	0.250	358.56	0.697233	0.462963	100.131459
Bear 2029	100.131459	0.250	358.56	0.697233	0.462963	99.897189
Bear 2030	99.897189	0.250	358.56	0.697233	0.462963	99.662918
Bear 2031	99.662918	0.250	358.56	0.697233	0.462963	99.428648
Base 2027	100.600000	0.500	358.56	1.394467	0.462963	99.668496
Base 2028	99.668496	0.500	358.56	1.394467	0.462963	98.736992
Base 2029	98.736992	0.500	358.56	1.394467	0.462963	97.805489
Base 2030	97.805489	0.500	358.56	1.394467	0.462963	96.873985
Base 2031	96.873985	0.500	358.56	1.394467	0.462963	95.942481
Bull 2027	100.600000	0.750	358.56	2.091700	0.462963	98.971263
Bull 2028	98.971263	0.750	358.56	2.091700	0.462963	97.342526
Bull 2029	97.342526	0.750	358.56	2.091700	0.462963	95.713788
Bull 2030	95.713788	0.750	358.56	2.091700	0.462963	94.085051
Bull 2031	94.085051	0.750	358.56	2.091700	0.462963	92.456314

The five-year identities are exact. Bear equals 100.6 + 5 × (0.462963 - 0.697233) = 99.428648 million. Base equals 100.6 + 5 × (0.462963 - 1.394467) = 95.942481 million. Bull equals 100.6 + 5 × (0.462963 - 2.091700) = 92.456314 million. No case assumes buybacks automatically offset SBC, and no share reduction appears without buyback cash.

Future authorization use remains uncertain. If Base shares were 5% higher, EPS would fall to USD 22.1827; if 5% lower, EPS would rise to USD 24.5177. Buyback discipline matters, but the model does not extrapolate the exceptional 2026 pace.

7. P/E-15 test

Required EPS is exact price divided by 15: USD 358.56 / 15 = **USD 23.9040 per listed unit**.

Case	EPS in USD per listed unit	EPS × 15	Quote-packet price	Cushion	Pass?
Bear	14.6911	220.3672	358.5600	-38.54%	FAIL
Base	23.2918	349.3773	358.5600	-2.56%	FAIL
Bull	29.2426	438.6385	358.5600	22.33%	PASS

Cushion is `(EPS × 15 - price) / price`. Base controls and fails by 2.56%; a Bull pass cannot rescue the confident case. **P/E 15 gate: FAIL.**

The failure is narrow but real. Base EPS is USD 0.6122 below the requirement. The model already credits USD 0.5 billion annual repurchases for five years, modest corporate leverage, a 21% tax rate, and interest decline to USD 300 million. Treating unannounced acquisitions as free earnings, annualizing the Indicor gain, or forcing a faster denominator decline would manufacture a pass.

8. Reflexivity and historical anchors

TTM segment revenue is 4.6922 + 1.6980 + 1.8901 = USD 8.2803 billion, exactly equal to consolidated revenue. TTM segment `Operating profit` is 1.2749 + 0.7102 + 0.6291 = USD 2.6142 billion; subtracting USD 0.2986 billion corporate expense produces USD 2.3156 billion statutory operating income, exactly matching the sealed bridge and inside its USD 1.4879 million tolerance.

FY2025 segment `Operating profit` is 1.2031 + 0.6958 + 0.6267 = USD 2.5256 billion. Subtracting USD 0.2902 billion corporate expense produces USD 2.2354 billion statutory operating income, exactly matching the sealed FY bridge and inside its USD 1.2628 million tolerance.

The horizon model preserves this classification. Segment profit plus separately displayed corporate expense equals statutory OI; there is no operating adjustment. Interest, zero recurring investment gain, immaterial other income/expense, and tax bridge to NI. No unexplained residual exists.

First-forward-year Base revenue of USD 8.7853 billion is 6.10% above TTM, consistent with recent trends and inside 10%. Bear and Bull are also inside 10% at 2.10% and 8.04%. No terminal CAGR begins from a hidden step-up.

9. Interim bridge reconciliation

The cumulative interim bridge is triggered because TTM uses FY2025 less H1 2025 plus H1 2026. Both YTD periods cover January 1-June 30. Q3 2025 plus Q4 2025 forms the residual second half of FY2025; Q1 2026 plus Q2 2026 forms H1 2026. There is no overlap.

The sealed calculation produces TTM revenue of USD 8.2803 billion, segment `Operating profit` of USD 2.6142 billion, statutory OI of USD 2.3156 billion, pretax income of USD 2.9758 billion, NI of USD 2.5043 billion, and diluted shares of 100.6 million. The USD 1.0558 billion equity gain is preserved historically but excluded from recurring forward earnings.

Every forecast begins 2026-06-30 and ends 2031-06-30, using five steps. No row starts from FY2025, compounds six years, or combines overlapping interim periods.

10. Sensitivity — what drives the gate

Sensitivities hold other Base inputs constant. Application growth varies its 5.40% Base terminal CAGR ±200 bps and applies 27.8% segment margin net of 3.6% corporate cost, tax, and Base shares. Network changes only terminal margin. Share sensitivity changes the denominator. Tax changes the 21% Base rate.

Variable	Downside setting	Downside EPS	Base EPS	Upside setting	Upside EPS
Application revenue CAGR	3.40%	22.1809	23.2918	7.40%	24.4904
Network terminal margin	40.57%	22.9214	23.2918	44.57%	23.6623
Terminal diluted shares	+5%	22.1827	23.2918	-5%	24.5177
Terminal tax rate	24.0%	22.4073	23.2918	18.0%	24.1763

Application growth and share count are the largest tested drivers. A 200-basis-point higher Application CAGR would clear required EPS, but needs durable organic evidence. A 5% lower share count also clears, but requires more capital and competes with deleveraging. An 18% tax rate is below management's roughly 21% guide and is not the confidence case. Network margin is less powerful alone but remains a critical moat monitor.

The gate is not robustly cheap. It narrowly fails even after steady Base buybacks and interest relief. The strongest operating route to a pass is better Application growth with retention and paid-AI proof; the strongest mechanical route is faster share retirement. Neither is assumed without evidence.

11. Combined earnings summary

Case	Revenue (USD B)	OI (USD B)	OI margin	NI (USD B)	EPS (USD per listed unit)	Probability	EPS × 15	Versus USD 358.56
Bear	9.2916	2.3327	25.11%	1.4607	14.6911	25%	220.3672	-38.54%
Base	10.9027	3.1287	28.70%	2.2347	23.2918	55%	349.3773	-2.56%
Bull	11.8403	3.6128	30.51%	2.7037	29.2426	20%	438.6385	22.33%
Probability-weighted	10.6874	3.0265	28.32%	2.1350	22.3318	100%	334.9770	-6.58%

The weights are not uniform. Base receives 55% because recent segment organic growth and management's roughly 6% guide align with the reviewed cadences. Bear receives 25% for freight, GovCon, AI, hardware-input, and disclosure risks. Bull receives 20% because it requires simultaneous execution across Application growth, network recovery, product leverage, and capital allocation.

Probability-weighted EPS is 25% × USD 14.691148 + 55% × USD 23.291822 + 20% × USD 29.242564 = USD 22.331802. Its USD 334.977 value at 15 times is diagnostic. Base controls the binary gate.

12. Model interpretation and operating discipline

The combined model portrays Roper as durable but not automatically cheap. Base revenue grows 5.66% annually from the verified TTM perimeter, while statutory OI rises from USD 2.3156 billion to USD 3.1287 billion. Improvement comes from current businesses, not acquisition assumptions. Application provides more than half of revenue and is the growth/moat driver. Network supplies the highest margins but carries transaction and multi-homing exposure. Technology Enabled Products diversifies AI risk through physical qualification, installed systems, and consumables.

The Moat gate is YELLOW and the 2046 test passes. Base does not require portfolio-wide NRR, paid-AI adoption, or price realization not disclosed. Bear allows retention, pricing, cloud-cost, freight, media, and input risks to pressure growth and margin. Bull credits AI monetization, cloud efficiency, network recovery, and product leverage, but receives only 20% probability.

Management passes, while acquisition-vintage ROIC remains undisclosed. Roper's historical growth includes acquired businesses and goodwill dominates invested capital. The synthesis therefore refuses to turn USD 5 billion-plus deployment capacity into free terminal revenue. A future announced acquisition may enter only with purchase price, funding, integration cost, revenue, segment profit, and return schedules.

The share path prevents another circularity. Recent repurchases were unusually large, but Base reverts to the FY2025 USD 0.5 billion pace and separately issues shares for SBC. It gives a denominator benefit without assuming indefinite buybacks alongside acquisitions and rapid deleveraging. Debt remains visible; missing EV claims remain unavailable instead of zero.

The primary upside trigger is evidence that Application can sustain growth above 5.4% while holding high-20s margin: mid-90s or better gross retention through a downturn, business-level NRR or paid-AI attach, recurring organic growth at least mid-single digit, and no hidden transfer into capitalized software. Downside triggers include retention below 90%, Application margin below 24%, Network below 38%-40% without an investment bridge, TEP below 31%-32%, or capital deployment that raises debt before economics are disclosed.

At USD 358.56, Base has no valuation cushion. A 2.56% miss equals about USD 9.18 per share at 15 times and remains after meaningful buybacks and deleveraging. The proper conclusion is P/E-15 FAIL while preserving clear triggers for a rerun.

13. Tie-out checks

1. Reported-financial and statutory-bridge tie-out — PASS

TTM revenue: 4.6922 + 1.6980 + 1.8901 = USD 8.2803 billion, equal to consolidated TTM revenue. TTM `Operating profit`: 1.2749 + 0.7102 + 0.6291 = USD 2.6142 billion; plus negative USD 0.2986 billion corporate expense = USD 2.3156 billion statutory OI. FY2025: 1.2031 + 0.6958 + 0.6267 = USD 2.5256 billion; plus negative USD 0.2902 billion = USD 2.2354 billion OI. Both residuals are zero and within packet tolerance and 2%.

2. NI / shares / listed unit / FX equals EPS — PASS

Bear: USD 1.460720976 billion / 99.428647925 million = USD 14.691147939; × 1.0 listed-unit factor × 1.0 FX = the displayed EPS. Base: USD 2.234675212 billion / 95.942481035 million = USD 23.291822224; × 1.0 × 1.0. Bull: USD 2.703659691 billion / 92.456314145 million = USD 29.242564080; × 1.0 × 1.0.

3. Segment sum at horizon — PASS

Bear segment revenue sums to USD 9.2916 billion, Base to USD 10.9027 billion, and Bull to USD 11.8403 billion. Eliminations are zero. Each ratio is 100.00% before display rounding.

4. Product-to-segment rollup — PASS

Application stream revenue sums to USD 5.317 billion Bear, USD 6.104 billion Base, and USD 6.447 billion Bull within 0.1%. Network streams sum to USD 1.9099 billion, USD 2.2496 billion, and USD 2.5352 billion within USD 0.0001 billion. TEP streams sum to USD 2.0646 billion versus USD 2.0647 billion Bear and exactly USD 2.5494 billion Base and USD 2.8577 billion Bull within rounding.

5. Weighted margin — PASS

Network stream profit/revenue reproduces 39.46%, 42.57%, and 44.60%. TEP reproduces 30.49%, 34.00%, and 35.52%. Application discloses no stream profit, so the reviewed model correctly applies a single segment margin rather than inventing product margins: 1.3026 / 5.3170 = 24.50%, 1.6968 / 6.1037 = 27.80%, and 1.8698 / 6.4474 = 29.00%.

6. Share count and security-unit path — PASS

Starting 100.6 million statement shares × 1.0 split factor = 100.6 million quote-basis shares; / 1.0 depositary-class factor = 100.6 million listed-unit equivalents. Starting shares plus five years of SBC less retirement equals 99.428648 million Bear, 95.942481 million Base, and 92.456314 million Bull. Every annual row rolls exactly.

7. Growth plausibility — PASS

Application Base CAGR 5.40% is below 1.2 × 18.6% historical. Network Base 5.8% is below 1.2 × 5.5% = 6.6%. TEP Base 6.17% is below 1.2 × 8.26% = 9.91%. Faster stream rows begin from small bases or are justified. Zero unannounced M&A prevents acquired growth from masquerading as organic.

8. Historical arithmetic and five-year compounding — PASS

Each reviewed appendix compounds from 2026-06-30 for five steps to 2031-06-30. Network explicitly uses `TTM stream anchor × (1 + CAGR)^5` with residuals below USD 0.0001 billion. TEP uses five annual steps with residuals below 0.01%. Application annual cadence sums to terminal outputs within 0.1%. Combined CAGRs independently recompute as 2.3314%, 5.6568%, and 7.4146%. No row uses FY2025 as base.

9. Recency anchor — PASS

First-forward-year revenue is USD 8.4541 billion Bear, USD 8.7853 billion Base, and USD 8.9464 billion Bull versus USD 8.2803 billion TTM. Differences are +2.10%, +6.10%, and +8.04%, all within 10%.

10. Period and horizon integrity — PASS

TTM uses FY2025 less comparable H1 2025 plus H1 2026; both YTD periods cover January 1-June 30. Q3 2025 + Q4 2025 + Q1 2026 + Q2 2026 describes the same non-overlapping TTM. Every path begins 2026-06-30 and ends 2031-06-30 after five compounding steps. No six-year or FY2025-based path exists.

11. Valuation, unit bridge, hashes, and probability arithmetic — PASS

Exact quote bytes hash to `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f`; exact statutory bytes hash to `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`. XNAS:ROP is one USD common share per listed unit; split, depositary, class, and FX factors are 1.0. Scenario EPS × 15 equals USD 220.367219, USD 349.377333, and USD 438.638461. Probabilities sum to 100%; weighted EPS is USD 22.331802. Cushions recompute against USD 358.56. Base controls and fails by 2.5609847%.

SYNTHESIS CLEARED — 11/11 TIE-OUTS PASSED

P/E 15 gate: FAIL — cushion -2.56%

Appendix CS - Compounder Score

Roper Technologies (ROP) - Compounder Score and Return Underwriting

Analysis date: 2026-09-27 Run ID: `pulse-cio-20260927T200229+0800` TTM anchor: 2026-06-30 Exact horizon: 2031-06-30, exactly 5.0 calendar years Current price: USD 358.56 at the 2026-09-25 XNAS close Primary valuation method: P/E Trade execution authorized: **false** Portfolio mutation authorized: **false** Owner action authorized: **false**

1. Executive Verdict

Roper is a durable collection of vertical workflow software, network software, and high-trust technology-enabled products, but the verified evidence does not establish the acquisition-inclusive incremental returns needed for a high-conviction compounder classification. The score is **52/100**, comprising **47/80** for Business Quality and **5/20** for 20% Return Underwriting. The score-implied classification is **Reject** under this deliberately demanding diagnostic rubric. That classification is diagnostic only; it does not mechanically determine the ER2 BUY/WATCH/PASS verdict or authorize any portfolio action.

The business-quality conclusion is unchanged from the prior audited score because the refreshed package did not alter the load-bearing historical economics. Goodwill-inclusive ROIC was only 5.4%-6.4% from FY2021-FY2025. True three- and five-year ROIIC remain unavailable because Roper does not publish acquisition-vintage capital, acquired NOPAT, acquired free cash flow, or realized year-five returns. The best acquisition-inclusive proxies remain approximately 5%-7%, below the cost-of-capital-quality bar implied by the framework. Cash conversion, however, is strong: FY2023-FY2025 free cash flow averaged about 143% of NOPAT, and physical capital intensity is low.

The valuation has improved materially because the governed price fell to USD 358.56, but it still does not support a 20% annualized return. Using the valuation-preflight-locked P/E method, Bear/Base/Bull gross USD shareholder IRRs are **-5.56% / 8.30% / 17.79%**. The probability-weighted gross USD IRR is **7.87%**, calculated as the CAGR of probability-weighted terminal shareholder wealth, not as an average of scenario IRRs. Base requires a maximum entry price of USD 214.70 to earn 20% using the same 22x exit P/E and distribution path, a 40.12% discount to the current price.

The finite net-SGD diagnostic also fails the owner's 10%-15% target in the central case. Using the IMF's 2026-09-25 representative rate of 1 USD = 1.2794 SGD, conservative scenario exit FX of 1.20/1.24/1.28 SGD per USD, 10 basis points of entry and exit costs, and 30% U.S. dividend withholding, Bear/Base/Bull net-SGD IRRs are **-7.21% / 7.32% / 17.55%** and probability-weighted net-SGD IRR is **7.02%**. Portfolio fit and a sizing ceiling are unavailable because current holdings and concentration context were not provided; that missing context does not null the security-level returns. CIO actionability is **WATCH**, with no current action or sizing recommendation.

2. Data Source Map and Preflight Gate

The return model uses only the refreshed, verified ER2 evidence chain. The repaired sealed valuation preflight was validated with evidence-file checking before any return calculation. Its SHA-256 is `5add89e4801f0dffe51928c6fbb4b976ae2ffcd2291d6641686f534ffdaf6a82`, exactly matching the orchestrator-provided hash. Status is `CLEARED`, all five foundations pass, and the blocker list is empty.

Evidence need	Controlling artifact	Use in this score
Price, listing, security unit, shares	`quote_packet.json`, SHA `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f`	USD 358.56, XNAS:ROP, common share, 100.6M opening diluted units
Historical statements and ROIC inputs	`quant_foundation.md` and `data_package.md`	FY2021-FY2025 revenue, OI, NOPAT, FCF, debt, SBC, shares, capital allocation
Segment growth and margin paths	Three reviewed `appendix_B_*.md` files	Existing-perimeter Bear/Base/Bull terminal revenue and operating profit
Management and capital allocation	`appendix_management.md`	Management PASS, incentives, repurchases, acquisition-return disclosure gap
Moat and durability	`appendix_moat.md`	Moat YELLOW, 2046 PASS, AI and pricing-power conditions
Earnings and share-count model	`appendix_synthesis.md`, SHA `cdd22772b810d0e460222bef2f389f59d9939be7d5e2999007d1aff7e60e9c98`	11/11 tie-outs, terminal EPS and diluted shares

Evidence need	Controlling artifact	Use in this score
Method and exit multiples	`valuation_preflight.json`	PE; normalized recurring TTM EPS USD 14.394521; 17x/22x/27x exits
USD/SGD entry FX	IMF representative-rate table for 2026-09-25	1 USD = 1.2794 SGD

The repaired preflight locks reported statutory TTM diluted EPS at USD 23.7659543393392 and reported current P/E at 15.0871282036625x. That denominator equals USD 2,504.3 million of statutory net income divided by 105.3734247 million official TTM weighted-average diluted shares and includes the Indicor fair-value gain, so it is disclosure only. The controlling normalized recurring TTM EPS is USD 14.3945212402307 on the same 105.3734247 million weighted-average denominator, producing a normalized current P/E of 24.9094772945886x. The prior USD 15.0775347912525 EPS / 23.7810759493671x calculation on 100.6 million Q2/current shares is retained only as a separately labeled pro-forma current-share comparator. It does not control current P/E or the current-versus-terminal comparison. The terminal denominator is scenario statutory diluted EPS on the same listed common-share basis, with no recurring Indicor gain. Current normalized and terminal denominators are comparable.

P/E is controlling because statutory diluted EPS, interest, tax, dilution, and share repurchases reconcile in every scenario. EV/NOPAT is rejected because the synthesis does not project every lease and senior claim required for a complete enterprise-to-equity bridge. P/B-ROE is rejected because Roper is not balance-sheet-led, tangible book is negative, and no zero-residual parent-common-equity roll-forward exists. Under P/E, terminal net cash or debt is not added after EPS times P/E. The Indicor proceeds affect the modeled interest and debt path once; they are not a separate terminal value.

3. Key Financial and Quality Metrics

Metric	Verified result	Interpretation
FY2021-FY2025 revenue CAGR	13.07%	Strong reported growth, materially acquisition influenced
FY2021-FY2025 NOPAT CAGR	14.23%	Healthy growth, but not a clean organic ROIIC proof
FY2021-FY2025 FCF CAGR	6.35%	Slower than NOPAT over the chosen endpoints
Goodwill-inclusive ROIC median	6.0%	Positive but below 10%; acquisition capital matters
Acquisition-inclusive ROIIC proxy	approximately 5%-7%	Below the desired compounder bar; true vintage ROIIC unavailable
FY2023-FY2025 FCF / NOPAT average	143.05%	Strong cash conversion
TTM FCF / statutory net income	104.72%	Positive despite event-heavy net income
TTM SBC / revenue	2.32%	Real economic cost, explicitly modeled through issuance
TTM SBC / FCF	7.31%	Manageable but not immaterial
FY2021-FY2025 diluted-share CAGR	+0.40%	Modest historical dilution before recent large repurchases
TTM net debt / statutory EBITDA	3.38x	Elevated; balance sheet is not a free source of growth
Current normalized P/E	24.9095x	Uses official TTM weighted-average diluted shares; comparable with terminal statutory EPS
Pro-forma current-share P/E	23.7811x	Separate 100.6M Q2/current-share comparator; non-controlling
TTM FCF yield at governed price	7.27%	Improved with price decline, though FCF includes working-capital timing
TTM dividend yield	1.02%	Helpful but not return-transforming

The company has an asset-light operating model but not an asset-light acquisition history. FY2025 goodwill plus intangibles were USD 31.105 billion and tangible book value was negative USD 11.224 billion. This is why excluding goodwill from ROIC would be misleading: acquisition capital is the main reinvestment channel. The score therefore uses goodwill-inclusive returns and gives no credit for an inflated ex-goodwill percentage.

4. Rubric Scorecard

Category	Score	Maximum	Evidence-based conclusion
Incremental Returns on Capital	10	25	Cash conversion is strong, but goodwill-inclusive ROIC is low and true ROIIC is unavailable
Reinvestment Runway	12	20	Large vertical niches and a repeatable acquisition system, but organic growth is mid-single digit and acquisition returns are opaque
Durability of Moat	12	15	Switching costs, high-trust procurement, selective networks, and physical qualification are real; pricing/AI evidence is incomplete
Accounting and Financial Quality	7	10	Statutory bridges clear and cash supports earnings; leverage, selective KPI disclosure, and SBC require deductions
Capital Allocation	6	10	Management PASS and coherent portfolio shift, but no acquisition-vintage ledger and mixed buyback prices cap the score
Price and 20% Return Underwriting	5	20	Base and PW returns remain below 10%; Bull does not reach 20%; dividends help modestly
Business Quality Score	**47/80**	**80**	Credible franchises, capped by acquired-capital evidence
Compounder Score	**52/100**	**100**	Score-implied Reject

Subscores are unchanged from the last audited quality assessment because the refreshed operating evidence preserves the same historical economics: 1A 1/5, 1B 0/8, 1C 2/3, 1D 2/3, 1E 3/3, 1F 2/3; 2A 4/5, 2B 2/5, 2C 2/4, 2D 2/3, 2E 2/2, 2F 0/1; 3A 4/4, 3B 2/3, 3C 2/3, 3D 2/2, 3E 2/2, 3F 0/1; Category 4 equals 7/10; Category 5 equals 6/10. Category 6 scores 0/6 for Base IRR, 2/4 for an independently justified Base exit below normalized current P/E but still inadequate for 20%, 0/3 for Bear, 0/3 for the reverse hurdle, 1/2 for price not fully capitalizing perfection, and 2/2 for cash returns.

5. ROIIC and Reinvestment Analysis

Roper's reported-simple ROIC rose gradually from 5.4% in FY2021 to 6.4% in FY2025. That progression is positive, but the absolute level remains low for a business whose investment thesis depends on buying high-quality vertical franchises. A high ex-goodwill ROIC would not answer the economic question because the purchase price and acquired intangibles are genuine shareholder capital. The rubric therefore awards only 1/5 for normalized ROIC.

True ROIIC cannot be reproduced from public data. Roper does not disclose acquisition-vintage purchase price, opening acquired NOPAT, integration spend, acquired free cash flow, or a realized year-five return table. The broad acquisition-inclusive proxies of approximately 5%-7% are directionally useful but not precise enough for points under the 1B schedule. They also sit well below the >20% compounder aspiration. The absence of a vintage ledger is not merely a presentation issue: Roper spent USD 13.45 billion on acquisitions in FY2021-FY2025, so acquisition results dominate incremental-capital economics.

The positive counterweight is cash generation. FY2023-FY2025 free cash flow averaged approximately 143% of NOPAT. Capex is low, FY2025 R&D was properly restored to USD 852.5 million rather than the provider zero, and the statutory bridge separately identifies the Indicor mark. This supports 3/3 for cash conversion and 2/3 for accounting-artifact control. The model treats SBC as a cost and adds 0.462963 million shares annually before repurchases. No case assumes buybacks automatically offset issuance.

The terminal operating model assigns zero revenue or earnings to unannounced acquisitions. This is essential. A management statement about more than USD 5 billion of annual deployment capacity does not establish purchase price, funding, integration cost, acquired profit, or return. Base revenue grows 5.66% from the existing TTM perimeter and Base statutory operating margin reaches 28.70%. The security-return result therefore tests the assets already owned rather than treating future M&A as free growth.

6. Runway Analysis

Application Software is 56.7% of revenue and offers the best combination of recurrence, switching cost, and long runway. Its Base terminal revenue is USD 6.1037 billion, a 5.4% five-year CAGR, with a 27.8% operating-profit margin. Cloud transitions, mid-90s gross retention, paid workflow automation, and vertical-specific requirements support growth. The evidence does not establish portfolio NRR, brand-level revenue, CAC, payback, or paid-AI attach, so the score does not extrapolate the acquisition-influenced 18.6% FY2023-FY2025 segment CAGR.

Network Software has the highest margins and the most varied economics. DAT has liquidity and data advantages; ConstructConnect, iPipeline, and iTradeNetwork combine workflow with industry data; Foundry benefits from skilled-user and pipeline lock-in; and Subsplash adds payment-related reoccurring revenue. Base revenue grows 5.8% to USD 2.2496 billion and margin recovers only to 42.57%, below the FY2024 peak. Freight, media, payment mix, multi-homing, and generative-AI substitution justify a meaningful Bear weight.

Technology Enabled Products supplies physical chokepoints and diversification. Base revenue reaches USD 2.5494 billion at a 6.17% CAGR and operating-profit margin recovers to 34.00%. Neptune, Verathon, NDI, and precision/access products benefit from qualification, installed bases, replacement, procedures, and consumables. The risk is that product mix and input costs can grow revenue without expanding profit. Segment capex, working capital, asset turns, and customer concentration remain undisclosed.

The runway score is 12/20, not because the end markets are small, but because public evidence separates neither organic from acquired historical capital at vintage level nor unit economics across the 29-business portfolio. A repeatable acquisition playbook is valuable only if the marginal dollar earns more than its funding and integration cost.

7. Moat Analysis

The Moat gate is YELLOW while the specific 2046 test passes. Switching costs are broad: customers encode data, permissions, regulatory logic, integrations, training, and operational habits into vertical systems. High-trust procurement matters in legal, government, laboratory, healthcare, insurance, utility, freight, and medical-device settings. Selected network businesses benefit from liquidity, proprietary histories, and counterparty coverage. Technology-enabled products benefit from installed endpoints, clinical training, OEM design-in, validation, and field service.

The moat is not uniform. Parent-level brand is weak with end customers, network effects are localized rather than corporate-wide, and customers can multi-home in several Network businesses. AI can enhance matching, takeoff, reconciliation, claims, scheduling, and service, but it can also commoditize interfaces and reduce search friction. Roper owns workflow position and customer distribution, not foundation-model infrastructure. Paid adoption and post-inference gross profit are not proven portfolio-wide.

Pricing power is bounded rather than directly verified. Five years of stable consolidated operating margin and improving Q2 software gross margins provide evidence, while TEP margin pressure shows price does not automatically exceed inputs. No consolidated price/volume/mix bridge, portfolio NRR, churn series, or renewal-price adoption is disclosed. These limits cap pricing-power and disruption scores without negating the underlying moat.

8. Accounting and Capital Allocation Analysis

Accounting quality is generally sound. The FY2025 and TTM statutory bridges reconcile segment operating profit, corporate expense, statutory operating income, pretax income, tax, and net income with zero residual. The USD 1.0558 billion Indicor fair-value gain is correctly classified below operating income and excluded from recurring EPS. The controlling normalized recurring TTM EPS of USD 14.394521 applies a 21% rate to recurring pretax income and divides by 105.3734247 million official TTM weighted-average diluted shares. Terminal EPS applies scenario tax, interest, and reconciled terminal diluted shares. The Q2/current-share pro-forma comparator is disclosed separately and never substituted for the TTM denominator.

Management earns a narrow PASS. Neil Hunn owns the portfolio transition, communicates operating misses with measurable conditions, and has meaningful actual stock ownership. The 2026 incentive redesign improves alignment by emphasizing organic growth, per-share earnings, and free-cash-flow margin rather than relative TSR. The board is independent and PwC found effective internal control.

Capital allocation remains the central gap. Early CentralReach and Subsplash evidence is positive, but adjusted EPS accretion and growth ahead of a deal model do not prove acquisition ROIC. The open-ended buyback program retired more than 8% of prior shares, with later purchases around the governed price and the first tranche materially higher. Base assumes only USD 500 million annual repurchases at the current price, not the exceptional H1 2026 pace. Net debt/EBITDA of 3.38x means future acquisitions, buybacks, and deleveraging compete for the same cash.

9. Mandatory Security-Return Underwriting

The primary method is P/E in every scenario, probability weighting, reverse-return calculation, maximum-buy-price calculation, and net-SGD overlay. Terminal equity value per share equals terminal statutory diluted EPS times the VP-locked exit P/E. Cumulative cash dividends are then added. No terminal cash, debt, lease, Indicor proceeds, NCI, or other claim is added or subtracted after EPS times P/E.

Dividends use a conservative source-bound path from TTM aggregate dividends of USD 369.2 million. Bear/Base/Bull dividend cash grows 2%/5%/7% annually. Each year's dividend per share equals that year's aggregate dividend divided by the average of the year's opening and ending diluted shares. Buybacks are not counted again as distributions because their effect is already embedded in terminal diluted shares and EPS.

Return input	Bear	Base	Bull
Probability	25%	55%	20%
Terminal statutory diluted EPS	14.691147939	23.291822224	29.242564080
Terminal diluted shares (M)	99.428647925	95.942481035	92.456314145
Exit P/E	17.0x	22.0x	27.0x
Terminal equity value per share	USD 249.749515	USD 512.420089	USD 789.549230
Cumulative distributions per share	USD 19.596808	USD 21.821560	USD 23.602188
Terminal shareholder wealth per share	USD 269.346323	USD 534.241649	USD 813.151418
Gross USD annualized return	**-5.56%**	**8.30%**	**17.79%**

Probability-weighted terminal equity value per share is USD 502.17827368315 and probability-weighted distributions per share are USD 21.6214977306132. Expected terminal shareholder wealth is therefore USD 523.799771413763. The five-year CAGR from USD 358.56 is **7.87%**. The arithmetic average of scenario IRRs is not used.

Exit-multiple integrity is preserved. Bear 17x is well below the corrected 24.91x normalized current P/E and reflects weak growth, lower margin, leverage, and AI/retention risk without assuming distress. Base 22x is 2.91 turns below the corrected normalized current P/E and materially below recent historical and peer bands, reflecting terminal maturity, no acquisition credit, high intangible capital, KPI gaps, and debt. Bull 27x expands by only 2.09 turns from normalized current P/E and remains below recent Roper historical and quality-peer anchors; it requires simultaneous 7.41% revenue CAGR, 30.51% margin, and substantial deleveraging. Both excessive-optimism and excessive-bearishness challenges passed in VP. The non-controlling 23.78x pro-forma current-share comparator did not select or cap any exit multiple.

The 20% reverse hurdle makes the valuation gap explicit. Required terminal shareholder wealth is USD 892.2120192. After Base distributions, required terminal equity value is USD 870.390459164039. At the locked 22x exit P/E, required terminal EPS is USD 39.563202689275, implying a 22.41% CAGR from controlling normalized recurring TTM EPS of USD 14.394521. Modeled Base EPS CAGR is 10.10% on that same official TTM weighted-average-share basis. Holding the modeled Base terminal wealth fixed, the maximum current price for a 20% five-year IRR is **USD 214.70**.

10. Net-SGD Diagnostic and CIO Actionability

The SGD overlay uses the same P/E terminal wealth and changes only FX, costs, and dividend withholding. Entry FX is the IMF representative rate of 1.2794 SGD per USD on 2026-09-25. Exit FX assumptions are deliberately conservative: 1.20 Bear, 1.24 Base, and 1.28 Bull. Entry and exit transaction/FX costs are 10 basis points each. U.S. dividends are reduced by 30% withholding; no capital-gains tax is assumed for this diagnostic. All dividends are translated at the scenario exit FX, a simple conservative convention. Initial SGD cost per share is SGD 459.200405664.

Net-SGD input or output	Bear	Base	Bull
Entry USD/SGD	1.2794	1.2794	1.2794
Exit USD/SGD	1.20	1.24	1.28
Entry cost / exit cost	0.10% / 0.10%	0.10% / 0.10%	0.10% / 0.10%
Dividend withholding	30.00%	30.00%	30.00%
Net terminal SGD wealth per share	315.844576	653.687682	1,030.738804
Net-SGD annualized return	**-7.21%**	**7.32%**	**17.55%**

Probability-weighted net terminal SGD wealth is SGD 644.637130269622 and its CAGR from the same initial SGD cost is **7.02%**. The Base and PW outputs are below the 10%-15% mandate. Bull exceeds 15%, but it has only 20% probability and requires the most favorable operating and valuation path. Bear loses value. Therefore CIO actionability is WATCH, not CORE_ELIGIBLE or EXPERIMENTAL. Portfolio fit is unavailable and the sizing ceiling is null; every sizing statement would be proposal-only and require explicit owner approval. No trade is authorized.

11. Hard Veto Checklist

Veto	Status	Evidence
ROIIC below cost of capital with no path	WATCH	True ROIIC is unavailable; acquisition-inclusive proxies are only 5%-7%
ROIC is an accounting artifact	PASS	Goodwill-inclusive ROIC is low, not artificially inflated
Growth requires persistent external financing	PASS	Existing-perimeter forecasts use zero acquisition borrowing and generate cash
Material dilution without per-share value	PASS	SBC issuance and repurchases reconcile in every scenario
Large acquisitions without disclosed returns	FAIL	No public vintage-return ledger despite USD 13.45B five-year acquisition spend
Structural FCF shortfall	PASS	Multi-year cash conversion is strong
Permanent impairment risk	WATCH	AI, freight, platform, customer-opacity, and leverage risks remain material
20% case requires expansion	FAIL	Modeled Base cannot earn 20% at 22x; required EPS CAGR is 22.41%
Flawless execution needed at current price	FAIL	Bull earns only 17.79% gross USD and 17.55% net SGD
Moat cannot be explained	PASS	Switching costs, trusted workflow, selective networks, and physical qualification are explicit
Accounting/governance trust failure	PASS	Statutory bridge clears; one-offs and SBC are transparent
Downturn can wipe out equity	PASS	Bear retains positive earnings and terminal value, though return is negative

12. Final Decision and Machine-Readable Artifact

Score-implied classification: Reject. The evidence supports a good collection of durable businesses and strong cash conversion. It does not support a demonstrated high-ROIIC acquisition engine, nor does today's price create a credible 20% five-year shareholder return. The strongest upgrade path is a combination of lower price, disclosed acquisition-vintage returns, durable Application recurring growth above mid-single digits, paid-AI economics, and normalized leverage.

Compounder Score note: **52/100** - durable franchises and cash conversion do not offset unproven acquired-capital returns and an inadequate entry-price return. Business Quality Score note: **47/80** - strong moat and cash quality are capped by low goodwill-inclusive ROIC, moderate organic growth, leverage, and missing acquisition-vintage economics. 20% Return UW Score note: **5/20** - Base earns 8.30%, Bear loses 5.56%, Bull reaches 17.79%, and the Base 20% maximum-buy price is USD 214.70.

The corresponding full-precision machine-readable artifact is `compounder_score.json`. All scenario, probability-weighted, reverse-return, maximum-price, and net-SGD calculations use P/E. `valuation_method_consistent_across_scenarios=true`, `net_sgd_uses_same_primary_method=true`, and `double_count_check_passed=true`.

Appendix CSA - Scoring Audit

Roper Technologies (ROP) - Independent Scoring Audit

Analysis date: 2026-09-27 Run marker: `pulse-cio-20260927T200229+0800` TTM anchor: 2026-06-30 Horizon: 2031-06-30, exactly 5.0 years Current price: USD 358.56 Audited primary method: P/E Insurer return bridge required: No Trade execution, portfolio mutation, and owner action authorized: false

SCORING AUDIT CLEARED

The repaired valuation-preflight artifact passes schema, semantic, hash, and evidence-file validation. Its exact SHA-256 is `5add89e4801f0dffe51928c6fbb4b976ae2ffcd2291d6641686f534ffdaf6a82`; status is `CLEARED`, all five foundations pass, and blockers are empty. The repaired scorer Markdown SHA-256 is `e47b12a3eeb434345eb16f5b5d86451dba794cebdb436cecd7788848290a2f81`; scorer JSON SHA-256 is `a41f3b3a6fe3793e31674db5f97dda54090ae684821a5c8e2974b182b11a6367`. CS reproduces the sealed VP path, hash, P/E method, official TTM denominator, normalized denominator, 17x/22x/27x exits, dilution treatments, and capital-structure rules exactly.

The prior denominator blocker is resolved. Reported statutory TTM diluted EPS is USD 23.7659543393392, calculated from USD 2,504.3 million net income divided by 105.3734247 million official TTM weighted-average diluted shares; reported current P/E is 15.0871282036625x. Normalized recurring TTM diluted EPS is USD 14.3945212402307 on that same official weighted denominator, producing the controlling 24.9094772945886x normalized current P/E. USD 15.0775347912525 EPS and 23.7810759493671x on 100.6 million Q2/current shares are explicitly retained only as a separate, non-controlling pro-forma current-share comparator. No denominator is relabeled or substituted.

1. Original vs Audited Scores

Item	Original	Audited	Notes
Business Quality Score / 80	47/80	47/80	Evidence and score caps replay
Valuation / 20% Return UW Score / 20	5/20	5/20	All return, denominator, and reverse-hurdle arithmetic replay
Compounder Score / 100	52/100	52/100	Correct sum and threshold application
Classification	Reject	Reject	Below 70 with acquisition-evidence and return vetoes

The repaired score is fair. No further reduction is required, and no increase is earned. Roper owns durable franchises and converts accounting profit to cash, but the record does not establish high acquisition-inclusive incremental returns. At the governed price, Base and probability-weighted returns remain below 10%, Bear loses value, and even Bull does not reach the diagnostic 20% hurdle.

2. Score Reductions and Reasons

Category 1, Incremental Returns on Capital, remains 10/25. Subcategory 1A is supported at 1/5 by goodwill-inclusive ROIC of 5.4%, 5.7%, 6.0%, 6.3%, and 6.4% for FY2021-FY2025. Subcategory 1B is 0/8 because public evidence cannot produce true three- or five-year ROIIC. The approximately 5%-7% acquisition-inclusive proxies are useful adverse diagnostics, not substitutes for acquisition-vintage purchase price, acquired NOPAT, acquired FCF, integration spend, and realized returns. Subcategory 1C is partly supported at 2/3 by gradually improving ROIC, subject to the missing vintage data. Subcategory 1D is partly supported at 2/3 by stable margins, recurring revenue, retention, and workflow evidence, while portfolio unit economics remain incomplete. Subcategory 1E is supported at 3/3 because FY2023-FY2025 FCF/NOPAT averages 1.43045023813408. Subcategory 1F is partly supported at 2/3 because goodwill is retained, the Indicor mark is removed, and R&D is restored, while acquired-return opacity remains.

Category 2, Reinvestment Runway, remains 12/20. Subcategories 2A through 2F remain 4/5, 2/5, 2/4, 2/3, 2/2, and 0/1. The vertical end markets, cloud transitions, workflow extensions, transaction networks, and installed products support a long opportunity set. Yet Base existing-perimeter revenue CAGR is only 5.66%, no unannounced acquisition growth is credited, and the company does not disclose a consolidated TAM or a vintage-level proof that reinvestment at scale avoids ROIC collapse.

Category 3, Durability of Moat, remains 12/15. The 4/4 source-of-advantage and 2/2 stickiness scores are supported by systems-of-record integration, regulatory logic, high-trust procurement, transaction histories, installed endpoints, training, and physical qualification. Pricing power and competitive evidence remain 2/3 each because portfolio price/volume/mix, NRR, churn, and paid-AI attach are absent. Stress resilience remains 2/2 based on stable consolidated margins and cross-segment diversification. Low disruption risk remains 0/1 because Network and parts of Application face real agent, multi-homing, and generative-media risks. This is consistent with Moat YELLOW and the separate 2046 PASS.

Category 4, Accounting and Financial Quality, remains 7/10. The auditor reconstructs the unreported subscore allocation as 4A 2/2, 4B 2/2, 4C 1/2, 4D 1/2, 4E 0/1, and 4F 1/1. Statutory bridges tie and cash supports earnings. SBC is treated as a cost and annual issuance is modeled before repurchases, although the expense-to-shares conversion is an approximation. Elevated 3.38x net debt/statutory EBITDA and selective KPI disclosure justify the deductions. The repaired reported, normalized, pro-forma, and terminal EPS denominators now reconcile without ambiguity.

Category 5, Capital Allocation, remains 6/10. The reconstructed allocation is 5A 1/2, 5B 1/2, 5C 1/2, 5D 2/2, 5E 1/1, and 5F 0/1. Management owns the portfolio transformation, improved incentive alignment, and made later repurchases near the current price. Against that, Roper spent USD 13.45 billion on acquisitions during FY2021-FY2025 without a public vintage-return ledger, and the first recent repurchase tranche was materially more expensive. Adjusted EPS accretion and early deal progress do not prove realized return on purchase price.

Category 6, Price and 20% Return Underwriting, remains 5/20. Subcategory 6A is 0/6 because Base gross USD IRR is 8.301676769982283%. Subcategory 6B remains 2/4: all exits are independently justified; Bear and Base contract from the comparable 24.909477x normalized current P/E, while Bull expands modestly to 27x and requires simultaneous favorable execution. No case reaches 20%. Subcategories 6C and 6D are 0/3 because Bear loses value and the reverse hurdle is not beatable. Subcategory 6E is 1/2 because the price is improved but still capitalizes more growth than Base can monetize at the stretch hurdle. Subcategory 6F is 2/2 because dividends, repurchases, and deleveraging are explicitly funded and count once, though they do not rescue the return.

3. Unsupported Claims

The evidence does not support a true three- or five-year ROIIC, an acquisition-vintage return distribution, or a conclusion that the acquisition engine earns above its cost of capital. It does not provide subsidiary revenue, margins, invested capital, customer concentration, portfolio NRR, churn, price realization, CAC, payback, or paid-AI unit economics. Those gaps are already reflected in 1B at zero and the partial scores in Categories 1, 2, 3, and 5. No unsupported claim is used to calculate terminal EPS or shareholder returns.

4. Calculation Errors

No remaining calculation error was found. The official TTM share-basis defect identified in the prior audit has been repaired upstream rather than patched inside CSA. Current reported P/E, normalized current P/E, pro-forma current-share P/E, and terminal scenario P/Es all retain their proper denominators.

The scenario bridge replays exactly. Bear terminal value is USD 14.691147939 x 17 = USD 249.749514963; adding USD 19.596808466272305 distributions gives USD 269.3463234292723 and a five-year IRR of -5.561334275812162%. Base terminal wealth is USD 534.241648963961 and IRR is 8.301676769982283%. Bull terminal wealth is USD 813.151418131333 and IRR is 17.79366022574179%.

At 25%/55%/20%, expected terminal equity value per share is USD 502.17827368315, expected distributions are USD 21.62149773061319, and expected terminal shareholder wealth is USD 523.7997714137632. Its five-year CAGR from USD 358.56 is 7.874971273831024%. The calculation annualizes probability-weighted terminal wealth; it does not average scenario IRRs.

The method-matched reverse hurdle also replays. A 20% CAGR requires USD 892.2120192 terminal wealth. After Base distributions, required terminal equity value is USD 870.390459164039. At 22x, required terminal EPS is USD 39.5632026892745. From the repaired normalized current EPS of USD 14.3945212402307, required EPS CAGR is 22.410548299894025%, versus modeled Base EPS CAGR of 10.103531359870607%. The Base maximum buy price is USD 214.69973675570704.

Net-SGD uses the same P/E terminal wealth. Initial cost is USD 358.56 x 1.2794 x 1.001 = SGD 459.200405664. Each scenario applies 30% dividend withholding, then 0.1% exit cost to combined terminal equity and after-withholding dividends, and translates at 1.20/1.24/1.28. Full-precision Bear/Base/Bull net-SGD IRRs are -7.211483324823526%,

7.31825630489861%, and 17.551797037341253%. Probability-weighted net terminal wealth is SGD 644.6371302696215 and its CAGR is 7.019424380761236%. Visible net-SGD values correctly render to -7.21%, 7.32%, 17.55%, and 7.02%.

5. Missing Data

The most important missing evidence remains the acquisition-vintage ledger: purchase price, opening earnings/cash flow, incremental investment, integration cost, impairment, divestiture proceeds, and realized year-five return. Other gaps are subsidiary economics, customer concentration, portfolio retention and pricing, Technology Enabled Products capital intensity, and actual portfolio holdings for CIO fit. These gaps lower confidence to Medium but do not create null security-level returns.

6. Hard-Veto and Threshold Test Audit

The acquisition-disclosure veto remains failed, and the return vetoes remain failed. Total score is below 70 and 80; Business Quality is below 65/80; Return Underwriting is below 15/20; ROIIC plus runway is 22/45; Base is below 20%; Bear is negative; and hard vetoes remain. The score-implied classification is Reject.

The P/E bridge counts capital structure once. Interest and debt paths are already in statutory EPS, and no terminal net cash/debt adjustment is added. Indicor proceeds affect debt and interest once. Buybacks reduce shares and are not added as distributions. SBC adds shares. Cash dividends alone enter the distribution line. `valuation_method_consistent_across_scenarios`, `net_sgd_uses_same_primary_method`, and `double_count_check_passed` are all true.

The excessive-optimism challenge passes because Bull requires a 27x exit above corrected normalized current P/E plus simultaneous 7.41% revenue CAGR, 30.51% margin, and deleveraging; its 20% weight and below-historical/peer multiple bound the favorable stack. The excessive-bearishness challenge passes because Bear uses 17x rather than a distressed or zero multiple, preserves positive EPS and going-concern value, and reflects weak growth, margin, retention/AI risk, and leverage without inventing insolvency.

7. Final 20% Hurdle Pass/Fail

FAIL. Audited gross USD IRRs are Bear -5.561334275812162%, Base 8.301676769982283%, Bull 17.79366022574179%, and probability weighted 7.874971273831024%. None reaches 20%. The finite net-SGD diagnostic is likewise below the mandate in Base and probability-weighted outcomes.

8. Dream Business / Dream Investment Classification

Neither. Roper owns durable businesses, but the evidence does not establish high acquisition-inclusive ROIIC, and the current price does not support the stretch return. The single biggest reason is the combination of missing acquisition-vintage return proof and a starting valuation that requires substantially more per-share earnings growth than the Base case supplies.

9. Stage 7 Scorecard Notes

- Compounder Score note: **52/100** - durable franchises and cash conversion do not offset unproven acquired-capital returns and an inadequate entry-price return.
- Business Quality Score note: **47/80** - strong moat and cash quality are capped by low goodwill-inclusive ROIC, moderate organic growth, leverage, and missing acquisition-vintage economics.
- 20% Return UW Score note: **5/20** - Base earns 8.30%, Bear loses 5.56%, Bull reaches 17.79%, and the Base 20% maximum-buy price is USD 214.70.

10. Auditor JSON

The full-precision structured audit is in `compounder_score_audit.json`. Confidence is Medium. The VP repair, scorer hashes, score arithmetic, P/E consistency, denominator bridge, scenario wealth, probability weighting, reverse hurdle, net-SGD overlay, double-count controls, and false authority flags all clear. No publication blocker remains at CSA.

Appendix RT - Independent Red Team

Roper Technologies (ROP) — Red Team

Analysis date: 2026-09-27 Run marker: `pulse-cio-20260927T200229+0800` TTM anchor: 2026-06-30 Horizon: 2031-06-30, exactly five years Current price: USD 358.56 Primary valuation method: P/E Trade execution authorized: false

Gate and repair verification

This review attacked the repaired evidence chain rather than the obsolete pre-repair denominator. The exact SHA-256 of `valuation_preflight.json` is `5add89e4801f0dffe51928c6fbb4b976ae2ffcd2291d6641686f534ffdaf6a82`. Independent schema, semantic, hash, and evidence-file validation returned `VALUATION_PREFLIGHT_VALID`. CS and CSA both bind that exact SHA and reproduce the locked P/E method, USD 23.765954 reported TTM statutory diluted EPS on 105.3734247 million official TTM weighted-average diluted shares, USD 14.394521 normalized recurring EPS on the same denominator, 24.909477x normalized current P/E, 17x/22x/27x exits, 25%/55%/20% probabilities, and the share and capital-structure treatments. The prior use of the 100.6 million Q2/current-share count as the controlling current denominator is repaired: USD 15.077535 EPS and 23.781076x remain only a labeled pro-forma comparator. No mismatch remains between VP, CS, and CSA.

Audited results are preserved: Bear/Base/Bull gross USD returns are -5.561334%/8.301677%/17.793660%, and probability-weighted gross USD return is 7.874971%. Net-SGD returns are -7.21%/7.32%/17.55%, with 7.02% probability weighted. Scores remain 52/100, 47/80, and 5/20, classified Reject. Roper is not a P&C insurer, so the insurer-return-bridge lane is not triggered.

1. The most fragile assumption

The most fragile assumption is Application Software's 5.4% existing-perimeter revenue CAGR to USD 6.104 billion while terminal segment `Operating profit` margin rises from 27.17% to 27.80%. This is the largest segment, approximately 57% of TTM revenue, so a modest error matters more than a dramatic miss in a smaller product line. The model relies on recurring growth, cloud migration, retention, price, module attach, and a benign GovCon path, yet Roper discloses only mid-90s enterprise gross retention, not portfolio NRR, churn, price realization, paid-AI attach, or acquisition-cohort economics. Recent Application organic growth of 6%, 4%, 5%, and 5% is stable rather than accelerating. It supports a mid-single-digit starting point, but it does not prove five years of 5.4% growth while SaaS migration, duplicated cloud/on-premise costs, security spending, and AI inference costs are absorbed without margin loss.

The synthesis already supplies the decisive sensitivity. Cutting Application's CAGR by 200 basis points to 3.4% lowers Base EPS from USD 23.2918 to USD 22.1809, a USD 1.1109 or 4.8% reduction. At the separate P/E-15 gate, value falls from USD 349.38 to USD 332.71, and the cushion deteriorates from -2.56% to approximately -7.21%. The Base return bridge would also weaken; holding the locked 22x exit and Base distributions constant, terminal wealth falls to about USD 509.80 and gross return to approximately 7.29%, roughly 1.01 percentage point below the audited Base return. The thesis is therefore not broken by one ordinary miss, but the already-inadequate entry-price return becomes worse quickly.

Recent adjacent competitors make the risk concrete. Intapp reported 27% SaaS growth, 29% cloud ARR growth, and 123% cloud NRR while positioning governed AI inside regulated professional workflows, demonstrating that Roper's legal and professional-software customers have credible AI-native alternatives ([Intapp FY2026 results](https://investors.intapp.com/investor-news/news-details/2026/Intapp-announces-fourth-quarter-and-fiscal-year-2026-financial-results/default.aspx)). Autodesk reported 14% constant-currency growth and argues that trusted platforms combining connected project data and models will control AI in construction, a direct warning to weaker workflow and data layers around ConstructConnect ([Autodesk FY2027 Q2 results](https://investors.autodesk.com/news-releases/news-release-details/autodesk-inc-announces-fiscal-2027-second-quarter-results)). These examples do not prove Roper loses, but they reject the idea that vertical incumbency alone guarantees mid-single-digit organic growth.

2. The most likely optimistic Stage 5 number

The most optimistic Stage 5 number is Bull terminal EPS of USD 29.2426. It is not just a high revenue forecast. It requires USD 11.8403 billion of revenue, 7.41% CAGR, a 30.51% statutory operating margin, net interest falling to USD 222 million, a 20.5% tax rate, debt declining to USD 5.2 billion, and diluted shares falling to 92.456 million at the same time. Each component is individually possible. Their conjunction is the optimistic element.

The share path deserves particular skepticism. The model spends USD 750 million annually and assumes every Bull repurchase occurs at the current USD 358.56, retiring 2.092 million shares each year even as terminal equity value rises to USD 789.55. A non-controlling sensitivity that lets the repurchase price compound toward that terminal value produces approximately 96.24 million terminal shares and USD 28.09 EPS on the same displayed terminal net income. Bull wealth falls to roughly USD 782.13 and gross return to about 16.88%, a 0.91-point reduction. That is not a material bridge defect and does not justify editing the audited number, but it shows why USD 29.24 is the Stage 5 output most likely to be revised down.

3. Strongest bear case

Roper is a leveraged acquisition vehicle whose reported growth can remain respectable after the underlying franchises begin leaking. Horizontal and vertical AI agents increasingly operate across systems of record; data portability and API access reduce the value of the user interface; network participants multi-home; and Adobe, Autodesk, Intapp, and other platform vendors can bundle AI workflows into broader ecosystems. Adobe's 2026 expansion of agentic workflows across Premiere, Photoshop, Illustrator, InDesign, and Frame.io is a specific threat to Foundry's place in media-production pipelines, not a generic AI slogan ([Adobe agent expansion](https://news.adobe.com/news/2026/06/adobe-unveils-major-expansion)).

The numerical mechanism is a two-year sequence. Application organic growth falls below 3% as churn and downsell absorb price; Network organic growth remains below 4% and margin fails to recover above 40%; Technology Enabled Products holds revenue but cannot restore margin above 32% because input costs and mix persist. Management responds with another expensive acquisition, allowing total growth and adjusted EPS to obscure weaker existing-perimeter economics while adjusted leverage remains near or above 3.5x. The first evidence appears in organic recurring growth and segment margins, before goodwill impairment or consolidated revenue decline. In that path, the Base scenario is not conservative: it is the optimistic branch, and the Bear path may need both lower EPS and a lower multiple.

4. Cross-examination of management commentary

- **“SaaS transitions continue to advance meaningfully” — Q2 FY2026, Application Software.** This can be true operationally while economics worsen. A cloud migration may cannibalize licenses and services, extend dual-running costs, raise hosting and security expense, and increase dependence on third-party model and infrastructure vendors. The first contradiction would be recurring growth holding near 5% while Application margin slides below 25%, or non-recurring revenue declines without a corresponding acceleration in recurring revenue. The model assumes migration produces durable recurring economics; it has no disclosed cohort gross margin or payback evidence.

- **“Setup becoming increasingly encouraging for '27” — Q2 FY2026, DAT.** Carrier additions and spot pricing are leading signals, but management explicitly said load volumes had not confirmed a full freight recovery. The Network model nevertheless gives Base recurring revenue 6.5% CAGR and gradually restores segment margin to 42.57%. The first contradiction would be Network organic recurring growth below 4% or backlog declining for two consecutive quarters while DAT load volumes remain weak. A cyclical signal should not be capitalized as a durable network-effect improvement until transactions confirm it.

- **“High singles range” — Q2 FY2026, second-half Technology Enabled Products outlook.** That statement is vulnerable to Neptune project timing, mechanical-meter input costs, hospital purchasing, and OEM concentration. The first contradiction would be sub-4% organic growth combined with operating margin below 32% for two quarters. Revenue can recover as project shipments normalize without the favorable mix and price needed for the Base 34.0% terminal margin.

Management deserves credit for not embedding unannounced acquisitions or quantified AI revenue in formal guidance. The red-team objection is narrower: qualitative product progress is ahead of disclosed paid adoption and unit economics. Roper has demonstrated AI features and internal productivity, not yet portfolio-level incremental gross profit.

5. Stage 5 tie-out and recency challenge

The TTM anchor is current and correctly composed of Q3 2025, Q4 2025, Q1 2026, and Q2 2026. Application organic growth was 6%, 4%, 5%, and 5%; Network was 6%, 5%, 5%, and 4%; Technology Enabled Products was 6%, 5%, 7%, and 7%. The model is not stale arithmetically, but Network's declining organic sequence makes its first-year Base reacceleration and later 42.57% margin recovery the least comfortable trend extrapolation. Application's first-forward-year 5.8% and TEP's 7.2% are close to recent evidence; Network needs freight, Foundry, and Subsplash to work together.

The share path reconciles mathematically, but its economics are simplified. Constant repurchase prices overstate retirement when the share price rises and understate it when the price falls. Repricing repurchases along a smooth path toward the scenario terminal equity value changes Base gross return by about -0.28 point, Bull by about -0.91 point, and Bear by about +0.15 point. Every effect is below the two-point materiality threshold. The approximation should be disclosed, but it is not a publication blocker.

The funding stack is demanding but not facially impossible. Base combines USD 2.5 billion of buybacks, growing dividends, debt reduction from USD 11.319 billion to USD 7.0 billion, and only one recognized USD 1.1 billion Indicor-proceeds benefit. Strong historical FCF conversion can fund this if operating earnings arrive. The real fragility is circular: weaker Application growth reduces cash available for both deleveraging and repurchases, increasing interest and shares simultaneously. The model sensibly separates the lines but does not show an annual cash waterfall that mechanically forces one use of capital to yield when another misses.

6. The score-derived 20% return claim

The red team agrees with the audited 20% failure. There is no credible audited claim that Roper earns 20% at the current price. Base earns 8.30%; Bear loses 5.56%; Bull earns 17.79%; probability weighted earns 7.87%. At 22x and the Base distribution path, a 20% return requires terminal EPS of USD 39.5632, a 22.41% CAGR from normalized current EPS, versus modeled Base EPS CAGR of 10.10%. The Base maximum purchase price is USD 214.70, 40.12% below USD 358.56.

The assertion most likely to be misread is not the hurdle conclusion but the Bull's apparent proximity to 20%. It depends on 27x while revenue growth, margin expansion, deleveraging, tax, and buybacks all cooperate. At 24x, Bull gross return falls to approximately 15.13%; at the comparable normalized current 24.909477x, it is approximately 15.97%. The audited 5/20 score correctly refuses to call the stretch case plausible at today's price.

7. Two-sided valuation challenge and objection classification

Strongest reason the model is too optimistic

Bull uses a 27x exit P/E, 2.09 turns above normalized current P/E, on top of the most favorable operating and balance-sheet stack. A 24x sensitivity lowers terminal wealth from USD 813.15 to USD 725.42 and gross return from 17.79% to 15.13%, a 2.66-point change. Bear also has a meaningful multiple tail: 15x instead of 17x lowers return from -5.56% to -7.72%, a 2.16-point change. These are material sensitivities. They are not corrections to the audited bridge because VP selected multiples before returns, tied them to comparable normalized denominators, and expressly rejected a distressed Bear multiple absent structural impairment. The objection is therefore material but already resolved in the sealed preflight; it does not authorize RT to replace the exits.

Probability calibration is the other optimistic lever. Bull requires simultaneous execution but receives 20%, only five points less than Bear. An adversarial 35%/55%/10% Bear/Base/Bull stress lowers probability-weighted wealth to about USD 469.42 and return to 5.54%, 2.34 points below audited. That is a useful risk envelope, not an empirically superior correction: the record lacks historical frequency data that could prove 35%/55%/10% is better than 25%/55%/20%, and either weighting leaves ER2 Reject and CIO WATCH unchanged.

Strongest reason the model is too bearish

The model assigns zero unannounced acquisition contribution in every scenario, including Bull, even though Roper spent USD 13.45 billion on acquisitions during FY2021-FY2025 and describes more than USD 5 billion of annual deployment capacity. This understates the business model if management finds another CentralReach-quality asset and finances it without undoing deleveraging. To lift Base return by two points, terminal wealth must rise by about USD 51.18; at 22x, that requires roughly USD 2.33 of additional terminal EPS, or approximately USD 223 million of terminal net income on modeled Base shares. That is not absurd relative to Roper's acquisition scale.

It is also not supportable as a forecast correction. No announced target, purchase price, funding schedule, integration cost, acquired operating profit, or vintage return exists, while observed acquisition-inclusive return proxies are only about 5%-7%. Zero is punitive but disciplined. The valuation could also be too bearish because Base 22x is below normalized current P/E and Bull 27x is below Roper's recent historical floor and quality-peer median. Those discounts may over-penalize a franchise that sustains mid-90s gross retention and proves paid AI monetization, but the missing KPI evidence prevents an upward revision today.

Return-model objection	Quantified consequence	Classification	Resolution
Repaired current denominator and normalized P/E	24.909477x controlling; CS/CSA exact match	MATERIAL_RESOLVED	Official 105.3734247M TTM denominator is sealed and validated.
Bear/Bull exit-multiple tails	15x Bear: -7.72%; 24x Bull: 15.13%	MATERIAL_RESOLVED	VP independently selected 17x/27x and documented both directional challenges.
Scenario-weight asymmetry	35%/55%/10% stress: 5.54% PW return	MATERIAL_RESOLVED	Material stress, not a supportable correction; Reject/WATCH is unchanged.
Fixed USD 358.56 repurchase price	Approx. -0.28 point Base; -0.91 point Bull	IMMATERIAL	Simplification is below the two-point threshold and does not change actionability.
Zero unannounced M&A	About +USD 2.33 EPS needed to add two Base return points	MATERIAL_RESOLVED	Deliberately excluded because no source-bound deal economics exist.
Cash-dividend distribution path	Distributions are only USD 19.60-23.60 of terminal wealth	IMMATERIAL	Cash dividends count once; buybacks are not double counted.

RETURN_MODEL_OBJECTION_STATUS: MATERIAL_RESOLVED. No unresolved normalization, method, denominator, claim-perimeter, dilution, probability arithmetic, or terminal-equity defect was found. The material multiple and probability sensitivities make the audited returns less attractive, not more actionable, and the sealed files already document their treatment. No reroute to VP, CS, or CSA is required.

8. P&C insurer bridge

Not applicable. Roper Technologies is not a property-and-casualty insurer, reinsurer, specialty carrier, or balance-sheet-led financial business. `insurer_return_bridge.json` is neither required nor present, and no P/B-ROE or retained-versus-managed insurance perimeter is used.

9. Signal that forces an exit

The explicit exit trigger is **Application Software organic growth below 3% for two consecutive reported quarters, with segment operating margin below 24% in the second quarter, absent a separately quantified temporary disruption**. This is observable in Roper's quarterly segment disclosure. It would indicate that switching costs and recurring mix no longer offset churn, price pressure, cloud duplication, AI/security spend, and implementation weakness. Because Application is roughly 57% of revenue, crossing both thresholds would invalidate the Base 5.4% growth and 27.8% terminal-margin assumptions, not merely trim them. The thesis should then be rewritten around structural workflow commoditization and capital-allocation defense, and the position should be exited rather than averaged down.

Secondary monitoring conditions are Network organic recurring growth below 4% with margin below 38%-40% without a time-bounded investment bridge; Technology Enabled Products margin below 31%-32% for four quarters; and adjusted leverage above 3.5x after Indicor proceeds while a large acquisition closes without disclosed year-five per-share return economics. These are downgrade signals, but the Application trigger is the one that forces the action.

10. Conviction after red team

Thesis does not survive as a purchase at USD 358.56. The business-quality thesis survives conditionally: Roper still owns durable systems of record, selected data networks, and physical chokepoints, and the 2046 test can pass. The current-price thesis does not. Base gross USD return is only 8.30%, probability-weighted gross return is 7.87%, Base net-SGD return is 7.32%, and the P/E-15 gate fails by 2.56% despite buybacks and deleveraging. The most credible bear mechanism—Application leakage hidden by acquisitions while AI and platform vendors attack workflow layers—would lower those already-insufficient returns.

The strongest rebuttal is that the forecast gives no credit to future acquisitions, applies terminal multiples below Roper's historical and peer bands, and may understate AI monetization inside trusted vertical workflows. That rebuttal argues for WATCH rather than a permanent rejection of the company. It does not argue for buying now. The correct red-team conclusion is Reject under the 20% underwriting score, CIO WATCH for a materially lower entry price or stronger evidence, and no trade authorization.

Appendix D - Source Data Package

Roper Technologies — Data Package

Run ID: `pulse-cio-20260927T200229+0800` Information cutoff: 2026-09-27 20:02:29 SGT Reporting basis: USD billions unless a table states USD millions; per-share data in USD Fiscal year end: December 31 Latest complete quarter: Q2 2026 ended 2026-06-30 Forecast base: Q3 2025 + Q4 2025 + Q1 2026 + Q2 2026 = TTM ended 2026-06-30 Forward horizon: 2031-06-30, exactly five calendar years Trade execution authorized: **false**

The Stage D live-source archive is `C:\Users\Admin\OneDrive\GPT\ER 2.0\Roper Technologies\raw\pulse-cio-20260927T200229+0800\d`. The controlling official sources are the 2025 Form 10-K, Q2 2026 Form 10-Q, SEC-filed earnings releases, Roper's live Q2 2026 investor presentation, and FMP stable statement/transcript endpoints. `D_FMP_INCOME_A`, `D_FMP_BALANCE_A`, `D_FMP_CASHFLOW_A`, and `D_FMP_KEYMETRICS_A` refer to the same-named fresh JSON files in that archive. No local data-warehouse cache was read. The pre-refresh package was preserved at `raw\pulse-cio-20260927T200229+0800\d\prior_data_package_20260909.md` with SHA-256 `22afa6aa2f3ba7ebc53971ef03cf01124bd9234bb52ff71f36c813c8096673e5` before replacement.

QFR gate: `QUANT FOUNDATION VERIFIED — CLEARED FOR WAVE 1`. The sealed quote is $358.56 on 2026-09-25 and `QUOTE_PACKET_SHA256` is `e2c3c0b117761d75c511bd0773e15b009ec76f6f2683a4e7f25cb4a45d47077f`. The unchanged statutory packet hash is `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`.

0a. Industry classification and disclosure inventory

Roper is a U.S. domestic filer operating vertical-market application software, network software, and technology-enabled products. It uses U.S. GAAP, files Forms 10-K and 10-Q, and reports three segments. The software/SaaS checklist is triggered because roughly three quarters of revenue is software, while FMP's product endpoint is materially non-comparable with the issuer taxonomy. Fresh Stage D annual and quarterly endpoint pulls again returned one FY2025 vendor line, `Software And Related Services`, of $12,259.8 million, exceeding official consolidated revenue by $4,357.3 million and official software revenue by $6,129.9 million. It is preserved as provider evidence and excluded. The same fresh quarterly endpoint now correctly reports the three official segments for Q1 and Q2 2026 and sums to H1 revenue of $4,204.2 million. The official SEC taxonomy controls.

Source and search inventory

Source family	Live sources checked in this run	Search terms and tables	Result
Annual filings	2022, 2023, and 2025 Forms 10-K; SEC URLs in manifest	Segment Information; revenue stream; operating profit; RPO; backlog; research and development; geographic	Five-year segment, revenue-stream, backlog, and RPO histories assembled
Interim filings	Q3 2025, Q1 2026, and Q2 2026 Forms 10-Q	segment profit; revenue stream; deferred revenue; RPO; backlog; capex; share repurchases	Latest-quarter and H1 evidence assembled
Earnings releases	SEC Exhibits 99.1 dated 2025-10-23, 2026-01-27, 2026-04-23, 2026-07-23	total revenue; organic revenue; segment; margin; guidance; acquisition contribution	Last four quarters included
Earnings calls	FMP live transcripts for Q3 FY2025 through Q2 FY2026	ARR; retention; bookings; SaaS; churn; pricing; AI; acquisition; capital deployment; segment outlook	Dates matched requested fiscal quarters; concise verified excerpts included
Investor material	Live Roper Q2 2026 presentation and event page; Q4 2025/Q1 2026 presentation links	segment detail; outlook; revenue mix; organic growth; AI launches	Q2 2026 presentation was live-opened and its segment tables verified; direct local byte downloads timed out twice, so SEC exhibits and archived transcripts remain the controlling local evidence
FMP statements	Income, balance sheet, cash flow, key metrics, product segmentation; annual and quarterly as applicable	revenue; operating income; shares; EPS; capex; FCF; R&D; debt; goodwill; intangibles	Live files archived; official filings override two denominator issues and product taxonomy

Completeness matrix

Dataset / table family	Official source searched	Search terms or table names	Years available	Included in data package?	If excluded, why	Downstream relevance
Segment economics	2022, 2023, 2025 10-Ks; 2025-2026 10-Qs	Segment Information; net revenues; operating profit	FY2021-FY2025; Q3 2025-Q2 2026	Yes	None	Segment forecasts and statutory bridge
Revenue streams	Same filings	recurring; reoccurring; non-recurring; product revenue	FY2021-FY2025; H1 and Q2 2026	Yes	None	Recurrence, software mix, growth durability
RPO and backlog	Same filings	Remaining Performance Obligations and Backlog	FY2021-FY2025; Q2 2026	Yes	None	Visibility and demand durability
ARR, NRR, GRR, churn	Same filings and four transcripts	ARR; net retention; gross retention; churn	Selected business commentary only	Partial	True non-disclosure at consolidated dollar/rate level	SaaS durability and moat
Customer count, ACV, seats, CAC/payback	Same filings and calls	customers; ACV; ARPU; seats; CAC; payback	No consolidated series	No	True non-disclosure after stated searches	Unit economics
Capital and balance sheet by unit	Segment note and balance sheets	total assets; goodwill; debt; cash; capital expenditures	FY2021-FY2025	Partial	Segment capital is not needed for statutory bridge; latest total balance sheet included	ROIC and valuation
Recent trend	Four releases, calls, and interim filings	segment revenue; organic growth; operating profit; outlook	Last four completed quarters	Yes	None	Recency check

Material software and visibility KPI history

KPI family	Granularity	FY2021	FY2022	FY2023	FY2024	FY2025	Latest interim / TTM	Source path
Recurring software revenue ($B)	Consolidated	2.553	2.939	3.511	3.976	4.483	TTM 4.753	2022/2023/2025 10-Ks; Q2 2026 10-Q
Reoccurring software revenue ($B)	Consolidated	0.361	0.370	0.401	0.624	0.833	TTM 0.870	Same official tables
Non-recurring software revenue ($B)	Consolidated	0.685	0.721	0.733	0.770	0.814	TTM 0.821	Same official tables
Product revenue ($B)	Consolidated	1.235	1.341	1.533	1.669	1.773	TTM 1.837	Same official tables
Remaining performance obligations ($B)	Consolidated	3.539	4.214	4.613	4.755	5.204	Q2 2026 5.223	2022/2023/2025 10-Ks; Q2 2026 10-Q
Backlog, next 12 months ($B)	Consolidated	2.325	2.913	3.157	3.105	3.425	Q2 2026 3.286	Same official sources
Backlog, Application Software ($B)	Segment	1.542	1.796	2.136	2.275	2.533	Q2 2026 2.369	Same official sources
Backlog, Network Software ($B)	Segment	0.448	0.508	0.494	0.516	0.578	Q2 2026 0.608	Same official sources
Backlog, Technology Enabled Products ($B)	Segment	0.335	0.609	0.527	0.315	0.313	Q2 2026 0.309	Same official sources

TTM revenue streams equal FY2025 less H1 2025 plus H1 2026. The sums are $4.7529 billion recurring, $0.8702 billion reoccurring, $0.8205 billion non-recurring, and $1.8367 billion product revenue, totaling $8.2803 billion. On the Q2 2026 call, management said enterprise gross retention remained in the mid-90s and TTM core software bookings grew mid-single-digit-plus; these are rate/qualitative disclosures, not ARR dollars. The live Q2 2026 presentation also disaggregated Q2 revenue growth: Application Software 8% total/5% organic, Network Software 12%/4%, and Technology Enabled Products 7%/7%, materially improving current-period KPI coverage relative to FMP's defective FY2025 aggregation.

1. Reporting structure and taxonomy

Reportable segment	Description	FY2025 revenue ($B)	Share of total	Controlling source
Application Software	Vertical workflow and system-of-record software across legal, government contracting, healthcare, education, utilities, childcare, and insurance	4.4830	56.7%	2025 10-K Note 14
Network Software	Two-sided networks and vertical software in construction, freight, media, insurance, food supply, pharmacy, healthcare, and faith organizations	1.6008	20.3%	2025 10-K Note 14
Technology Enabled Products	Niche medical, water-metering, sensing, access-control, and precision-measurement products, including related software and consumables	1.8187	23.0%	2025 10-K Note 14

The current three-segment structure is comparable across FY2021-FY2025 in the official restated continuing-operations tables. The November 2022 Indicor divestiture removed the historical Process Technologies segment and industrial businesses from the former Measurement & Analytical Solutions segment; the continuing operations were presented as Application Software, Network Software, and Technology Enabled Products for all years used here. Subsequent acquisitions changed business membership but did not create a reportable-segment reclassification. Reporting structure is stable on the current basis since FY2021.

The 2025 10-K lists Aderant, CentralReach, Clinisys, Data Innovations, Deltek, Frontline, IntelliTrans, PowerPlan, Procare, Strata, Transact/CBORD, and Vertafore in Application Software; ConstructConnect, DAT, Foundry, iPipeline, iTradeNetwork, MHA, SHP, SoftWriters, and Subsplash in Network Software; and CIVCO Medical Solutions, FMI, Inovonics, IPA, Neptune, Northern Digital, rf IDEAS, and Verathon in Technology Enabled Products.

Sales to customers outside the United States were $1.0297 billion in FY2025, 13.0% of total revenue; U.S. revenue was therefore $6.8728 billion. The official geography disclosure is adequate for materiality and no regional profit split is disclosed.

Taxonomy flag: FMP's FY2025 `Software And Related Services` line of $12.2598 billion agrees between its annual and quarterly product endpoints but is not an issuer revenue category and exceeds official total revenue. It is excluded rather than allocated. Official categories are recurring software, reoccurring software, non-recurring software, and product revenue.

2. Consolidated historicals

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue ($B)	4.834	5.372	6.178	7.039	7.903	D_FMP_INCOME_A; official filings
Operating income ($B)	1.336	1.525	1.745	1.997	2.235	D_FMP_INCOME_A; official filings
Operating margin	27.6%	28.4%	28.3%	28.4%	28.3%	Calculated
Net income ($B)	1.097	1.188	1.364	1.549	1.536	D_FMP_INCOME_A
EPS, diluted ($)	10.30	11.13	12.70	14.35	14.20	D_FMP_INCOME_A; FY2025 official override
Diluted share count (M)	106.5	106.8	107.4	108.0	108.2	D_FMP_INCOME_A; FY2025 official override
Capital expenditures ($B)	0.063	0.070	0.108	0.066	0.047	D_FMP_CASHFLOW_A
Free cash flow ($B)	1.949	0.664	1.927	2.327	2.493	D_FMP_CASHFLOW_A
ROIC	5.4%	5.7%	6.0%	6.3%	6.4%	Calculated from live FMP statements

ROIC is NOPAT divided by average invested capital. NOPAT equals statutory operating income multiplied by one minus the annual effective tax rate. Invested capital equals total debt plus stockholders' equity less cash and short-term investments; the denominator is the average of beginning and ending balances. Effective tax rates were 22.0%, 23.1%, 21.5%, 21.2%, and 20.6%; NOPAT was $1.042, $1.172, $1.370, $1.573, and $1.774 billion; average invested capital was $19.482, $20.564, $22.778, $24.976, and $27.617 billion. The low reported ROIC reflects acquisition goodwill and intangibles retained in invested capital. FY2022 FCF is depressed by Indicor-transaction tax and cash-flow classification effects; downstream

analysts should not treat it as steady-state conversion.

3. Segment historicals

Application Software

Application Software	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue ($B)	2.3667	2.6395	3.1869	3.8683	4.4830	2022/2023/2025 10-K Note 14
YoY	n/a	11.5%	20.7%	21.4%	15.9%	Calculated
Operating profit ($B)	0.6331	0.7140	0.8208	1.0234	1.2031	Exact issuer metric, Note 14
Margin on Operating profit	26.7%	27.1%	25.8%	26.5%	26.8%	Calculated

Network Software

Network Software	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue ($B)	1.2238	1.3785	1.4394	1.4756	1.6008	2022/2023/2025 10-K Note 14
YoY	n/a	12.6%	4.4%	2.5%	8.5%	Calculated
Operating profit ($B)	0.4768	0.5706	0.6324	0.6665	0.6958	Exact issuer metric, Note 14
Margin on Operating profit	39.0%	41.4%	43.9%	45.2%	43.5%	Calculated

Technology Enabled Products

Technology Enabled Products	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue ($B)	1.2433	1.3538	1.5515	1.6953	1.8187	2022/2023/2025 10-K Note 14
YoY	n/a	8.9%	14.6%	9.3%	7.3%	Calculated
Operating profit ($B)	0.4156	0.4491	0.5187	0.5743	0.6267	Exact issuer metric, Note 14
Margin on Operating profit	33.4%	33.2%	33.4%	33.9%	34.5%	Calculated

The exact common segment-profit basis is issuer-disclosed `Operating profit`. It is additive across the three segments. No single-segment fallback is used.

3a. Historical statutory-profit bridge and forecast-driver ledger

Sealed packet: `statutory_bridge.json`. QFR-sealed SHA-256: `bad8a1b7caf1658c3cc9319a53a55e37cc02e3134d3243b2f7c083568298b9b6`. Currency is USD millions. Labels, values, signs, classifications, and source IDs below reproduce the sealed packet.

FY2025 bridge

Bridge line	Classification	Value	Source ID	Running subtotal
Application Software	segment profit	1,203.1	sec_10k_2025	1,203.1
Network Software	segment profit	695.8	sec_10k_2025	1,898.9
Technology Enabled Products	segment profit	626.7	sec_10k_2025	2,525.6
Sum of reportable segment profit	subtotal	2,525.6	sec_10k_2025	2,525.6
Corporate administrative expenses	corporate_unallocated	-290.2	sec_10k_2025	2,235.4
Consolidated segment profit metric	subtotal	2,235.4	sec_10k_2025	2,235.4
Statutory operating income	statutory subtotal	2,235.4	sec_10k_2025	2,235.4

Bridge line	Classification	Value	Source ID	Running subtotal
Interest expense, net	interest	-325.0	sec_10k_2025	1,910.4
Equity investments gain, net	other_non_operating	25.5	sec_10k_2025	1,935.9
Other income, net	other_non_operating	0.2	sec_10k_2025	1,936.1
Pretax income	statutory subtotal	1,936.1	sec_10k_2025	1,936.1
Income taxes	tax	-399.8	sec_10k_2025	1,536.3
Net income	statutory subtotal	1,536.3	sec_10k_2025	1,536.3

TTM ended 2026-06-30 bridge

Bridge line	Classification	Value	Source ID	Running subtotal
Application Software	segment profit	1,274.9	ttm_statutory_calculation	1,274.9
Network Software	segment profit	710.2	ttm_statutory_calculation	1,985.1
Technology Enabled Products	segment profit	629.1	ttm_statutory_calculation	2,614.2
Sum of reportable segment profit	subtotal	2,614.2	ttm_statutory_calculation	2,614.2
Corporate administrative expenses	corporate_unallocated	-298.6	ttm_statutory_calculation	2,315.6
Consolidated segment profit metric	subtotal	2,315.6	ttm_statutory_calculation	2,315.6
Statutory operating income	statutory subtotal	2,315.6	ttm_statutory_calculation	2,315.6
Interest expense, net	interest	-393.7	ttm_statutory_calculation	1,921.9
Equity investments gain, net	other_non_operating	1,055.8	ttm_statutory_calculation	2,977.7
Other expense, net	other_non_operating	-1.9	ttm_statutory_calculation	2,975.8
Pretax income	statutory subtotal	2,975.8	ttm_statutory_calculation	2,975.8
Income taxes	tax	-471.5	ttm_statutory_calculation	2,504.3
Net income	statutory subtotal	2,504.3	ttm_statutory_calculation	2,504.3

Forecast-driver ledger

Historical bridge line	FY value	TTM value	Forecast treatment	Driver and source	Bear / base / bull rule
Corporate administrative expenses	-290.2	-298.6	Percentage of revenue with explicit corporate-cost check	Historical 3.60%-3.67% of revenue; statutory bridge	Bear higher ratio; base recent ratio; bull modest scale benefit
Interest expense, net	-325.0	-393.7	Debt and interest-rate schedule	Debt, revolver, notes, and acquisition funding from filings	Bear higher debt/rate; base scheduled debt; bull faster deleveraging
Equity investments gain, net	25.5	1,055.8	Zero recurring operating contribution; separately model realized proceeds	Q2 2026 Indicor remeasurement and pending instrumentation sale	Do not annualize; scenarios vary net proceeds/timing only
Other income or expense, net	0.2	-1.9	Fixed immaterial amount or zero	Five-year history and statutory classification	Bear small expense; base zero; bull small income
Income taxes	-399.8	-471.5	Tax-rate schedule on pretax income	FY2025 20.6%; management 2026 guide about 21%	Bear 22%; base 21%; bull 20.5% unless sourced otherwise

The TTM $1,055.8 million equity-investment gain is non-recurring and sits below operating income. It must never be embedded in segment margins or normalized operating profit.

STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING

4. Product and sub-segment historicals

Roper does not disclose brand-level revenue dollars. The finest clean dollar history is its audited revenue-stream-by-segment table.

Segment	Product or revenue stream	What it is	Dollar disclosure?	FY2023 / FY2024 / FY2025 revenue ($B) and source
Application Software	Recurring software	Subscription, maintenance, and recurring software revenue	Yes	2.4543 / 2.8800 / 3.2822; 2025 10-K revenue-stream tables
Application Software	Reoccurring software	Transactional or usage-linked software revenue	Yes	0.1378 / 0.3539 / 0.5226; same source
Application Software	Non-recurring software	Licenses, implementation, and other one-time software revenue	Yes	0.5948 / 0.6344 / 0.6782; same source
Network Software	Recurring software	Subscription and recurring network-software revenue	Yes	1.0395 / 1.0701 / 1.1546; same source
Network Software	Reoccurring software	Transaction and usage-related network revenue	Yes	0.2634 / 0.2703 / 0.3105; same source
Network Software	Non-recurring software	License and service revenue not recurring	Yes	0.1365 / 0.1352 / 0.1357; same source
Technology Enabled Products	Software revenue	Software embedded in technology-enabled products	Yes	0.0188 / 0.0261 / 0.0461; same source
Technology Enabled Products	Product revenue	Medical, metering, sensing, access, and measurement products	Yes	1.5327 / 1.6692 / 1.7726; same source

No figures in the preceding table are back-solved. All are official dollars. Individual business growth is disclosed selectively without business-level dollar revenue:

Segment	Product or business	Disclosure method	Last four quarters YoY growth disclosed	Source
Application Software	Aderant	Management rate commentary only	Q4 FY2025: mid-teens FY growth; other quarters not quantified	FMP Q4 FY2025 transcript, 2026-01-27
Application Software	CentralReach	Management rate commentary only	Q1 FY2026: recurring software growth well north of 20%; other quarters not quantified	FMP Q1 FY2026 transcript, 2026-04-23
Application Software	Vertafore	Management rate commentary only	Q1 FY2026: mid-single-digit revenue growth; other quarters not quantified	Same transcript
Network Software	Foundry	ARR rate commentary only	Q3 FY2025: Q4 exit ARR expected high-single-digit YoY; later calls say positive growth without rate	FMP Q3 FY2025 transcript, 2025-10-23
Network Software	Subsplash	Management rate commentary only	Q2 FY2026: double-digit software growth; prior quarters not quantified	FMP Q2 FY2026 transcript, 2026-07-23
Technology Enabled Products	Neptune	Qualitative growth only	Q1-Q2 FY2026: low-single-digit decline or modest decline; no dollar revenue	Q1 and Q2 FY2026 transcripts

`Dollar-vs-growth status:` issuer dollars are available for eight segment/revenue-stream rows; six selected business-level lines have only rates or qualitative direction. No brand dollars were estimated.

5. Most recent quarterly trend

Roper's FY ends December 31. Most recently completed fiscal quarter at time of writing: FY2026 Q2, covering April-June 2026, reported on 2026-07-23 via https://www.sec.gov/Archives/edgar/data/882835/000088283526000031/a2026q2earningsrelease.htm.

Quarterly operating profit is the exact statutory segment metric. Q4 2025 equals FY2025 less H1 2025 less Q3 2025 using official filings.

Segment	Quarter	Revenue ($B)	Total YoY	Organic YoY	Operating profit margin	Source date
Application Software	Q3 2025	1.1610	18%	6%	27.8%	SEC release and 10-Q, 2025-10-23 / 2025-10-31
Application Software	Q4 2025	1.1589	10%	4%	26.6%	SEC release and 10-K, 2026-01-27 / 2026-02-24

Segment	Quarter	Revenue ($B)	Total YoY	Organic YoY	Operating profit margin	Source date
Application Software	Q1 2026	1.1915	12%	5%	26.8%	SEC release and 10-Q, 2026-04-23 / 2026-05-01
Application Software	Q2 2026	1.1808	8%	5%	27.4%	SEC release and 10-Q, 2026-07-23 / 2026-07-31
Network Software	Q3 2025	0.4134	13%	6%	43.1%	SEC release and 10-Q, 2025-10-23 / 2025-10-31
Network Software	Q4 2025	0.4261	14%	5%	42.6%	SEC release and 10-K, 2026-01-27 / 2026-02-24
Network Software	Q1 2026	0.4276	14%	5%	40.6%	SEC release and 10-Q, 2026-04-23 / 2026-05-01
Network Software	Q2 2026	0.4309	12%	4%	41.0%	SEC release and 10-Q, 2026-07-23 / 2026-07-31
Technology Enabled Products	Q3 2025	0.4431	7%	6%	33.9%	SEC release and 10-Q, 2025-10-23 / 2025-10-31
Technology Enabled Products	Q4 2025	0.4736	6%	5%	33.5%	SEC release and 10-K, 2026-01-27 / 2026-02-24
Technology Enabled Products	Q1 2026	0.4762	9%	7%	32.4%	SEC release and 10-Q, 2026-04-23 / 2026-05-01
Technology Enabled Products	Q2 2026	0.4972	7%	7%	33.3%	SEC release and 10-Q, 2026-07-23 / 2026-07-31

The latest quarter's largest segment grew 8% total and 5% organic. This was independently confirmed in the live Roper Q2 2026 presentation at `https://investors.ropertech.com/static-files/37d4c08f-ad15-4347-8274-de2301091b9a`; the archived SEC exhibit independently confirms Q2 Application Software revenue of $1,180.8 million versus $1,094.9 million. Application Software's recurring and reoccurring mix remained about 85% and grew mid-single-digit-plus organically; Network's organic recurring growth was high single digits but reoccurring/non-recurring weakness reduced total organic growth to 4%; TEP's mix of faster-growing consumables lowered margin despite improving revenue durability.

Stage D load-bearing live checks passed: FY2025 FMP revenue re-pulled at $7,902.5 million and tied the 10-K; the largest segment's latest growth was verified at 8% total/5% organic; and the Q2 2026 management statement on SaaS transitions was found in the freshly fetched transcript dated 2026-07-23.

6. Management commentary on forward growth

Copyright-compliant short excerpts are used; surrounding statements are paraphrased. All four transcripts were freshly fetched in this Stage D run and archived under `raw\pulse-cio-20260927T200229+0800\d`. Transcript dates matched the requested fiscal periods exactly: 2025-10-23, 2026-01-27, 2026-04-23, and 2026-07-23.

Application Software

Fiscal period and call date	Speaker	Verified short excerpt	Topic	Modeling interpretation
Q3 FY2025, 2025-10-23	Neil Hunn, CEO	“fundamentals remain strong”	Deltek / GovCon	Shutdown timing was distinguished from structural demand; keep a cautious near-term recovery curve
Q4 FY2025, 2026-01-27	Neil Hunn, CEO	“not included any benefit in our 2026 guidance”	GovCon outlook	Base case should not require a Deltek GovCon rebound
Q1 FY2026, 2026-04-23	Neil Hunn, CEO	“gross retention remained strong”	Segment retention	Mid-90s enterprise GRR supports recurring durability, but is not NRR
Q2 FY2026, 2026-07-23	Neil Hunn, CEO	“SaaS transitions continue to advance meaningfully”	Cloud migration	Ground-to-cloud conversion supports recurring mix but may defer non-recurring revenue

Additional verified commentary: Aderant continued strong cloud adoption; CentralReach was ahead of its acquisition model; Vertafore continued ARR growth and launched six agent SKUs; Deltek private-sector demand was solid, but management wanted several quarters of pipeline conversion before calling a GovCon turn. Application Software's second-half organic outlook was mid-single-digit-plus.

Network Software

Fiscal period and call date	Speaker	Verified short excerpt	Topic	Modeling interpretation
Q3 FY2025, 2025-10-23	Neil Hunn, CEO	“Q4 exit ARR to grow year-over-year in the HSD area”	Foundry ARR	Recovery evidence existed, but exposure to media cycles remains
Q4 FY2025, 2026-01-27	Neil Hunn, CEO	“no meaningful improvement in the freight market”	DAT base-case assumption	Do not require a freight recovery for the initial 2026 base
Q1 FY2026, 2026-04-23	Neil Hunn, CEO	“Net retention returned above 100%”	Foundry retention	Customer expansion had resumed after strike-affected weakness
Q2 FY2026, 2026-07-23	Neil Hunn, CEO	“setup becoming increasingly encouraging for '27”	DAT freight recovery	A modest 2026 benefit is plausible; larger recovery belongs in 2027 scenarios

Additional verified commentary: Subsplash grew software double digits and payments faster; ConstructConnect expanded AI-based takeoff; DAT carrier additions and spot pricing improved but load volumes had not yet confirmed a full recovery; Network Software's second-half organic growth outlook was mid-single-digit-plus. Lower reported margins reflect Subsplash mix and Convoy investment, not deterioration in the sealed statutory identity.

Technology Enabled Products

Fiscal period and call date	Speaker	Verified short excerpt	Topic	Modeling interpretation
Q3 FY2025, 2025-10-23	Neil Hunn, CEO	“organic growth in the low single-digit area”	Q4 outlook	Neptune timing and a hard comparison constrained Q4
Q4 FY2025, 2026-01-27	Neil Hunn, CEO	“segment organic growth in the mid-single-digit range”	FY2026 outlook	Base case should remain mid-single digit, with a softer first half
Q1 FY2026, 2026-04-23	Neil Hunn, CEO	“mid-single-digit range”	Balance-of-year outlook	Q1's 7% organic growth should not be extrapolated unchanged
Q2 FY2026, 2026-07-23	Neil Hunn, CEO	“high singles range”	Second-half outlook	Strong NDI/Verathon and Neptune normalization support acceleration

Additional verified commentary: NDI demand remained strong in cardiac, neurological, and orthopedic applications; Verathon's single-use BFlex and GlideScope products supported recurring consumables; Neptune's mechanical-meter input costs and volume normalization pressured margin, while cloud billing software grew. Management expected Neptune metering to return to growth in the second half.

Enterprise guidance and capital deployment

Q2 FY2026 guidance increased to adjusted diluted EPS of $22.15-$22.30, total revenue growth above 8%, and organic growth around 6%. Guidance excluded unannounced acquisitions/divestitures, pending Indicor proceeds, and future repurchases. Management described more than $5 billion of annualized deployment capacity and expected M&A conditions to improve later in 2026 and 2027. These are management assumptions, not analyst forecasts.

No recent investor-day transcript was found. The latest quarterly presentation and Q4 2025 results deck were located on Roper's IR site, but direct downloads timed out twice and are recorded as not fetched / omitted. Their quantitative claims were not used where SEC or FMP evidence was unavailable.

7. Capital allocation history

Year	Capex ($B)	Capex / revenue	R&D ($B)	R&D / revenue	Buybacks ($B)	Dividends ($B)	M&A cash outlay ($B)	Source
FY2021	0.063	1.30%	0.485	10.03%	0.000	0.236	0.217	Live FMP annual statements
FY2022	0.070	1.31%	0.530	9.86%	0.000	0.262	4.280	Live FMP annual statements
FY2023	0.108	1.75%	0.646	10.46%	0.000	0.290	2.053	Live FMP annual statements
FY2024	0.066	0.94%	0.748	10.63%	0.000	0.322	3.613	Live FMP annual statements

Year	Capex ($B)	Capex / revenue	R&D ($B)	R&D / revenue	Buybacks ($B)	Dividends ($B)	M&A cash outlay ($B)	Source
FY2025	0.047	0.60%	0.853	10.79%	0.500	0.355	3.290	Live FMP plus 2025 10-K official R,D&E override

FMP's R&D field returned zero for FY2025, but the controlling 2025 10-K explicitly reports consolidated research, development and engineering expense of $852.5 million (10.79% of revenue), versus $748.1 million in FY2024 and $646.1 million in FY2023; the official filing therefore overrides the provider zero. Capitalized software expenditure was $57.3 million in FY2025 and is separate from capex. Management expects capital expenditures plus capitalized software to equal 1.0%-1.5% of revenue. M&A cash outlay is absolute `acquisitionsNet`, not announced enterprise value.

8. Balance sheet snapshot

Item	FY2025 amount ($B)	Source
Cash and equivalents	0.297	D_FMP_BALANCE_A; 2025 10-K
Short-term investments	0.000	D_FMP_BALANCE_A
Total debt, current plus long term	9.301	D_FMP_BALANCE_A; 2025 10-K
Net debt	9.004	Calculated
Net debt / statutory EBITDA	2.87x	Net debt divided by operating income plus D&A of $0.898B
Goodwill plus intangibles	31.105	D_FMP_BALANCE_A; 2025 10-K
Tangible book value	-11.224	Stockholders' equity $19.882B less goodwill/intangibles

At Q2 2026, cash was $0.365 billion and gross debt was $11.319 billion, producing net debt of $10.955 billion. The company reported 3.4x adjusted net debt to EBITDA after repurchases. TTM statutory EBITDA, using operating income plus D&A, is $3.238 billion, making the comparable non-covenant ratio 3.38x. Goodwill and intangibles dominate invested capital, so acquisition underwriting and impairment risk are central.

9. Recent corporate actions

- **2025-10-23:** the Board authorized Roper's first $3.0 billion open-ended share repurchase program; Q3 FY2025 SEC-filed release.
- **Q4 2025:** Roper repurchased 1.121 million shares for $500 million at an average $445.87 per share; 2025 10-K.
- **2026-04-23:** Q1 release disclosed 4.3 million shares repurchased for $1.5 billion and an additional $3.0 billion authorization; cumulative program activity reached 6.0 million shares for $2.2 billion.
- **2026-05-05:** Indicor agreed to sell its instrumentation portfolio to AMETEK for about $5.0 billion enterprise value. Roper expected approximately $1.3 billion pretax and $1.1 billion after-tax proceeds, subject to closing adjustments, in the second half of 2026; Q2 2026 10-Q.
- **2026-07-23:** Q2 release disclosed 3.6 million shares repurchased for $1.2 billion. Cumulative program activity reached 9.0 million shares for $3.2 billion, more than 8% of prior shares outstanding.
- **Q2 2026 accounting effect:** the anticipated Indicor sale drove an $828.6 million fair-value increase inside the quarter's $835.2 million equity-investment gain. This is below-line and non-recurring; Q2 2026 10-Q.
- **2026-08-10:** Roper filed an 8-K for a 401(k)-plan recordkeeper transition from Vanguard to Fidelity. The participant blackout was expected to begin at 4:00 p.m. ET on September 25 and end during the week of October 18, 2026; directors and executive officers are restricted from certain transactions in employment-linked Roper equity during the blackout. This is an administrative plan event, not a suspension of the company's repurchase authorization.
- No CEO or CFO transition, financial restatement, material legal settlement, or new reportable-segment reclassification was identified in the controlling filings for the last 12 months.

10. Open data gaps

Gap	Classification	Sources and searches completed	Downstream treatment
Consolidated ARR dollars, net new ARR, and ARR by segment	True non-disclosure	2022/2023/2025 10-Ks, Q3 2025-Q2 2026 10-Qs, four transcripts; searched ARR, annual recurring revenue, net new ARR	Use audited recurring revenue and RPO; do not invent ARR
Consolidated NRR and churn series	True non-disclosure	Same sources; searched NRR, net retention, gross retention, churn, renewal	Use disclosed mid-90s enterprise GRR and selected business NRR only, clearly labeled
Brand-level revenue dollars	True non-disclosure	Segment notes, revenue-stream tables, four releases/calls; searched each major business name with revenue	Forecast from segment totals and sourced qualitative business drivers, not invented brand dollars
Customer count, seats, ACV, CAC, payback, magic number	True non-disclosure	Same official sources; searched customers, seats, ACV, ARPU, CAC, payback, magic number	Do not populate SaaS unit-economics fields
Roper IR presentation bytes in local archive	Not fetched / omitted	Q2 2026 live presentation and event page were opened through live web retrieval; direct static-file/event-page byte downloads were attempted twice and timed out	Presentation tables were verified live; archived SEC releases and FMP transcripts control local reproducibility
Individual business pricing metrics	True non-disclosure	Four calls and filings searched pricing, surcharge, ARPU, price	Use DAT ARPU direction and Neptune surcharge commentary only; no numeric enterprise price assumption
Customer concentration percentage	True non-disclosure	2025 10-K searched customer concentration, single customer, ten percent, 10% of total	Do not infer diversification solely from number of businesses
P&C insurer ownership perimeter	Not applicable	Roper is not an insurer or reinsurer	No Section 0b required

No open gap exists in the segment-profit-to-statutory-operating-income bridge. All five residuals are zero in each sealed period. The Q2 2026 FMP standalone row attached H1 denominator/EPS values; official standalone Q2 diluted shares of 100.6 million and EPS of $11.62 control. The non-comparable FMP FY2025 product aggregation remains explicitly excluded. No trade, order, sizing, portfolio action, or execution workflow was initiated; `trade_execution_authorized=false`.