THE OPERATOR ADVANTAGE IN VENTURE CAPITAL

Operator-Led Funds Are Outperforming Traditional
VCs by 1.7x in Early-Stage Returns

A White Paper

From the desk of Promise Phelon

Founder & Managing Director

Growth Warrior Capital

Dear Reader,

I've spent the last several years building Growth Warrior Capital on a simple thesis: Operators make better investors because we've actually done the job.

We haven't watched from the board seat. We've done it.

Operator investors have built sales teams from scratch. Fired executives who weren't working. Navigated churning enterprise customers at 2 a.m. Stared at a board deck, knowing the numbers wouldn't land.

For most of my career, the operator advantage felt obvious. Founders want investors who've sat in the chair. Hands-on support drives better outcomes.

But 'obvious' doesn't move institutional capital. Data does.

I kept asking: Where's the research proving the operator advantage? Then I found Sheila Trucco's published research in Capital Currents.

Sheila is one of the sharpest quantitative researchers in venture. She operates within a network of more than 200 Ph.D. researchers, and she'd done the work no one else had — synthesizing performance data on operator-led funds against traditional VCs, drawing on Cambridge Associates, Carta, SignalFire, PitchBook and more than two dozen LP interviews.

What you're about to read is her research — combined with my commentary on what the data means for founders, LPs and the industry. I also sat down to chat with her about her research; watch and listen to our insightful conversation on YouTube.

The headline: Operator-led funds are outperforming traditional VCs by 1.7x in early-stage returns. The advantage is structural, not cyclical. And it's widest in exactly the sectors where capital is flowing fastest.

Most institutional LPs already know this. Eighty-seven percent say they intend to commit capital — yet 75% of all venture dollars still flow to just 30 funds (Preqin H1 2025; Carta 2024). That gap between what LPs say and what they actually do is what this paper is really about.

— Promise

A note on methodology

The primary performance data in this report uses Total Value to Paid-In Capital (TVPI), which includes both realized returns and unrealized portfolio markups. Sophisticated LPs will note that TVPI can be influenced by valuation methodology; operator-led funds marking aggressively could inflate apparent outperformance.

A stronger test incorporates Distributions to Paid-In Capital (DPI), which measures only cash returned to investors. DPI is the metric institutional LPs weight most heavily — and the current market context matters. According to PitchBook-NVCA Venture Monitor data, cash flows to LPs have been negative $196.9 billion since 2022. This is the structural liquidity crisis that makes the operator advantage data even more urgent: Funds with faster paths to exit, fewer down rounds and stronger portfolio ARR growth are precisely what the LP community needs — and that's what the data shows operator-led funds delivering.

We expect DPI data, when available for this cohort, to further validate the operator advantage, given the exit multiple and down-round data presented in this report. The Cambridge Associates data referenced herein is proprietary and confidential; detailed vintage-level data was accessed through LP relationships. Public benchmark summaries are available in Cambridge Associates' archived reports.
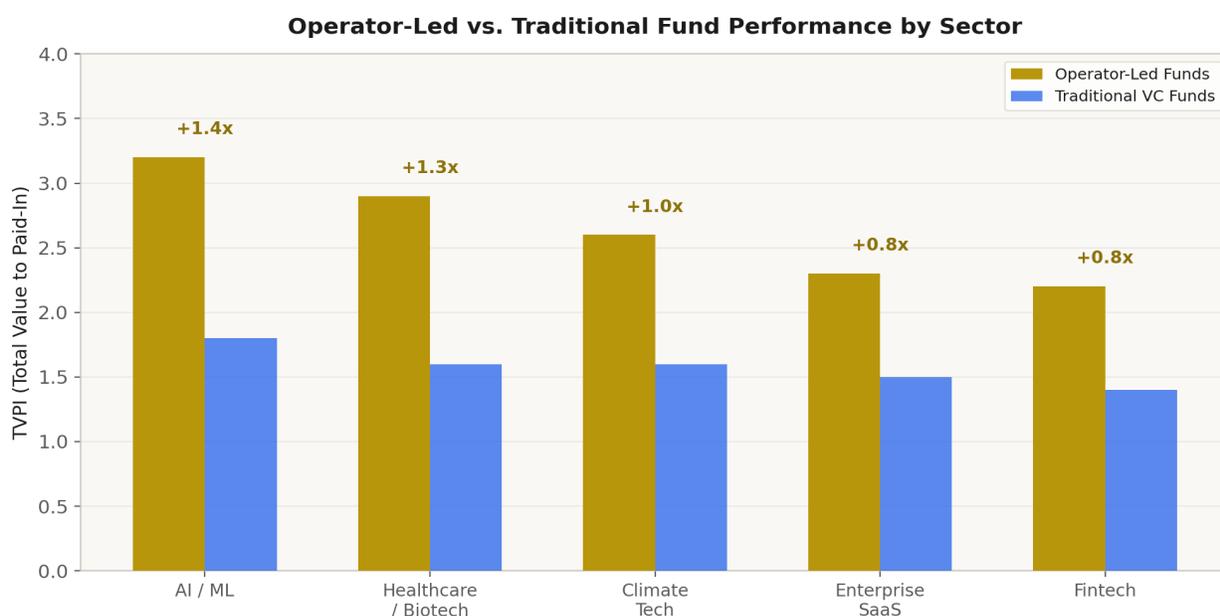
1. The Performance Gap

Venture capital has a performance problem. Most institutional LPs see the data — they just haven't acted on it yet.

According to Cambridge Associates, an analysis of 2022–2025 vintage funds reveals a compelling pattern: Operator-led funds are generating approximately 1.7x higher returns than traditional VC funds in early-stage (Seed and Series A) investing.

This outperformance is consistent across fund sizes, though most operator-led funds manage less than $200M in assets. The differential is particularly notable because it holds even during compressed exit environments.

When fewer companies go public or get acquired, the operator advantage becomes more pronounced, not less.

Source: Cambridge Associates Fund Performance Data, Q1 2025 (87 operator-led funds, 124 traditional funds, 2022–2025 vintages)

The AI/ML sector shows the widest performance gap at +1.4x TVPI, followed by healthcare/biotech at +1.3x. Even the narrowest gap — enterprise SaaS and fintech at +0.8x — represents material alpha for LPs. In a low-return environment, an extra 80% TVPI compounds significantly over fund lifecycles.

For a full discussion of data sources, TVPI vs. DPI methodology and the research validation underlying this report, see 'A note on methodology' on the preceding page.

2. Fund Size and the Scaling Paradox

The data on fund size and returns tells a stark story: The operator advantage is inversely correlated with fund size. Hands-on operational support — the core driver of outperformance — does not scale linearly with capital.

Fund Size vs. IRR Performance

Source: 7BC Venture Capital, Fund Size vs. IRR Analysis, 2025; Scientifica.ai analysis
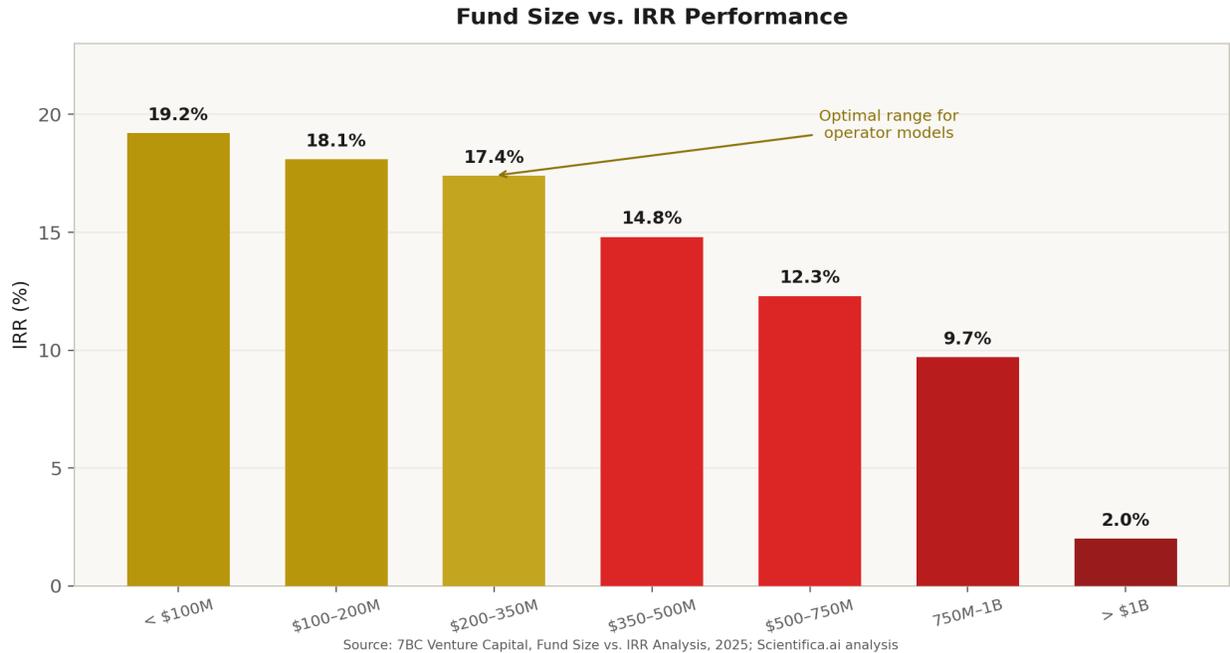
Funds under $350M deliver an average of 18.2% IRR. Performance declines sharply as fund size increases: $750M+ funds deliver approximately 9.7% IRR and funds exceeding $1B collapse to roughly 2.0% IRR. The Goldilocks zone for operator-led models is $50M–$350M — large enough for institutional credibility, small enough to stay hands-on.

2.1 The minimum viable operator fund

Everyone talks about how big is too big. But what about too small?

While the ceiling is well documented, the floor — the minimum fund size at which an operator-led model can credibly deliver on its hands-on promise — is equally important. The takeaway: Below $50M leaves a fund structurally under-resourced. You simply cannot hire the team, build the platform or sustain the hands-on engagement that defines the operator advantage. The 'minimum viable' label at $20M is technically true — but it's survival mode, not a model.

Fund Size	Annual Fee (2%)	10-Year Total	Team Capacity	Operator Viability
$10M	$200K	$2.0M	1 FT GP, lean ops	Marginal
$20M	$400K	$4.0M	1–2 FT GPs, lean ops	Minimum viable
$30M	$600K	$6.0M	2 FT GPs, basic platform	Viable
$50M	$1.0M	$10.0M	3–4 FT GPs, robust platform	Sweet spot floor
$75M	$1.5M	$15.0M	4–5 FT GPs, full platform	Fully resourced

Source: VC Lab fund sizing guidance; Scientifica.ai analysis

For industrial and robotics-focused funds specifically, the minimum effective size is likely higher — in the $30M–$50M range — due to longer deal cycles (18–24 months to product-market fit), more intensive technical due diligence requirements, greater complexity in supply chain evaluation and potential hardware prototyping support needs.

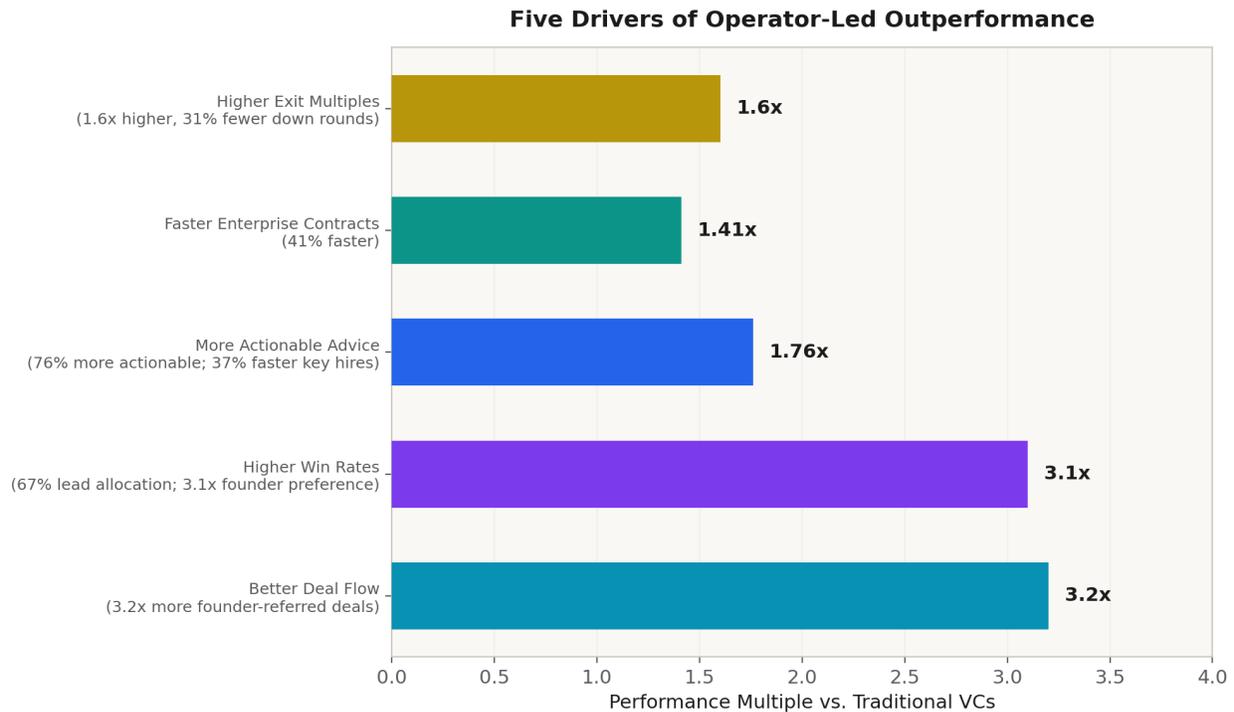## 2.2 Three models for scaling operational advantage

The most effective operator-led firms use a combination of three models to scale advantage without diluting quality.

- **Hero Model:** One or a few operators with deep domain expertise provide concentrated, high-conviction support. High impact per company but inherently limited portfolio breadth. Most common in sub-$100M fund sizes.

- **Ecosystem Model:** A broad network of operators with skin in the game. Scales relationship capital without diluting quality, but takes significantly longer to build.

- **Playbook Model:** Codified intervention frameworks triggered at critical inflection points — fundraising, GTM design, key hires, churn spikes. Allows firms to deploy pattern-matched expertise efficiently but requires customization for each company.

"The most effective firms use all three models in combination — custom playbooks triggered at critical moments, delivered through ecosystem relationships, guided by experienced operators."
— Sheila Trucco, Scientifica.ai

3. Five Drivers of Outperformance

Interviews with more than 25 LPs investing across both operator-led and traditional funds, combined with data from SignalFire, First Round Review, DocSend, NFX and Work-Bench, reveal five consistent drivers of the performance differential.

Five Drivers of Operator-Led Outperformance

Driver	Performance Multiple vs. Traditional VCs
Higher Exit Multiples (1.6x higher, 31% fewer down rounds)	1.6x
Faster Enterprise Contracts (41% faster)	1.41x
More Actionable Advice (76% more actionable; 37% faster key hires)	1.76x
Higher Win Rates (67% lead allocation; 3.1x founder preference)	3.1x
Better Deal Flow (3.2x more founder-referred deals)	3.2x

Sources: SignalFire, First Round Review, DocSend, NFX, Work-Bench, PitchBook, AngelList (2025)

Higher exit multiples for more aligned exit timing

Companies backed by operator-led funds achieve 1.6x higher exit multiples and 31% fewer down rounds, signaling stronger operational support throughout the company lifecycle. Their investors are 44% less likely to block founder-positive acquisitions (PitchBook, Q1 2025).

Why this matters: Operators don't hold companies hostage. They help founders build for exits that work, not exits that maximize VC fees.

Faster enterprise contracts for earlier revenue generation

Companies backed by operator-led funds secure enterprise contracts 41% faster (NFX 2025 Founder Satisfaction Survey; Work-Bench 2025 Enterprise Sales Benchmark Study).

Why this matters: Speed to revenue determines early-stage survival. Operators know how to navigate enterprise sales cycles because they've done it themselves.

More actionable, effective advice and support post-investment

Founders rate advice from operator-led investors 76% more 'immediately actionable.' Companies backed by operator-led funds also achieve 37% faster time-to-hire for key roles (NFX 2025 Founder Satisfaction Survey; Work-Bench 2025 Enterprise Sales Benchmark Study).

Why this matters: Operators provide guidance that founders can execute on immediately, not theoretical advice from the sidelines.

## Higher win rates as lead investor in competitive deals

When selected as lead investor, operator-led funds win allocation 67% of the time. In identical economics, founders select operator-led funds 3.1x more frequently (DocSend, April 2025).

Why this matters: Founders vote with cap tables. When the terms are the same, they choose operators.

Better deal flow for superior deal quality

Operator-led funds see 3.2x more founder-referred deals (AngelList 2025 Deal Flow Report). Additionally, 72% of founders prefer first outreach from former operators with relevant experience versus just 18% for established VCs with strong brands (SignalFire, 2025).

Why this matters: Founders don't refer bad companies to investors they respect and trust.

Founder-Preferred First Outreach from Investors
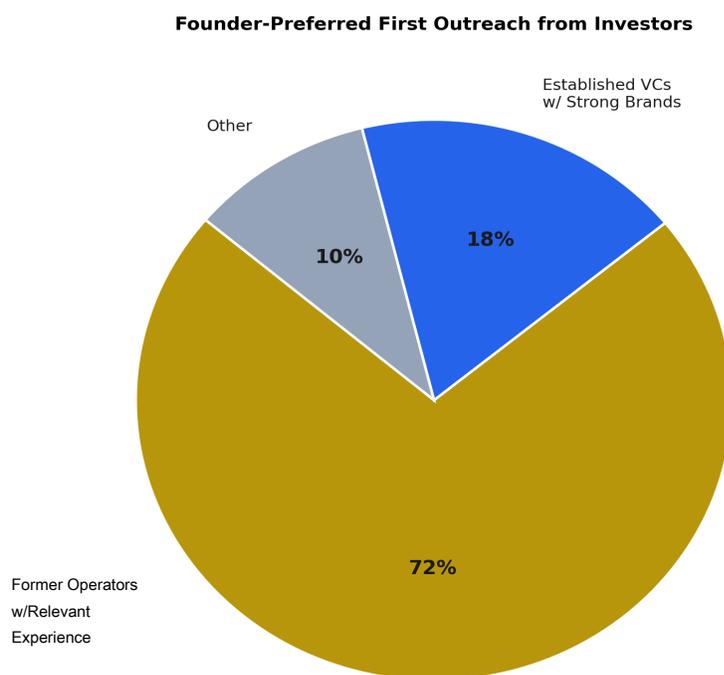
Source: SignalFire 2025 Founder Sentiment Survey

Note: The 'Other' category (10%) includes angel investors, accelerators, warm intros from advisors and other non-VC sources.

4. The Industrial Amplifier: Why the Operator Advantage Is Stronger in Hardware and Automation

While the operator advantage is documented primarily across software sectors, emerging evidence suggests it is amplified in the industrial, robotics and manufacturing technology sectors — where traditional VC pattern recognition is weakest and domain expertise matters most.

> *"Industrial AI is where I see the biggest information asymmetry right now. Most VCs simply cannot evaluate the technical moats of specialized robotics verticals, or how supply chain strategy and manufacturing operations create defensibility that traditional investors miss." — Sheila Trucco, Scientifica.ai*

Global robotics and industrial automation funding reached $2.26B in Q1 2025, with 70% flowing to specialized vertical robotics companies. By Q2 2025, deal value surged to $8.8B — a 170% quarter-over-quarter increase signaling massive, accelerating capital inflows into the sector.

Global Robotics & Industrial Automation Funding

Source: Crunchbase Robotics Reports, 2025
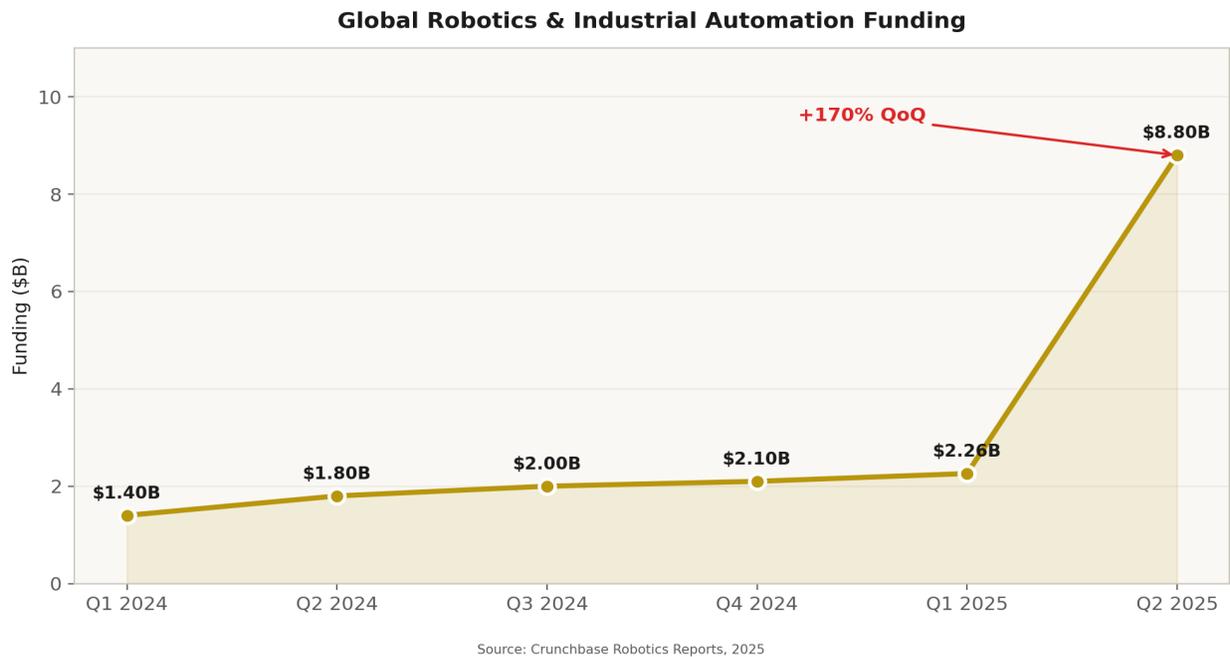
4.1 Why operator expertise is more critical in industrial sectors

The industrial sector amplifies the operator advantage for four reasons.

Differentiator	Why It Matters	Operator Edge
Technical complexity	Hardware, embedded systems and manufacturing require deep evaluation	Built and scaled physical products
Customer validation	Procurement cycles, plant-floor integration, operational ROI	Sold into industrial environments
Supply chain expertise	Tariff exposure, supplier concentration, geopolitical vulnerabilities	Understands how products move through global systems
Capital deployment	18–24 months to product-market fit vs. 6–12 for software	Patient capital with hands-on support

4.2 The geopolitical dimension

Industrial investors are now asking fundamentally different questions than their software-focused counterparts:

- What is your tariff exposure?
- How resilient is your supply chain?
- How exposed are you to geopolitical risk?

Answering such questions requires operational fluency that extends well beyond financial modeling. In sectors where less pattern recognition is available from existing VC datasets, operator expertise becomes not just an advantage but a prerequisite for sound investment judgment.

4.3 GWC and the industrial frontier

While operator-led funds have proliferated in software sectors, industrial automation remains dramatically underserved. Growth Warrior Capital is among the first dedicated operator-led venture firms applying this model specifically to the 4D Economy — backing companies that automate Dirty, Dull, Dangerous and Dated work.

In sectors where pattern recognition is still being built, operator expertise doesn't just help — it's the only way to evaluate deals properly.

"When there's less pattern recognition available, operator expertise matters more. In industrial sectors, especially robotics and automation, deep domain knowledge can become a true differentiator." — Sheila Trucco, Scientifica.ai

5. The Market Is Bifurcating

The venture capital market is splitting into two increasingly distinct worlds. Capital is concentrating at the top while new fund formation accelerates at the bottom — creating a structural tension with significant implications for LPs and founders.

In 2024, the top 30 funds captured approximately 70% of all venture capital raised (Carta). Simultaneously, micro funds ($1M–$10M) grew from 25% of new fund formations in 2020 to 42% in 2024 (Carta, Q1 2025). This bifurcation reflects diverging LP behavior.
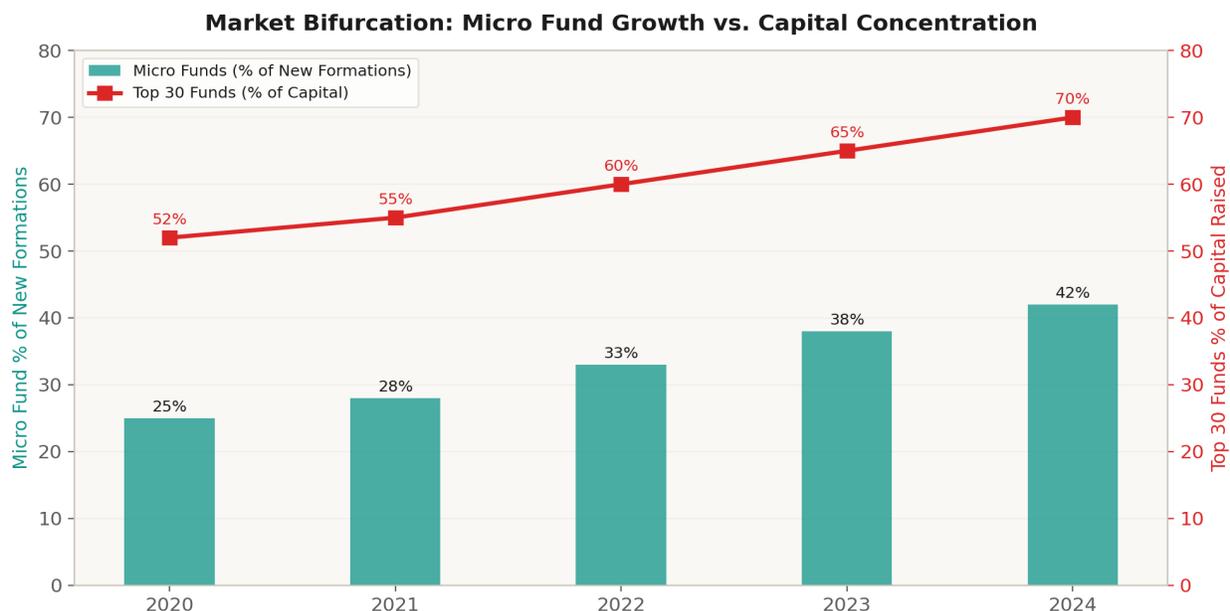
Source: Carta, VC Fund Performance Q1 2025

Institutional LPs continue to double down on mega funds, driven by deployment requirements, liquidity preferences and the comfort of established brands. For many allocators, a predictable 8% return is preferred over a volatile but potentially superior 17% return. **Traditional incentive structures reward consistency over outperformance.** Allocators are not personally penalized for missing top-decile returns, but they are penalized for non-consensus bets that underperform.

Family offices and high-net-worth individuals are increasingly backing operator-led emerging managers. These investors diligence differently, evaluating revenue models, founder capabilities and operational theses rather than AUM and brand recognition. Many come from operating backgrounds themselves — they recognize the signals that operator investors identify because they've built companies themselves.

5.1 The intention-action gap

Here's the number that matters most: 87% of institutional LPs say they intend to commit capital to alternative assets in 2025. Yet 75% of all venture dollars still go to just 30 funds. Andreessen Horowitz alone raised over 18% of all U.S. venture capital dollars allocated in 2025 (Ben Horowitz, a16z blog, January 2026).

The gap between what LPs say and what they actually deploy tells the real story. Institutional capital hasn't moved proportionally because of structural barriers — minimum check sizes that exceed many emerging fund capacities, liquidity requirements that favor larger vehicles and an incentive structure that does not personally reward allocators for outperformance.

The allocators who close this gap first will capture the best emerging managers before they're oversubscribed.

> *"Institutional LPs will feel more confident seeing year after year how performance gets maintained. It's like building reputation — those big brands started small, too. A16Z started small and created a reputation. When you start doing your own due diligence and looking for information advantages, you see it." — Sheila Trucco, Scientifica.ai*

5.2 Durability under pressure: what the data suggests

Institutional LPs worried about the current exit environment have a legitimate question: Do operator-led funds hold up during downturns?

The definitive study hasn't been done yet — but the proxy data is compelling. The Cambridge Associates historical analysis (1981–2010) shows smaller funds outperformed in 19 of 30 vintage years, spanning multiple cycles including the dot-com crash and the 2008 financial crisis. Companies backed by operator-led funds experience 31% fewer down rounds and demonstrate 2.2x higher pivot success rates (NFX; PitchBook) — both direct indicators of durability under compression.

The hypothesis is clear: Operator investors help portfolio companies cut burn intelligently, extend runway and make the strategic pivots that determine survival. That's not a board-seat skill. That's a CEO skill.

GWC's Operator Advantage research series will explore downturn durability in a future report. Sign up for early access by emailing promise.phelon@gwc.vc.

6. Implications

6.1 For limited partners

The performance data is clear. Operator-led funds are outperforming — structurally, not cyclically — in exactly the sectors where capital is flowing.

You already know this. Eighty-seven percent of you told Preqin you intend to commit capital. So why hasn't it moved?

Three reasons. None of them are about performance.

1. You'd rather write one $50M check to Sequoia than ten $5M checks to emerging operators — even though the math favors the latter.

2. Career risk: You won't get fired for picking a brand name.

3. Your incentive structure rewards predictable mediocrity over volatile excellence.

The best emerging managers are raising now. By the time you have 'more DPI data,' they'll be oversubscribed and closed to new LPs.

> **ACTION PLAN FOR LPs**
> • Start with $1M–$5M across three to five operator-led funds in Fund I or Fund II stage.
> • Build the relationships. Request quarterly portfolio company operational metrics — not just financials.
> • Watch the performance. Then scale into the next fund when you have conviction.

Or wait three years for the DPI data to confirm what the TVPI already shows — and miss the window entirely.

6.2 For founders

Capital is a commodity. Operational partnership is the differentiator.

The data is clear: **Companies backed by operator-led funds close enterprise contracts 41% faster, hire key executives 37% faster and exit at 1.6x higher multiples.** They also experience 31% fewer down rounds — which means operator investors are less likely to destroy your cap table when things get hard.

How do you find the right operator investor? Ask these questions in your first meeting:

"What revenue did you personally own?"

Not: Were you involved in sales? Ask: Did you carry quota? Run a P&L? Get fired if the number didn't hit? If they haven't felt that pressure, they can't help you navigate it.

"Who's in your network that you've worked with at three or four companies?"

High-currency introductions come from repeated relationships, not conference handshakes. If their 'strong network' is people they met at demo days, it's not a network. It's a contact list.

"When's the last time you disagreed with a founder you backed, and how did it play out?"

Good operators push back when it matters. If they say 'We're always aligned,' they're either conflict-averse or providing theoretical advice, not operational support. You want someone willing to have the hard conversations.

Operator investors matter most when:

> • **You're hiring your first sales leader.** They've done it. They know what good looks like.

> • **Enterprise sales are stalling.** They can diagnose pipeline problems in 20 minutes because they've lived through every failure mode.

> • **Your board is pressuring you to cut burn, but you know you need to invest in product.** Operators understand trade-offs. Traditional VCs optimize for their fund, not your company.

For industrial and hardware founders specifically, the stakes are higher. Your path to product-market fit is 18–24 months, not 6–12. Your supply chain is geopolitically exposed. Your customers need proof-of-concept deployments before they'll commit.

You don't need an investor who 'gets hardware.' You need an investor who has sold into manufacturers, navigated plant-floor integration and understands why a six-month procurement cycle isn't a bug — it's the reality of enterprise industrial sales.

The question isn't 'who has the biggest brand?' It's 'who has done what I'm trying to do?'

6.3 For the industry

The venture ecosystem needs both mega funds and operator-led funds. But let's be clear about what each does well.

Mega funds make frontier bets possible. Investments like A16Z writing a $500M check into Anthropic create companies that redefine industries. Those bets require patient capital, longer time horizons and tolerance for spectacular failures. That's institutional capital doing what it does best.

Operator-led funds are building the next 10,000 category leaders. They're automating logistics, rebuilding manufacturing software, replacing manual processes in healthcare. These companies need $3M seed rounds, hands-on GTM support and investors who know how to navigate 18-month enterprise sales cycles — not $100M Series A rounds and a board seat they'll rarely show up for.

6.4 What happens next

The market is bifurcating: mega funds getting bigger, emerging managers proliferating at the bottom and the middle getting hollowed out. Eighty-seven percent of institutional LPs say they intend to commit capital. Actual allocations haven't moved proportionally. The gap between intention and action creates an opening.

Family offices move first. They're already backing operator-led emerging managers because they diligence on fundamentals, not AUM. Many are former operators themselves — they recognize the signals.

Institutional LPs will follow, but slowly. The allocators who move now will capture the best emerging managers before they're oversubscribed. The ones who hesitate will find those managers already at capacity.

The healthiest outcome isn't one model replacing another. It's institutional capital recognizing that operator-led funds are a distinct asset class with structurally superior returns in early-stage investing.

The data proves it. The window is open. The question is how long institutional capital takes to act on it.

What's Next

This white paper is Part 1 of GWC's Operator Advantage series.

Also coming in Q1–Q2 2026:

- **Playbook #1:** How operators become investors (building an operator-led firm from scratch)
- **Playbook #2:** How LPs should diligence operator-led funds (what to ask, what matters)
- **The List:** Top 25–50 operator-led VCs we love (curated, updated quarterly)
- **Future research:** Operator-led fund durability in downturns and compressed exit environments

Want early access? Email promise.phelon@gwc.vc and request to be added to our early access list.

LP Insight roundtables: Quarterly invite-only sessions for institutional LPs exploring operator allocations. Limited to 12–15 participants per session. Email promise.phelon@gwc.vc to express interest.

About the Authors

Promise Phelon

Founder & Managing Director, Growth Warrior Capital

Promise Phelon built Growth Warrior Capital to be the firm she wished she'd had as a founder — operator-led, hands-on, same side of the table. Nearly 20 years as a CEO, CRO and COO across five exits and an IPO gave her 100-plus battle-tested GTM playbooks. She deploys them directly into the portfolio, driving outcomes like 10x revenue growth in 18 months and gross margin shifts from 35% to 80%. Based in San Francisco, the Growth Warrior Capital team invests exclusively in enterprise and industrial AI — backed from first close by institutional LPs who recognized that operator credentials produce superior returns.

Sheila Trucco

Researcher & Venture Investor, Scientifica.ai / Capital Currents

Data first, opinion second.

Sheila is a researcher and venture investor operating through Scientifica.ai within a network of more than 200 Ph.D. researchers — an interdisciplinary studio model combining research, technology development and venture investment. Her expertise spans dynamic pricing models, risk management systems and the application of quantitative science to early-stage companies.

She publishes the Capital Currents newsletter, delivering data-driven analyses of venture capital trends, institutional capital allocation and emerging manager dynamics. Her research on operator-led fund performance has become a reference point for LPs and GPs evaluating the structural shift toward operational expertise in venture investing.

Previously, Sheila co-founded a fintech company embedding machine learning models into regulated financial products and served as a strategy consultant to Fortune 500 companies including MetLife and major banks across the Americas and Europe.

About Growth Warrior Capital

Growth Warrior Capital is a venture capital firm focused on industrial AI and automation through its 4D Economy thesis: backing companies that automate Dirty, Dull, Dangerous and Dated work.

GWC takes a concentrated approach — 12–15 companies per fund — and deploys what founder Promise Phelon calls **Precision GTM**: a systematic methodology for diagnosing and unlocking go-to-market advantages at the exact moments that determine whether a company scales or stalls.

From first close, GWC attracted 90% institutional backing from Amazon, Bank of America, Pivotal Ventures, George Kaiser Family Foundation and Bessemer Venture Partners — alongside world-class venture investors including Altos Ventures, Foundry and Vista Equity.

Portfolio companies have demonstrated significant ARR growth under GWC's operational partnership model, with multiple companies tracking to strong revenue milestones in 2026.

In a market where everyone claims to add value, GWC is built on a simple premise: The investors who've actually done the job are the ones who can help founders do it better.

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Data combines public sources and research conducted by the organizations referenced. Performance data uses TVPI unless otherwise noted; DPI analysis would provide additional validation. Prepared by Growth Warrior Capital in collaboration with Scientifica.ai, March 2026.