How a cold reach-out from a VC algorithm kickstarted fertility startup Legacy's fundraising push

Khaled Kteily, founder CEO of Legacy. Legacy

- **Male fertility startup Legacy just raised $7.5 million from investors like Samsung Next Ventures.**
- **TRAC, a VC firm that makes its investment decisions with an algorithm, kickstarted Legacy's raise.**
- **It's the latest example of how AI is supercharging — and disrupting — venture capital.**

Legacy wasn't planning on raising more venture funding when an algorithm selected the startup for investment.

The at-home sperm testing company had previously grabbed $45 million from top VC firms like Bain Capital Ventures and FirstMark Capital, plus celebrity investors like Justin Bieber, The Weeknd, Orlando Bloom, and DJ Khaled.

Then, in April, AI-powered VC firm TRAC sent Legacy a cold email offering to give the company more cash.

TRAC's algorithm had selected Legacy as an attractive investment target, with high marks on criteria like the quality of its existing investors and its position in a fast-growing subsector, TRAC told Business Insider.

All Legacy founder and CEO Khaled Kteily had to do was fill out some forms — which he said took him an hour — and TRAC returned the same week with a $1 million offer.

"From a founder perspective, this is the dream," Kteily said.

The offer from TRAC spurred Legacy into action. The startup has now closed on $7.5 million in SAFEs, or simple agreements for future equity, which gives Legacy funding now in exchange for future shares in the company.

Samsung Next Ventures and other new and existing investors participated in the funding efforts alongside TRAC.

As AI overwhelms new VC investments, TRAC has taken the frenzy a step further in selecting all its bets with a proprietary algorithm. The firm stands out among a growing coalition of VC firms handling key portfolio management tasks with AI.

"I could imagine these algorithms being the right hand of investors, to source and figure out good deals," Kteily said. "And then a person is taking over to build those relationships."

Legacy ships its kits to patients' doors for sperm analysis and freezing. Legacy

Legacy's spot in the male fertility market

The cash infusion was a welcome offer for Legacy, which has its sights set on growth. The $7.5 million raise brings the startup to profitability, Kteily said.

Founded in 2019, Legacy last grabbed a $25 million Series B led by Bain Capital Ventures in May 2022.

The startup provides sperm testing and freezing, facilitated by at-home kits shipped to patients' doors. Kteily said Legacy has processed 25,000 sperm samples to date.

Male fertility has been on the decline for decades — the average sperm count has halved in the last fifty years. Yet while several companies have notched billion-dollar valuations to provide fertility care to women, the male fertility market hasn't seen the same boom.

Kteily wants to change that.

"Our prediction has always been that within five years from now, sperm freezing will be as normal for someone to talk about as egg freezing is today," he said.

Legacy plans to use much of the $7.5 million cash infusion to power two large contracts with the US Department of Veterans Affairs.

The startup also plans to launch 23andMe-style reports later this year to give patients insights into their health based on their sperm quality.

Legacy's team. CEO Khaled Kteily said its $7.5 million raise has brought the startup to profitability. Legacy

When AI picks investments

TRAC, founded in 2020, has been picking up steam for its AI-powered approach to venture bets — a model it calls "Moneyball for venture capital."

That model relies on five metrics, two of which correspond to a startup's existing investors. TRAC has a list of about 300 investors it calls "SuperForecasters," which it identifies as exceptionally successful early-stage backers. Legacy, according to TRAC managing partner Fred Campbell, has two SuperForecasters on its cap table.

TRAC's biggest challenge, Campbell told BI, isn't selecting its investments — it's fighting to get into those hot deals.

Campbell thinks AI will significantly cut the number of people needed in VC if algorithms can pick a limited partner's bets with the same or better returns than human investors.

But AI can't quite replace the relationships or reputations that impact which firms end up on the cap table.

"That's probably why you're paying a VC, because you can't get into the deals you want to get into, and Sequoia can," Campbell said.