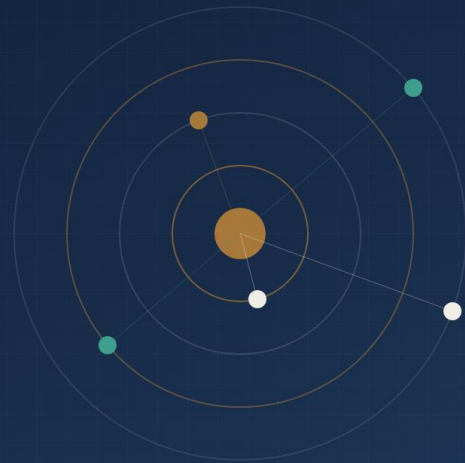


Gonagoor
Angel Network

Incubating deep technology, hands-on



Case study

From technical insight to investable company

How the Gonagoor Angel Network incubated Vayuvya through six layers of hands-on support

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A select circle of technologically inclined angels backing the next wave of deep technology

Abstract

The core argument

Deep-technology founders rarely fail because the science is wrong. They fail in the gap between a strong technical idea and the wide range of capabilities needed to turn it into a company: leadership, first-principles rigour, simulation, non-dilutive funding, investor readiness and a route to market. Incubation closes that gap by supplying those capabilities together, at the moment the venture needs them.

Vayuvya entered the Gonagoor Angel Network as an early-stage deep-technology venture. Deep technology has long build cycles, high technical risk and capital needs that arrive before revenue. A founder team is typically strong in one or two of these areas and thin in the rest. Left alone, the team spends its scarce first year learning to run a company rather than proving its technology.

Gonagoor responded with a structured incubation programme. Its angels in this case, Prashanth Raghu himself did not act as passive investors. He took a working role as technology leader and mentor, and capital was deployed gradually, at an average of Rs. 2.5 lakh a month over the first year, so that funding followed the venture's real milestones. This case study documents six layers of that support and what each one gives a deep-tech venture.

Vayuvya had a young team which lacked the experience and exposure needed to develop deep technology ventures such as gas turbines. Vayuvya also needed a program that could help structure the product from the lab to the customer's use case. Gonagoor structured the program, by virtue of its proprietary Physics Engine to help accelerate the development of the micro gas turbine by over 1100pc reducing lead time to less than one year. Backed by world class simulation, digital twins and precision manufacturing support, Gonagoor ensured these to be developed in a matter of 18 months, leading to both steady customer base and Angel investment of 3Crores (0.28M\$).

Why incubation, not just capital

- **Capability gap.** Founders need a CEO, CTO and marketing head on day one and can afford none of them full time.
- **Time gap.** Deep-tech milestones are measured in years, while a cheque runs out in months. Support must stretch the runway and de-risk each stage.
- **Readiness gap.** Investors back proof and preparation. Ventures that arrive without either are passed over, however good the science.

At a glance

Item	Detail
Venture	Vayuvya Raksha Systems Pvt.Ltd.
Sector and technology	Defence, Micro Gas Turbines
Stage at entry	Idea only.

Item	Detail
Network framework	Capital of Rs. 60 lakh to Rs. 1 crore per venture, with a minimum raise of Rs. 30 lakh used over 12 months
Angel role	Technology leader and mentor, working inside the venture
Support layers	Fractional leadership, first-principles development, simulation, grants, funding preparedness, go-to-market

1. Fractional CEO, CTO and marketing support



The need

A deep-tech venture such as Vayuvya, needed seasoned leadership across strategy, technology and market from the first month, but the early team can rarely afford three senior executives. The founders end up stretched across roles they have not held before, and decisions on hiring, architecture and positioning are made without experience behind them.

What Gonagoor provided

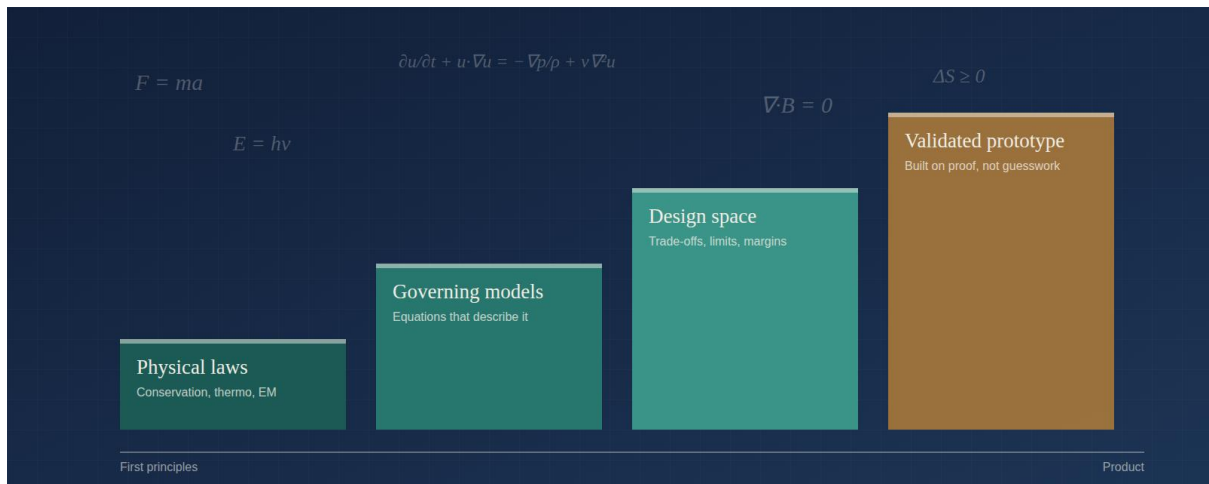
- **Fractional CEO.** Sets the operating rhythm, guides hiring and governance, and shapes the financing plan and investor narrative.
- **Fractional CTO.** Reviews architecture and the R&D roadmap, sets technical milestones and keeps engineering choices tied to what the market will pay for.
- **Fractional marketing lead.** Defines positioning and messaging, builds the early brand and turns technical strengths into a story customers understand.

Value to Vayuvya

Vayuvya gains a full leadership bench for a fraction of the cost, and its founders stay focused on the technology while experienced hands run the company around them.

Outcome to record: Cost reduction by 180pc and complete needed support for rapid entry to the market.

2. First-principles development support



The need

Development of microgas turbines needs solid first principles thinking, strong strength in the fundamentals of mathematics, physics, aerospace engineering and manufacturing. Vayuvya received the support from Gonagoor's proprietary Physics Engine enabling the creation of adaptable engines suitable for every aircraft design.

What Gonagoor provided

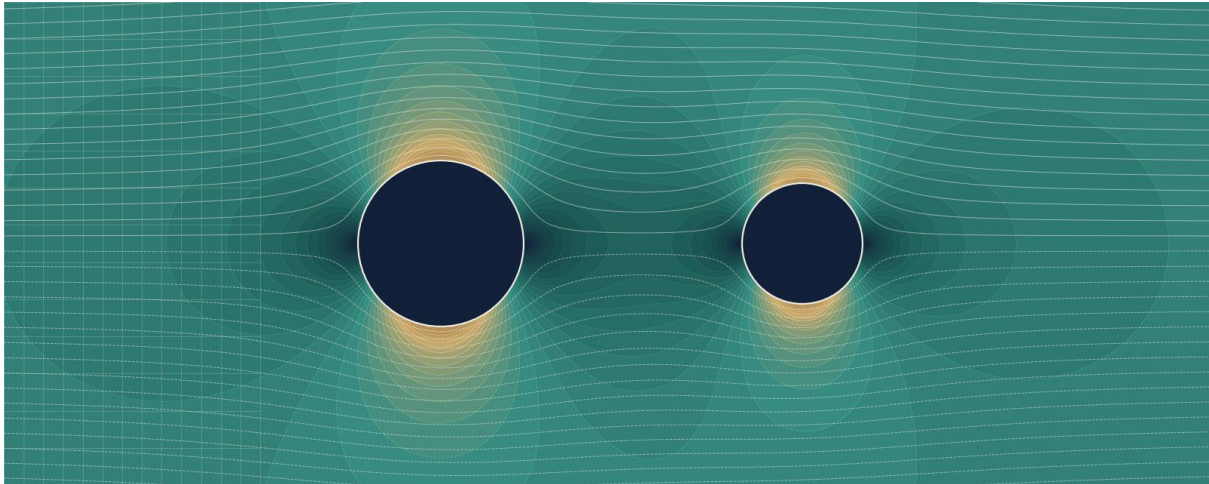
- **Research-led foundations.** Gonagoor's own research work is used as the starting point, so Vayuvya builds on established fundamentals rather than repeating them.
- **Model from the ground up.** Core behaviour is derived from governing laws, and each assumption is written down and tested.
- **Limits and margins.** The team maps performance limits and design trade-offs early, so effort goes where the gains are real.

Value to Vayuvya

Vayuvya's design decisions rest on understanding rather than imitation. That shortens the path to a prototype, lowers technical risk and creates intellectual property that is defensible.

Outcome to record: Reduction of GoToMarket from 6 years to 1.5 years a 400pc gain.

3. Support for world-class simulations and AI powered Digital Twins



The need

Physical prototypes are slow and expensive. Without strong simulation, a deep-tech team must build to learn, and each wrong turn costs weeks and capital. Simulation at a professional standard needs specialist skill and tooling that a young venture does not have. Powered by the Gonagoor Digital Twin framework, Vayuvya could rapidly test and iterate design variations at a fraction of the cost enabling highly relevant and accurate designs, faster to the market.

What Gonagoor provided

- **Simulation setup.** Gonagoor helps define the right physics, meshes, boundary conditions and solvers for each design question.
- **Validation.** Models are checked against theory and test data, so results can be trusted and shown to customers and investors.
- **Design iteration.** Hundreds of variants are explored virtually, and only the strongest go on to be built.

Value to Vayuvya

Vayuvya tests ideas at the cost of computing time instead of hardware. Fewer physical builds, faster learning and credible evidence of performance follow.

Outcome to record: 80pc cost reduction due to digital twin and structured simulation frameworks enabled by Gonagoor.

4. Grant support



The need

Government and institutional grants can fund deep-tech research without giving up equity, but the programmes are many, the applications are demanding and the timelines are tight. Small teams often miss them, or apply too late, or write proposals that do not match what reviewers score.

What Gonagoor provided

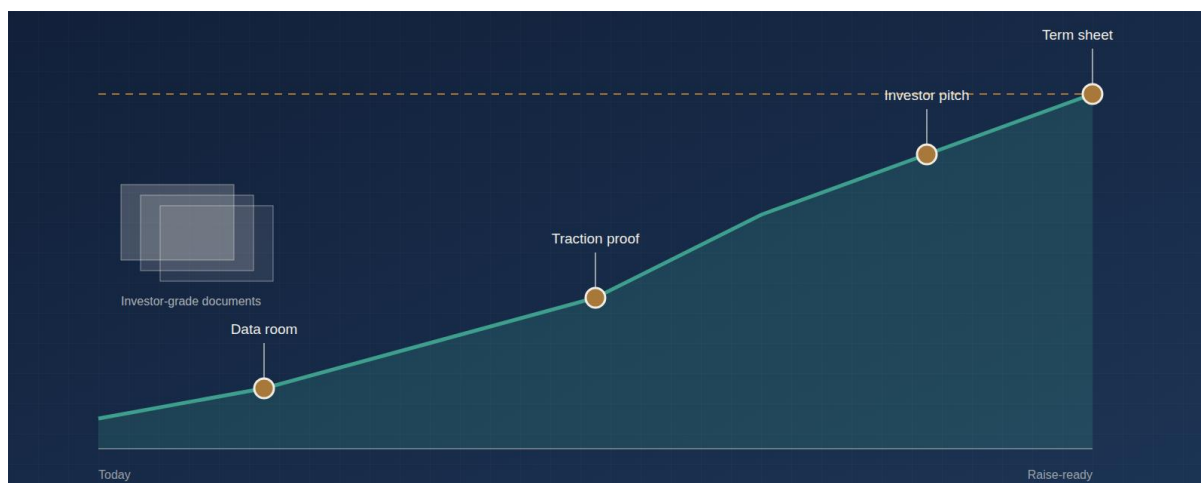
- **Opportunity mapping.** Identifies the grants, challenge programmes and research schemes that fit Vayuvya's stage and technology.
- **Proposal craft.** Angels with technical depth help frame the problem, the innovation and the milestones so the case is clear to reviewers.
- **Compliance and reporting.** Supports budgets, documentation and periodic reports so funds keep flowing once awarded.

Value to Vayuvya

Non-dilutive funding extends Vayuvya's runway and keeps more ownership with the founders. A grant award also acts as an independent stamp of technical merit.

Outcome to record: Gonagoor also provided a seed capital of Rs. 61 lakh for the team.

5. Funding preparedness



The need

Investors decide quickly and reward preparation. Ventures that reach a pitch without clean financials, a clear cap table, a defensible market case or organised diligence documents lose momentum, and sometimes the round.

What Gonagoor provides

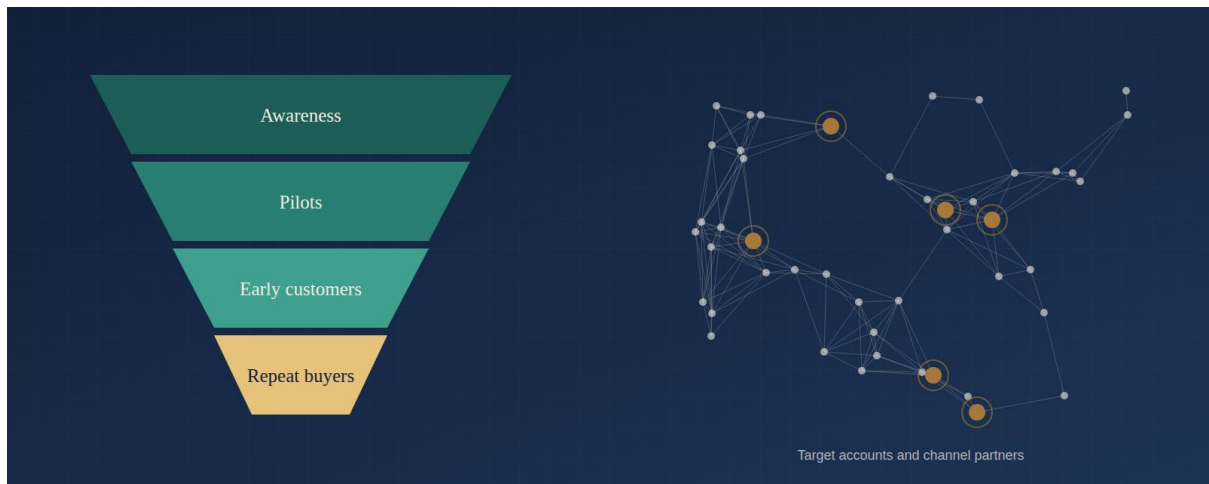
- **Data room.** Builds an organised diligence folder covering technology, IP, legal, financial and team records.
- **Financial model.** Prepares a realistic plan tied to technical milestones, with runway, use of funds and return scenarios.
- **Pitch and introductions.** Sharpens the narrative through rehearsal and opens doors to the right investors through the network.

Value to Vayuvya

Vayuvya reaches investors ready for diligence, with proof points in hand. That improves the chance of closing and the terms on which it closes.

Outcome to record: Rs. 3.5 raised by the team.

6. Go-to-market support



The need

A superior technology does not sell itself. Deep-tech buyers are cautious, sales cycles are long and the first customers are the hardest to win. Without a deliberate route to market, strong products stall at the pilot stage.

What Gonagoor provides

- **Customer discovery.** Identifies the first target segments and tests the value proposition with real buyers before scaling spend.
- **Pilot to purchase.** Structures pilots with clear success criteria so trials convert into paid contracts.
- **Channels and partners.** Uses the network's contacts to reach target accounts and to find distribution and integration partners.

Value to Vayuvya

Vayuvya moves from working technology to paying customers with a plan, not by chance. Early revenue and references then strengthen every later fundraise.

Outcome to record: 12 customers globally ready to acquire micro gas turbines.

Summary and way forward

The six layers of support work as one system. Leadership keeps the venture organised, first-principles work and simulation make the technology sound, grants stretch the runway, funding preparedness earns investor confidence and go-to-market turns the product into revenue.

Support layer	Risk it removes
Fractional CEO, CTO, marketing	Leadership gaps and poor early decisions

Support layer	Risk it removes
First-principles development	Flawed design assumptions
World-class simulation	Costly physical trial and error
Grant support	Early cash pressure and dilution
Funding preparedness	Failed or weak fundraises
Go-to-market	Stalled pilots and slow sales
Ecosystem development	Manufacturing and Govt systems enabled for acceleration.

The model in one line

Angels who are technologists invest capital and time together. That combination is what lets a young venture grow into a company that creates lasting value.