



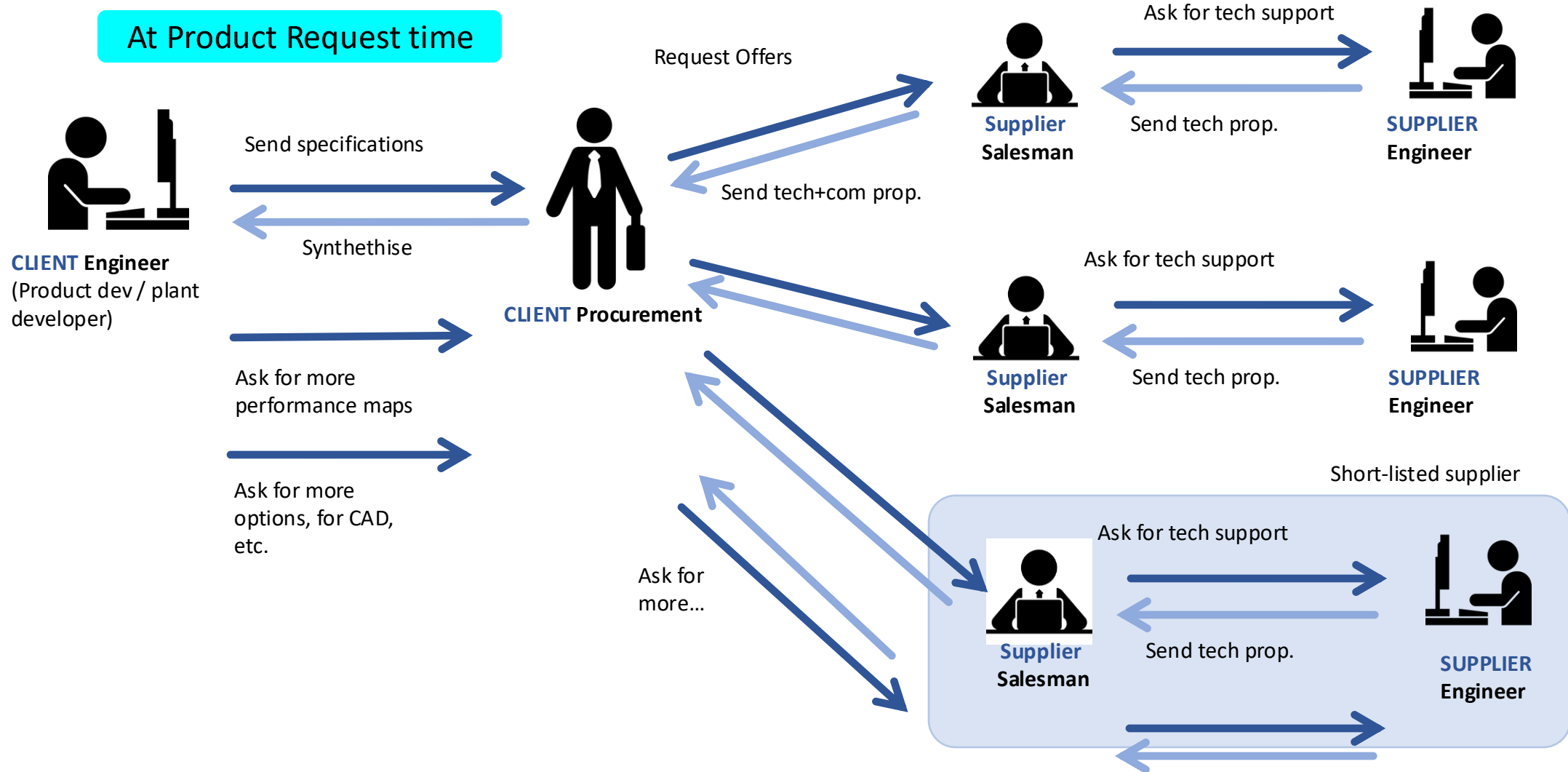
AlphaVantor

Efficient Store for Industrial Products



Currently, Buying Industrial Products is tedious.

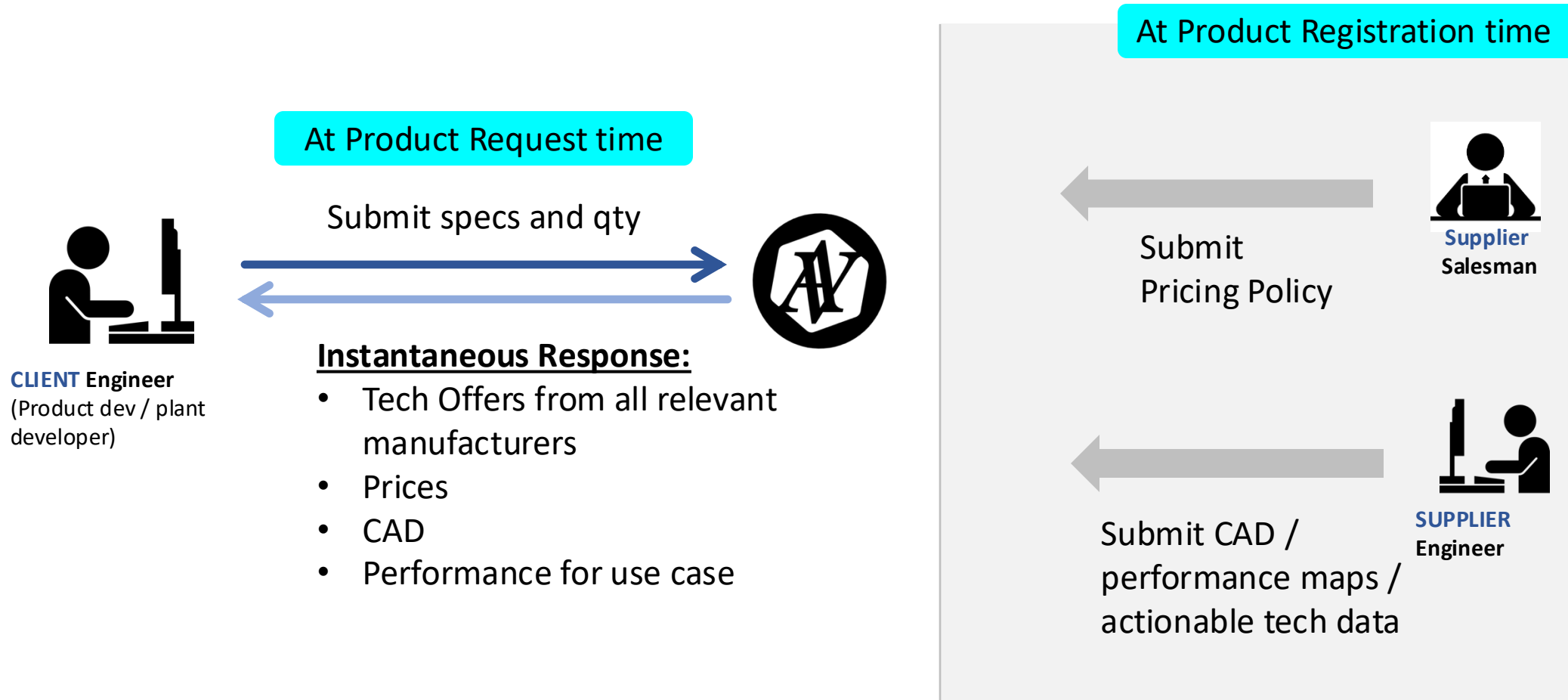
1



So many people involved, so many backlogs...
...hindering development speed, pushing costs up



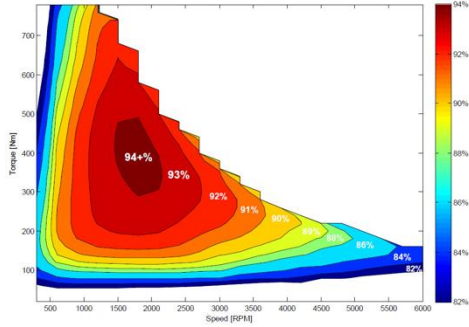
AlphaVentr Marketplace brings Efficient Procurement 2



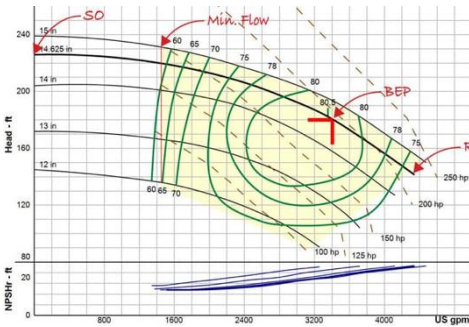
Efficient infrastructure enables efficient stores



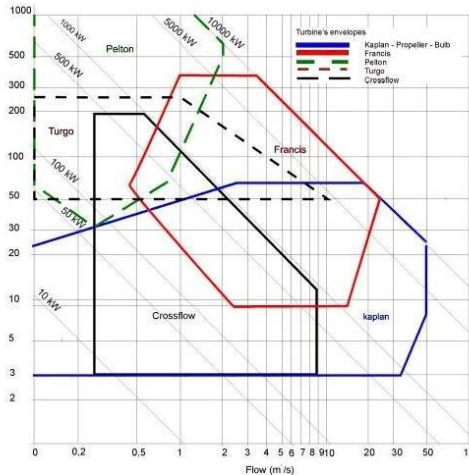
The backlog... ...and Why AlphaVantor can do it



Most characteristics map are weirdly defined

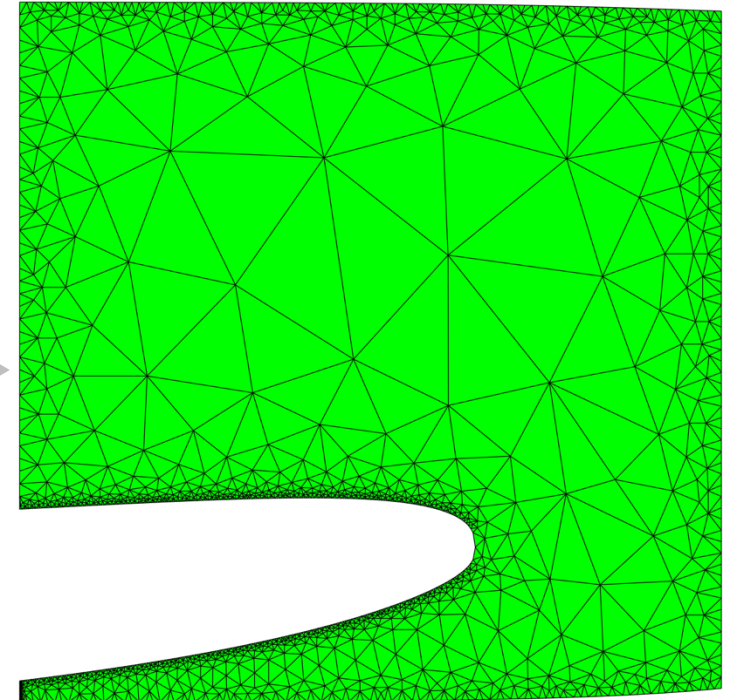


Requires “universal” all terrain interpolator that fits almost any data.



AlphaVantor leverages suchan interpolator, developed 10y ago for thermodynamics fluid properties

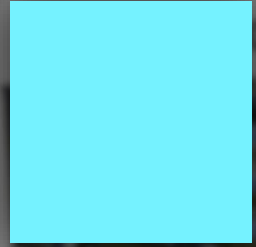
Unlocked!





AlphaVentor Platform

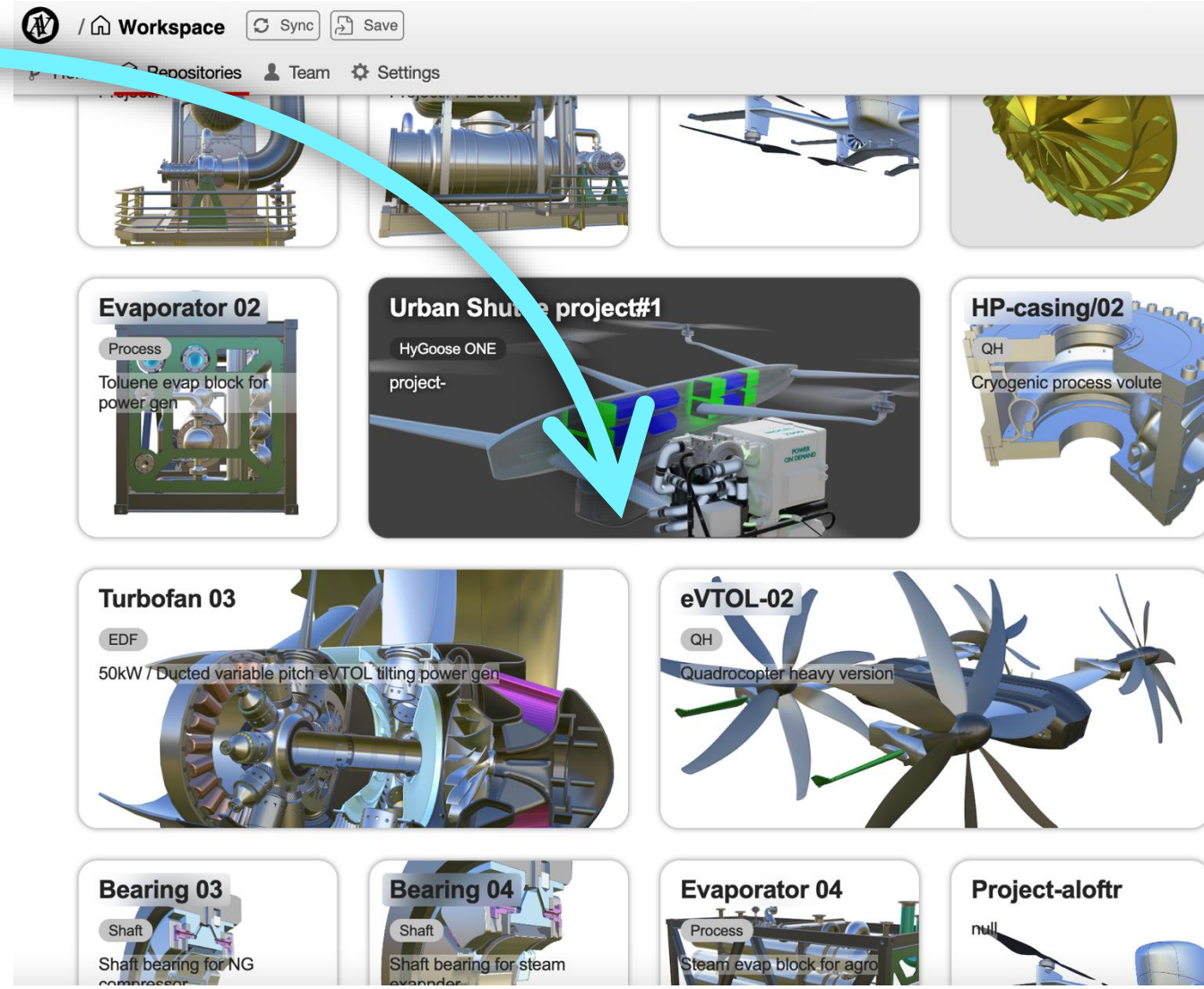
3



The Platform

ALL your technical procurements on progress are
one click away:

- **Wherever** you are (Office, remote working, conference, client meeting, exhibition centres)
- **Whoever** you are (R&D engineer, Sales person, manager, marketer, plant worker)
- **Whatever** you want to do (simply showing the objects, calculating a performance, double-check a plan before an assembly operation, re-design a critical parts, etc.)



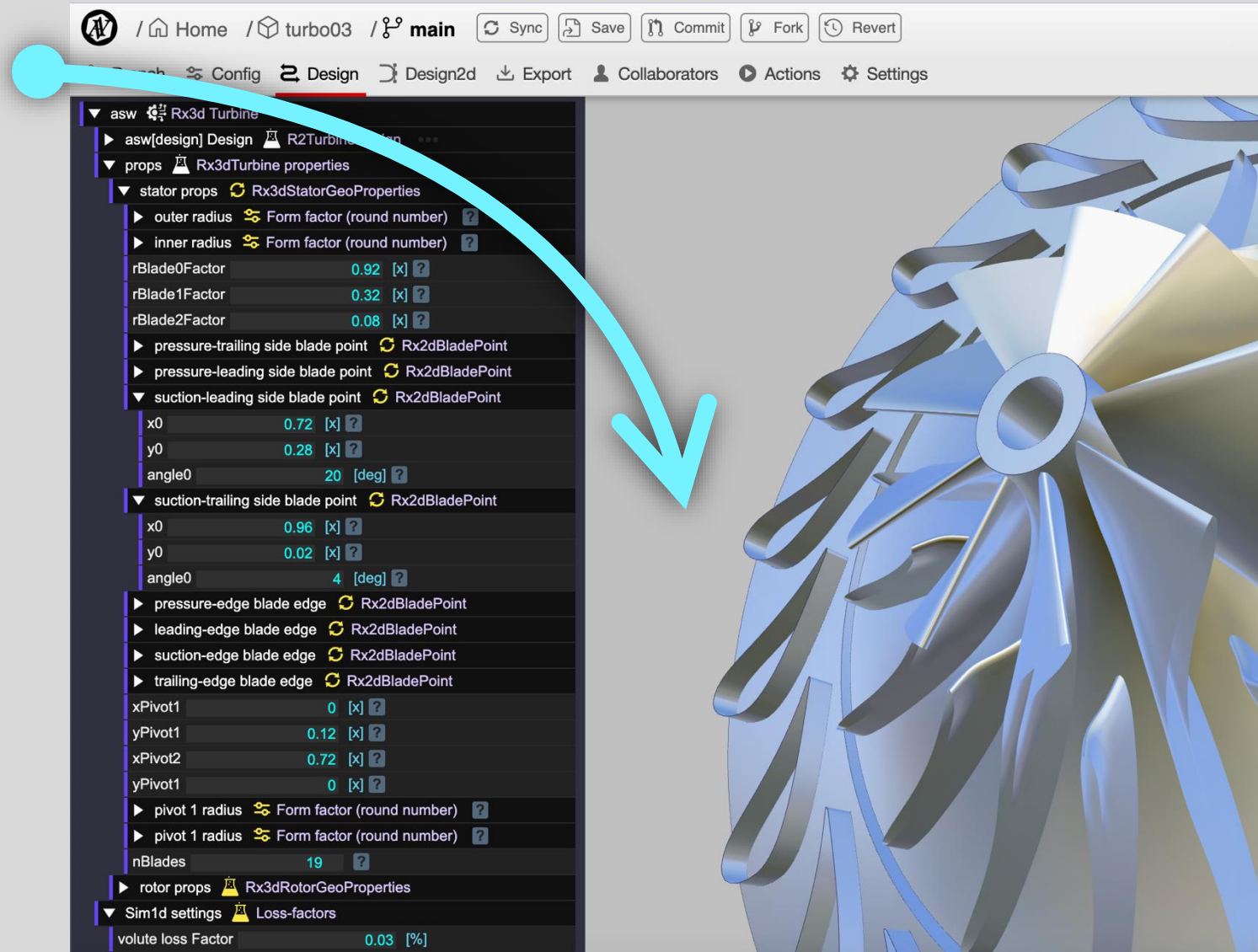


AlphaVantor : DESIGN, DOWNLOAD

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Enable Who you choose (internal, partners, clients) to:

- Directly **Generate the products** while enforcing the rules and methodology you defined
- **Iterate** at will
- **Take-over** the results you allowed (results spreadsheets, CAD files, special formats for external simulation, etc.)





AlphaVentor : CONFIGURE, RATE

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Enable Who you choose (internal, partners, clients) to:

- Quickly generate rich interface simple interface that can be used by clients to **FINE TUNE** its configuration
- **Rate** the product for its use case
- **Dive** into results ranging from wrap-up to maximum details, according to company disclosure & marketing policy.

The screenshot shows the AlphaVentor configuration interface. At the top, there's a navigation bar with options like Home, nano172kg, main, Sync, Save, Commit, Fork, and Revert. Below the navigation bar, there's a 3D model of a drone. To the right of the drone, there are configuration options for the 'Capacitors Pack' and 'Batteries Pack'. The 'Capacitors Pack' section includes options for 'Burst01 [64u]', 'Burst01 [92u]', 'High01 [32u]', and 'High01 [64u]'. The 'Batteries Pack' section includes options for 'none' and 'Long01 [10u]'. A large blue arrow points from the text 'Enable Who you choose (internal, partners, clients) to:' towards the configuration options.

| Variable | Value | Unit |
|---------------|-------------------|------|
| Burst01 [64u] | 426 kW / 7.1 kWh | |
| Burst01 [92u] | 613 kW / 10.2 kWh | |
| High01 [32u] | 186 kW / 12.4 kWh | |
| High01 [64u] | 372 kW / 24.8 kWh | |

| Variable | Value | Unit |
|--------------|-----------------|------|
| none | | |
| Long01 [10u] | 33 kW / 6.7 kWh | |

The screenshot shows the AlphaVentor configuration interface with various controls and outputs. On the left, there are 'Flight Controls' and 'Course Controls'. The 'Flight Controls' section includes payload, battery charges, and fuel charge. The 'Course Controls' section includes skyline height, airfield radius, cruise altitude, cruise speed, distance, ascending speed, descending speed, ascending radius, and descending radius. On the right, there are 'Outputs' and 'Take-off Outputs'. The 'Outputs' section includes trip, energy, and take-off outputs. The 'Take-off Outputs' section includes trip, energy, and take-off outputs. A large blue arrow points from the text 'Dive into results ranging from wrap-up to maximum details, according to company disclosure & marketing policy.' towards the 'Take-off Outputs' section.

| Variable | Value | Unit |
|----------------------|--------|------|
| payload | 172 kg | ✓ |
| Battery#1 charge @t0 | 95 % | ✓ |
| Battery#2 charge @t0 | 75 % | ✓ |
| Fuel charge @t0 | 75 % | ✓ |

| Variable | Value | Unit |
|-------------------|----------|------|
| Skyline Height | 350 m | ✓ |
| AirField radius | 30 m | ✓ |
| Cruise altitude | 500 m | ✓ |
| Cruise speed | 60 m.s-1 | ✓ |
| Distance | 200 km | ✓ |
| Ascending Speed | 4 m/s | ✓ |
| Descending Speed | 3.2 m/s | ✓ |
| Ascending radius | 1200 m | ✓ |
| Descending radius | 1200 m | ✓ |

| Variable | Value | Unit |
|---------------------|------------|------|
| Travel time | 59m : 6s | |
| Average speed | 56.39 km/h | |
| Total aircraft mass | 674 kg | |
| max x acceleration | 0 g | |
| max z acceleration | 0 g | |

| Variable | Value | Unit |
|---------------------------------|------------|------|
| Total energy supplied | 24.94 kWh | |
| Total energy consumed | -90.41 kWh | |
| Energy from Burst Batteries | -1.5 kWh | |
| Energy from Endurance Batteries | 0.67 kWh | |
| Energy from fuel | -89.57 kWh | |
| Max power | 201.31 kW | |
| max lifters power | 150.73 kW | |
| max pushers power | 119.84 kW | |

| Variable | Value | Unit |
|--------------------|------------|------|
| avg ground speed | 0.09 m.s-1 | |
| avg vertical speed | 2 m.s-1 | |
| Total flight time | 2m : 55s | |

| Variable | Value | Unit |
|-----------------------|------------|------|
| Total energy supplied | 6.51 kWh | |
| Total energy consumed | -11.03 kWh | |
| Max (peak) power | 146.33 kW | |

| AlphaVantor : and so much more to come...

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We have a super rich to-do list of high value features that will be added to the platform step by step:

End 2024

Assemblies for Power, Oil&Gas industries

Leveraging platform following already existing capacities:

- Ultra fast thermo properties
- Super large assemblies
- Merged geometry & physics objects

Mid 2025

Lab for Heavy drones

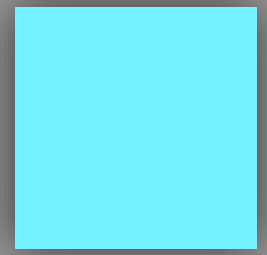
Leveraging platform following already existing capacities:

- Blade element Propeller simulation tools
- Fast editions of geometric assembly
- Fast performance map interpolators

2026

AI-powered auto-design

Leveraging platform components and element simulation capabilities



The Business Model



AlphaVentor : **BASE PLAN**

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~\$50k

ONE TIME FEE (+ ADDED FEATURE)

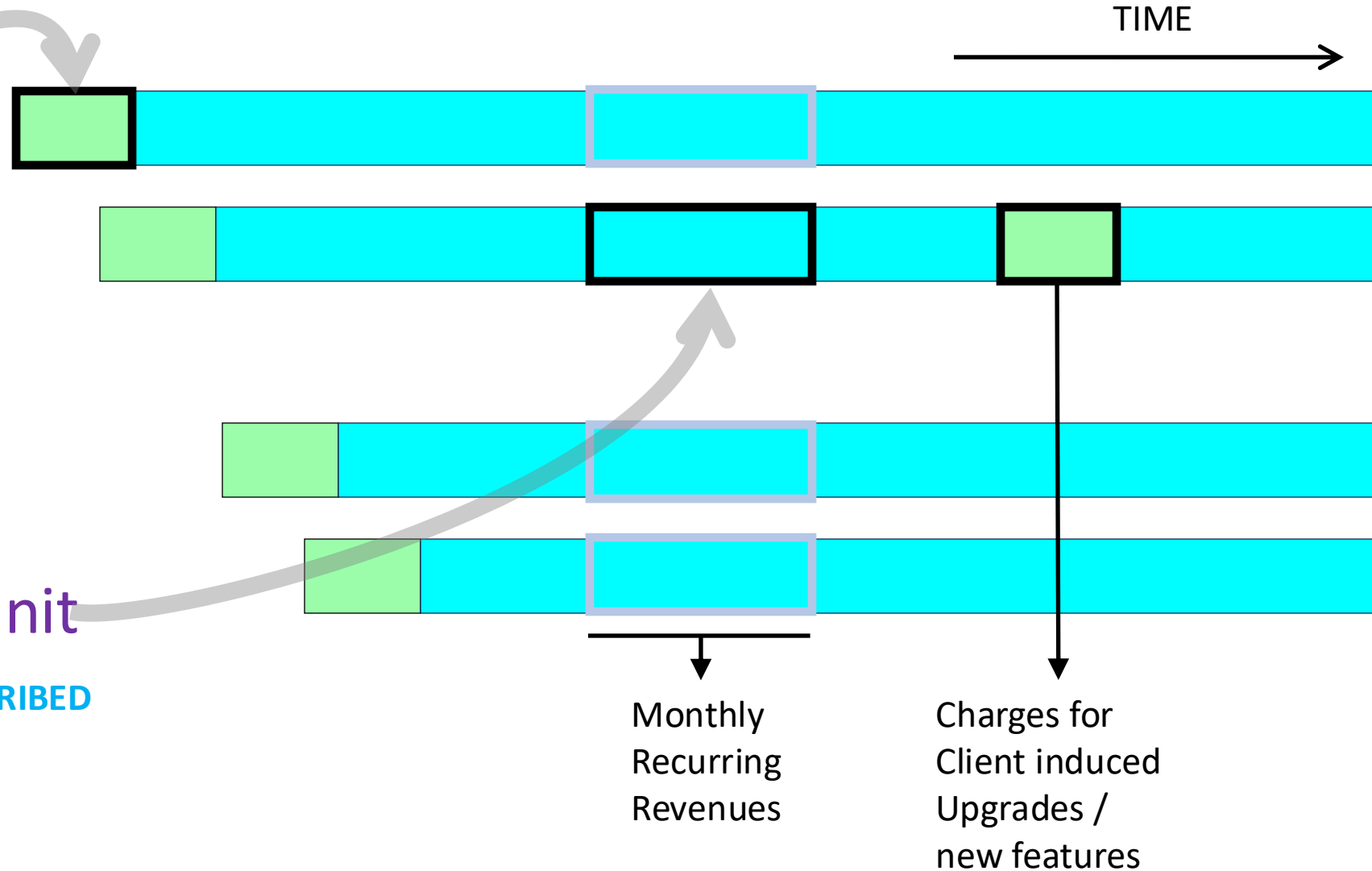
To have your product business line on the Platform (cover dev cost / engineering expertise). Adjustable per complexity level

~\$2k /month /unit

BASED ON NUMBER OF UNITS SUBSCRIBED

1 UNIT =

- Unlimited bandwidth
- Max 64 concurrent users /unit
- High responsiveness





AlphaVentr : **ENTERPRISE PLAN**

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~\$2M+

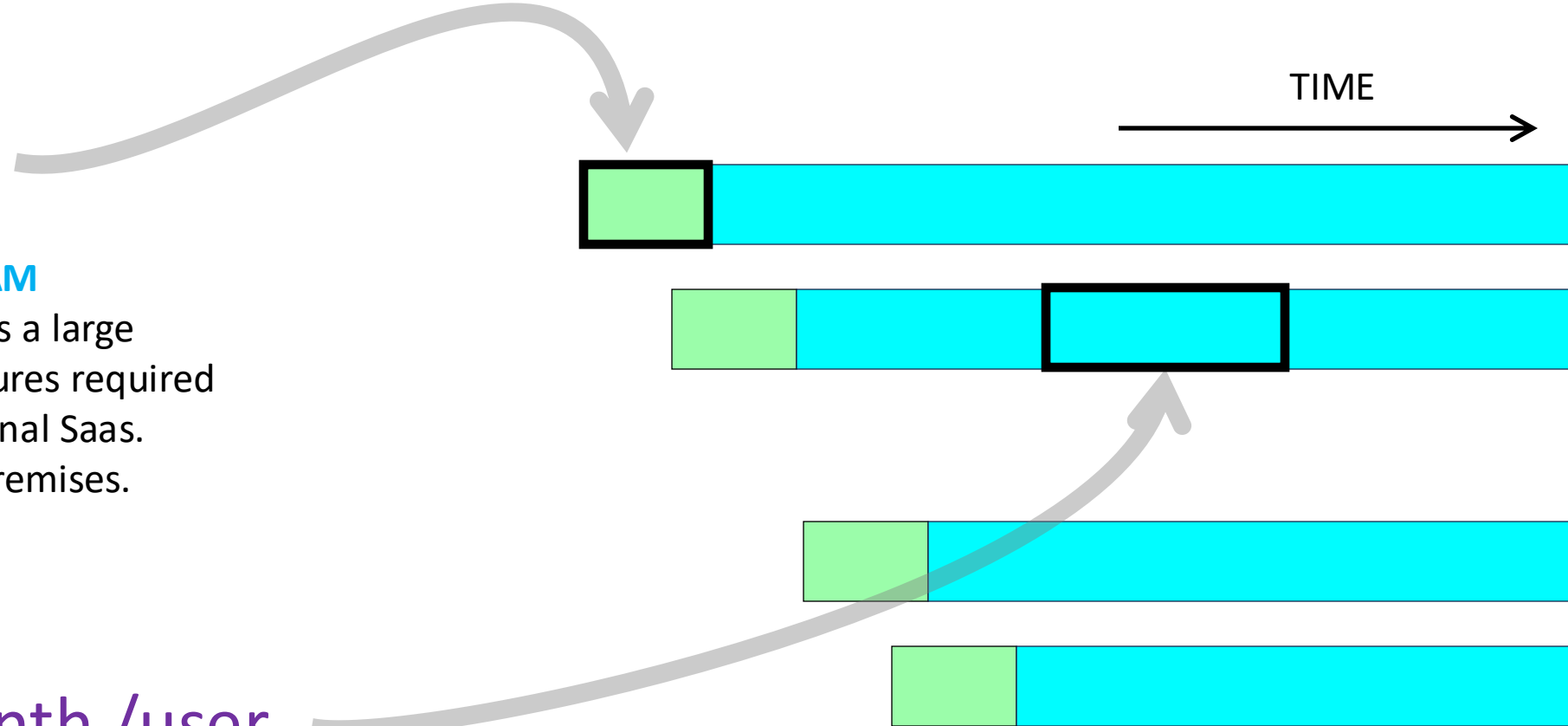
BESPOKE DEV TAILORED TO TEAM

- Specific development enables a large company to have all the features required in a seamless dedicated internal SaaS.
- Servers can be installed on premises.

~\$128 /month /user

Per seat maintenance pricing

- Unlimited bandwidth
- High responsiveness





AlphaVentor : Market

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Manufacturing output
World > \$16,083 B /y

China > \$4,909 B
France > \$908 B

- Sales Expense as % of Revenues > 8%
- Fraction of market where solution is applicable > 1/4

Total Available Market:
\$320B/y

Serviceable Available
Market

\$180B/y

- Europe & Asian markets serviceable
- SaaS model enables fast region servicing
- North America Market uncertain

Serviceable Obtainable
Market

\$24B/y

- Front runner premium
- Critical mass => “Winner takes all” platform aspect
- Disruptive tech stack ensures better performance and reduced dev costs

Sources:

<https://www.entreprises.gouv.fr/files/files/etudes-et-statistiques/chiffres-cles/2018-chiffres-cles-industrie-manufacturiere.pdf>



Paris

Paris Office

Thermodynamics

Turbomachine designs

- 1 previous experience as CEO & CTO of tech (turbomachine) company
- Engineering degree from Ecole Polytechnique, Ecole des Ponts et Chaussées.
- Master of Public Affairs.
- French Science Academy price (E. Riveau)

Shanghai Office

Co-founder

CEO AlphaVentor China

- 1 previous experience as CEO & CTO of tech (turbomachine) company
- PhD in aeronautics at Université Libre de Bruxelles and Beihang University,
- Experts in Helicopter Propulsion and Industrial Turbine
- Author of 5 SCI in Turbine Aerodynamics and Design



Shanghai