



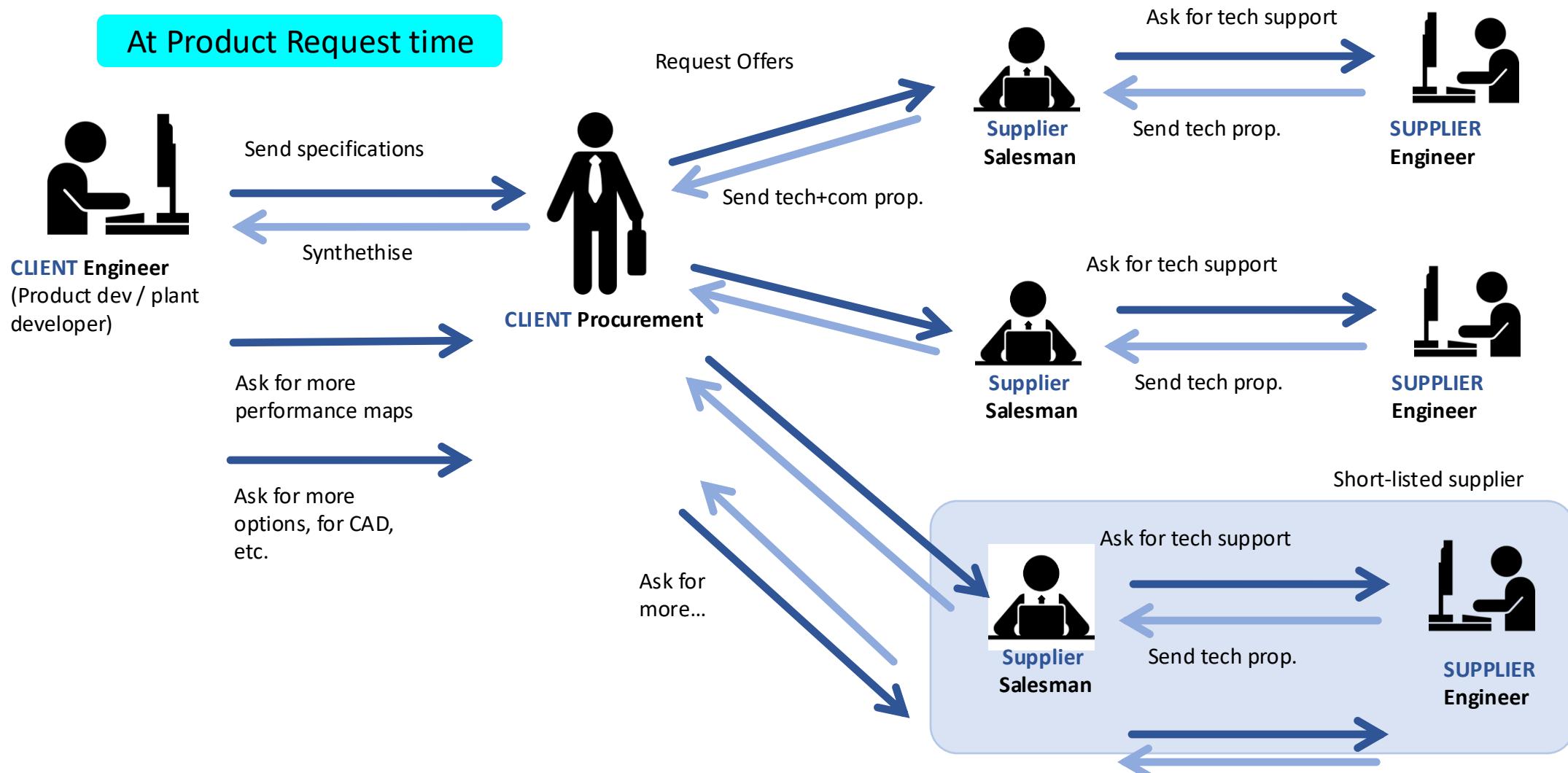
AlphaVentor

Efficient Store for Industrial Products



Currently, Buying Industrial Products is tedious.

1

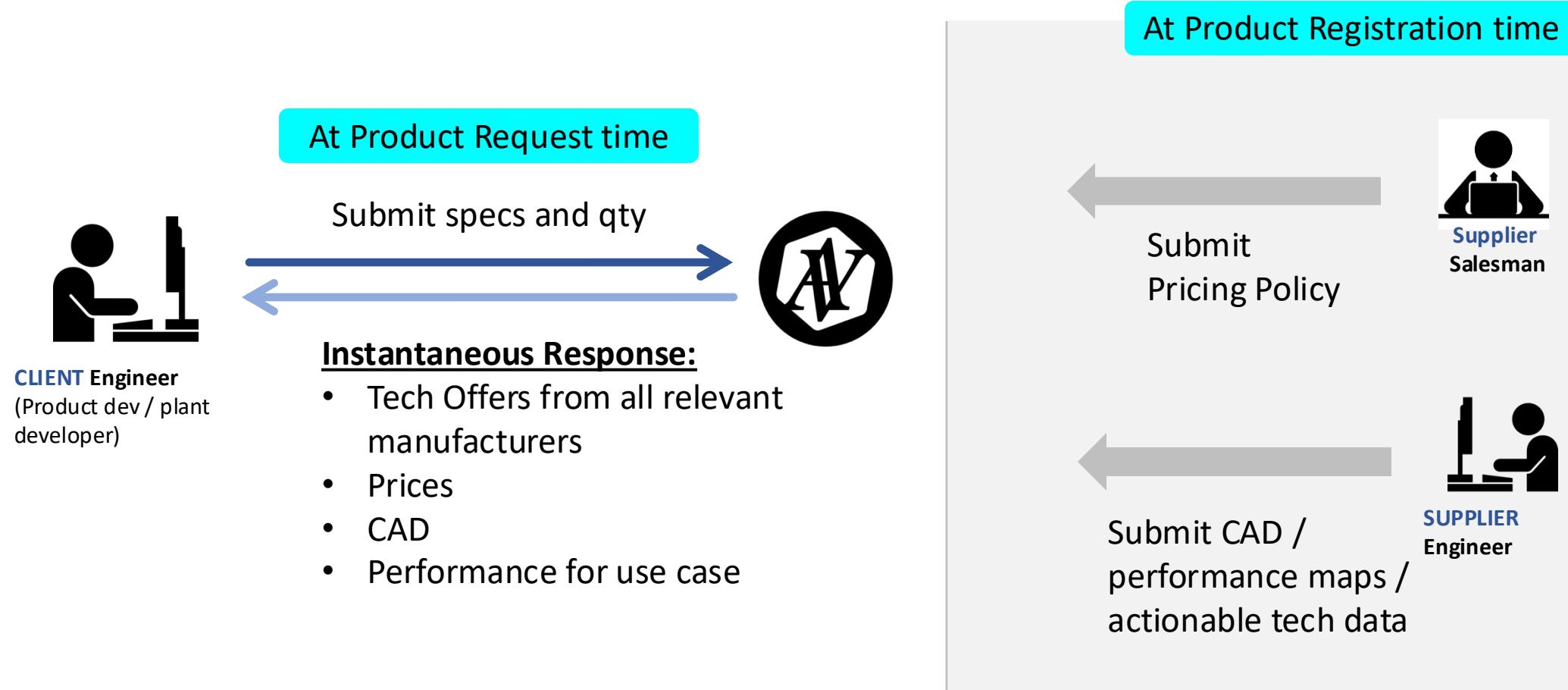


So many people involved, so many backlogs...
... hindering development speed, pushing costs up



AlphaVentor Marketplace brings Efficient Procurement

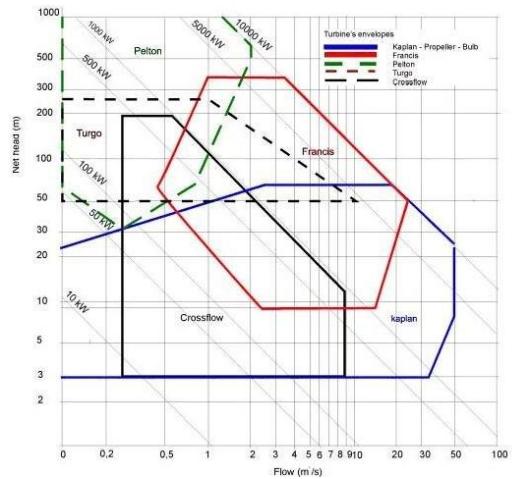
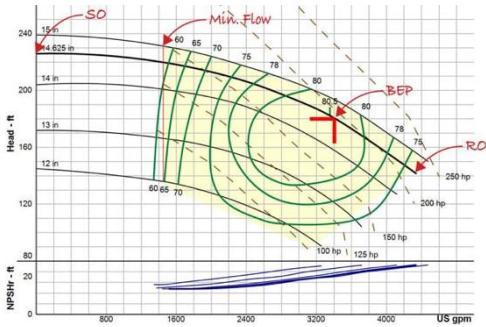
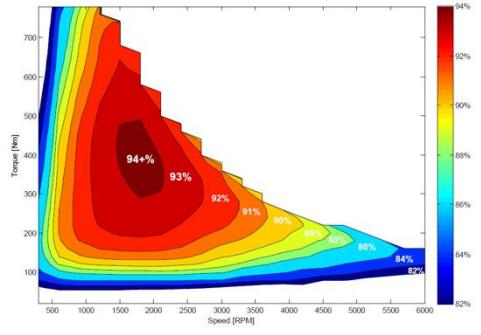
2



Efficient infrastructure enables efficient stores



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



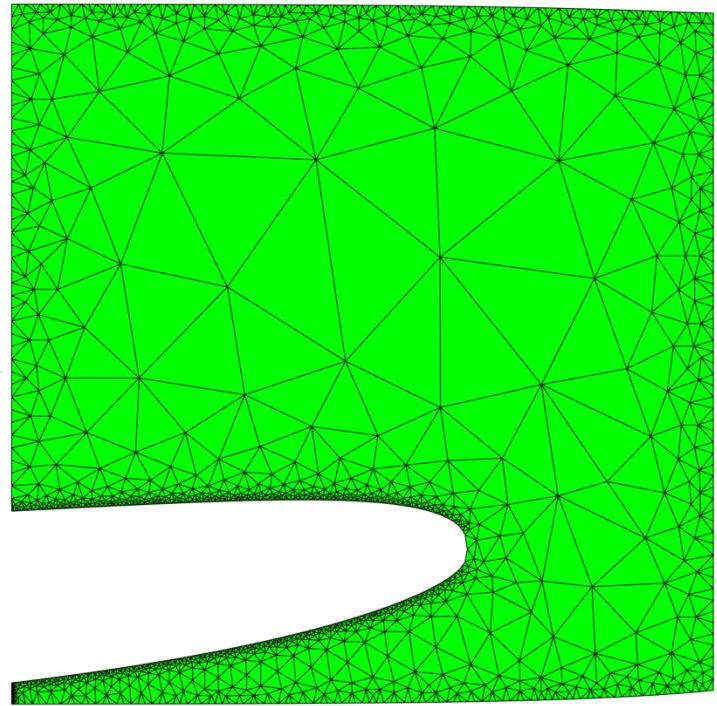
Most characteristics map are weirdly defined



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



AlphaVentor leverages such an interpolator, developed 10y ago for thermodynamics fluid properties



Unlocked!



Alphaventor Platform

3

The Platform

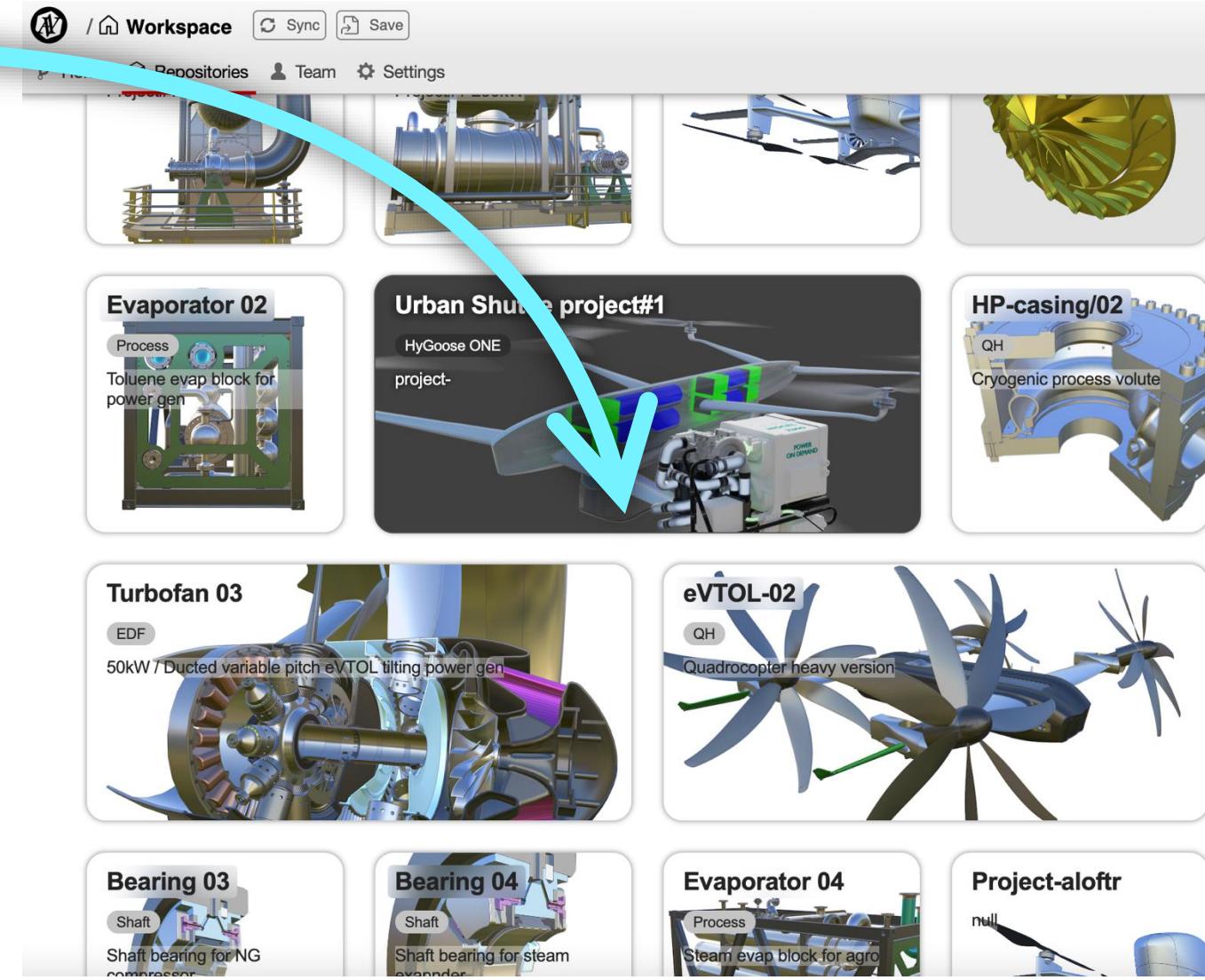


AlphaVentor : BROWSE, ACCESS, SHARE

4

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 enginner, 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, redesign a critical parts, etc.)



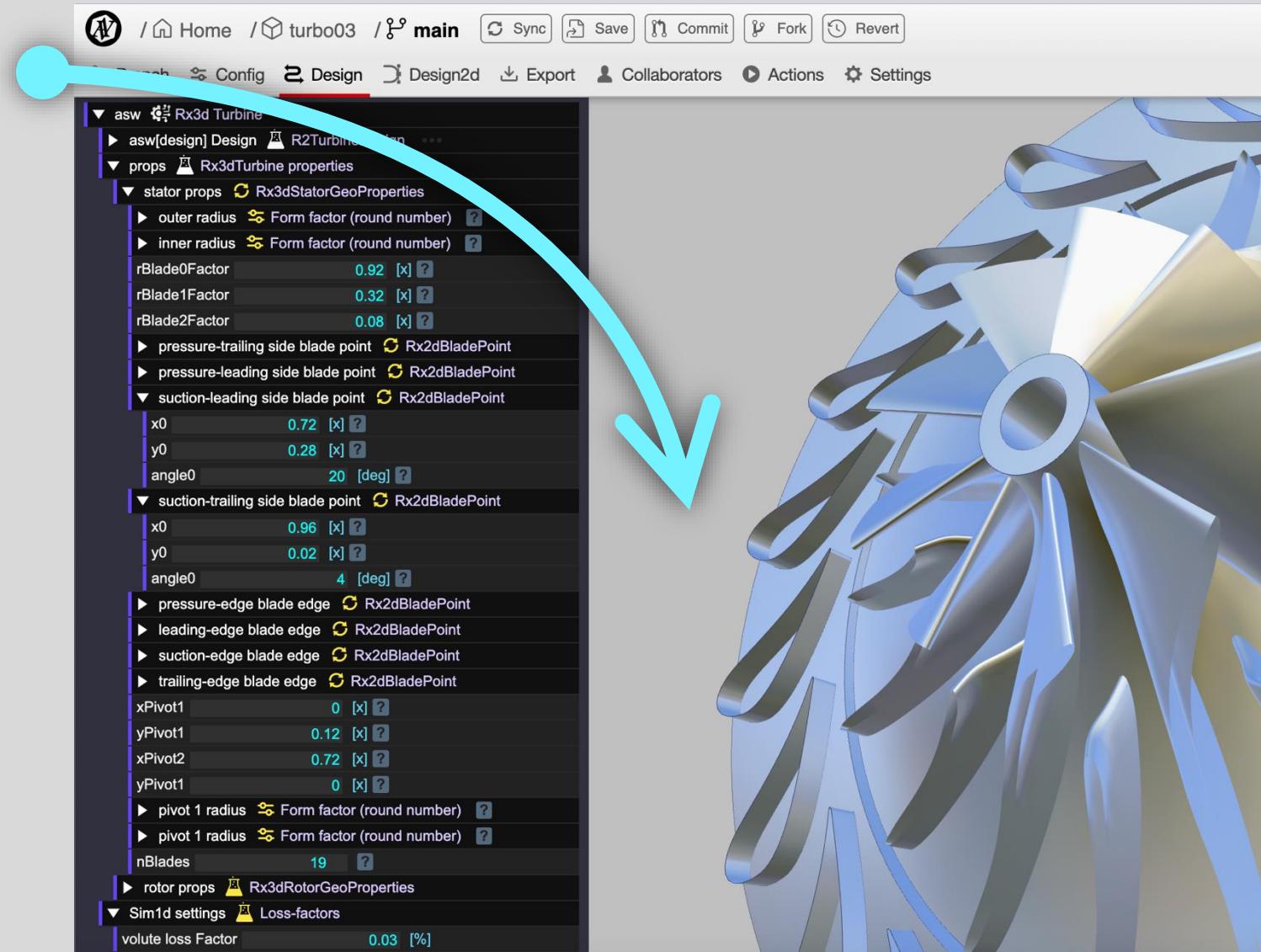


AlphaVentor : DESIGN, DOWNLOAD

5

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

6

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 displays the AlphaVentor software interface, specifically the 'Config' tab for a 'nano172kg' branch. The top right shows a 3D model of a quadcopter aircraft. A large blue arrow points from the text 'Enable Who you choose (internal, partners, clients) to:' towards the aircraft model. Another blue arrow points from the text 'Dive into results ranging from wrap-up to maximum details, according to company disclosure & marketing policy.' towards the bottom section of the interface.

Capacitors Pack

Capacitor Model	Power (kW)	Capacity (kWh)
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

Batteries Pack

Battery Model	Power (kW)	Capacity (kWh)
Long01 [10u]	33 kW	6.7 kWh

Flight Controls

Parameter	Value	Unit
payload	172 kg	kg
Battery#1 charge @t0	95 %	%
Battery#2 charge @t0	75 %	%
Fuel charge @t0	75 %	%

Course Controls

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

Outputs

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

Energy

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

take-off Outputs

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

Trip

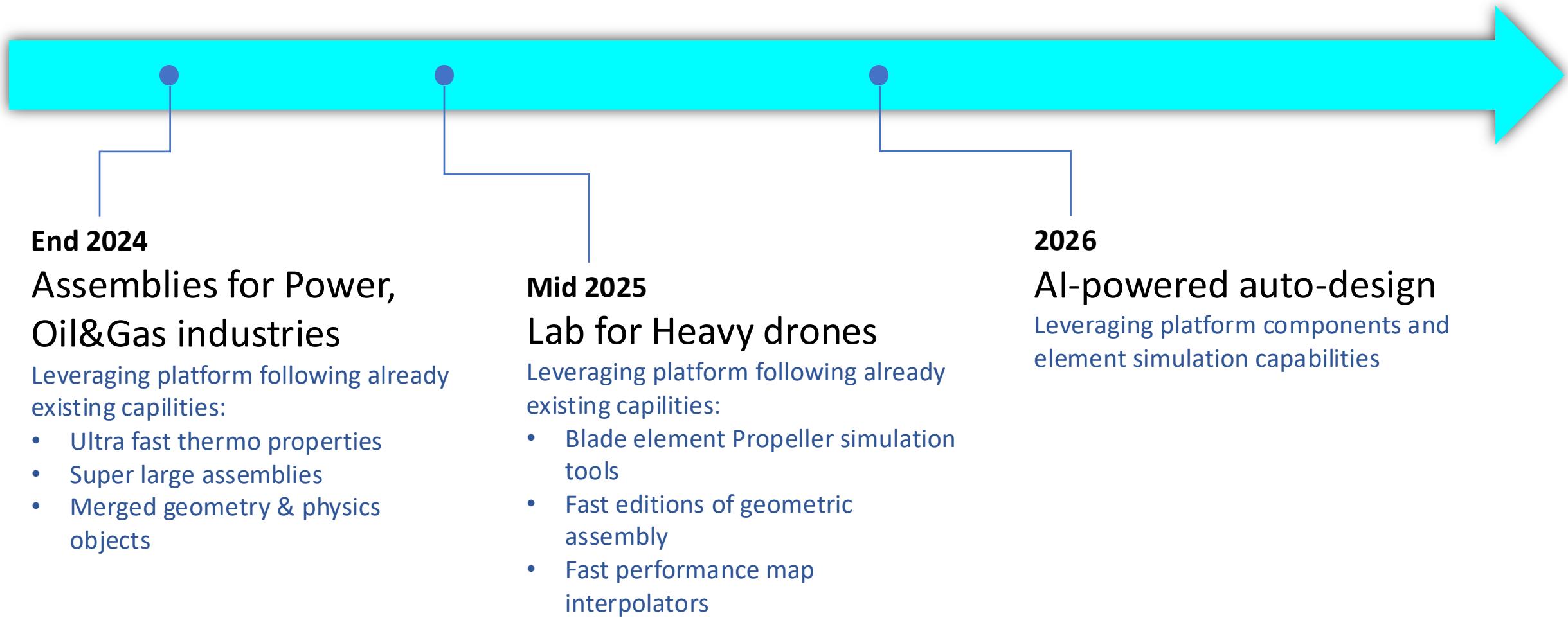
Take-off, Ascending, Cruise, Descending, Landing



AlphaVentor : and so much more to come...

7

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





The Business Model



AlphaVentor : BASE PLAN

9

~\$50k

ONE TIME FEE (+ ADDED FEATURE)

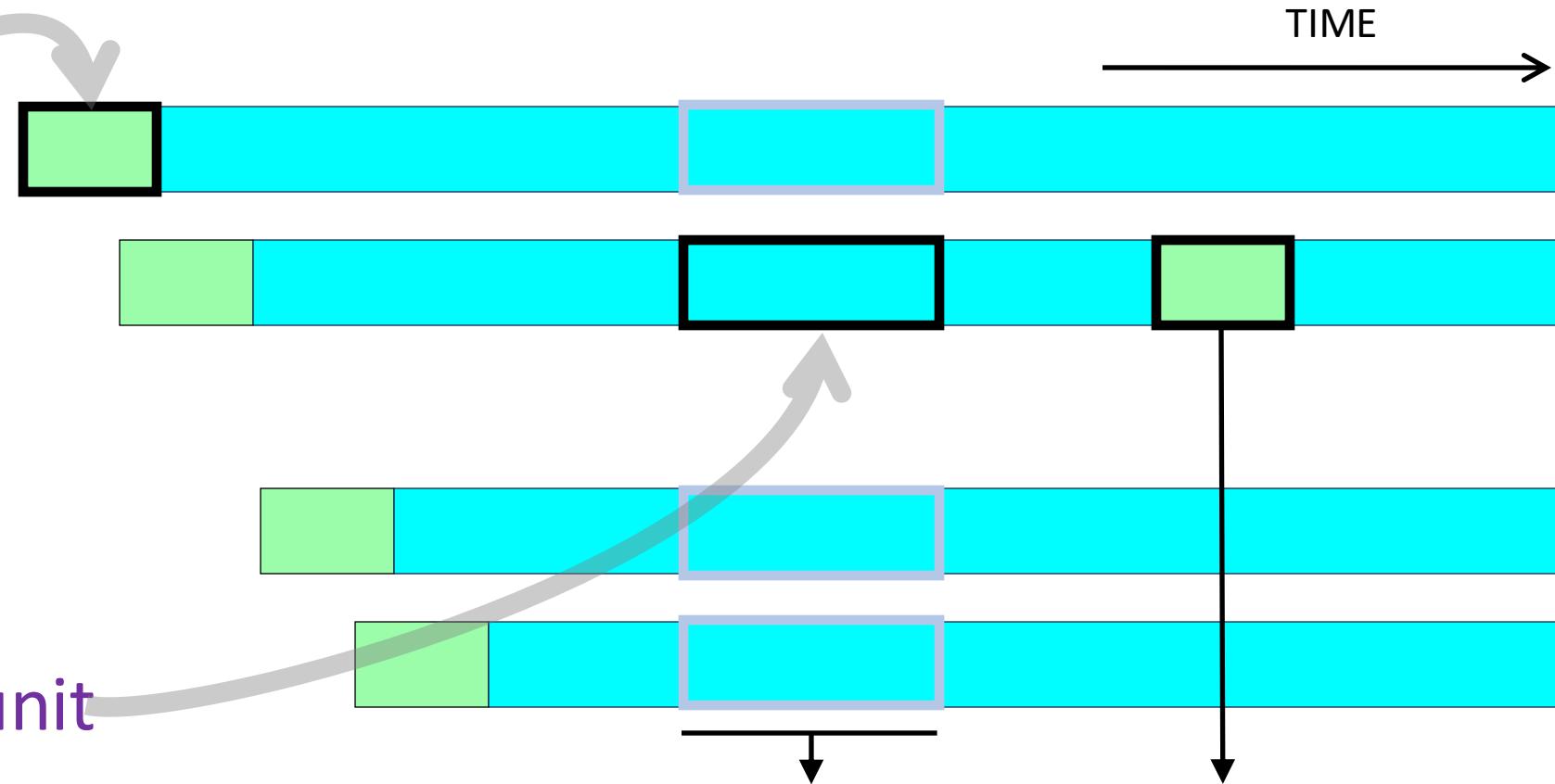
To have your product business line on the Platform (cover dev cost / engineering expertise). Adjustable per complexity level

~\$2k /month /unit

BASED ON NUMBER OF UNITS SUBSCRIBED

1 UNIT =

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



Monthly
Recurring
Revenues

Charges for
Client induced
Upgrades /
new features



AlphaVentor : ENTERPRISE PLAN

10

~\$2M+

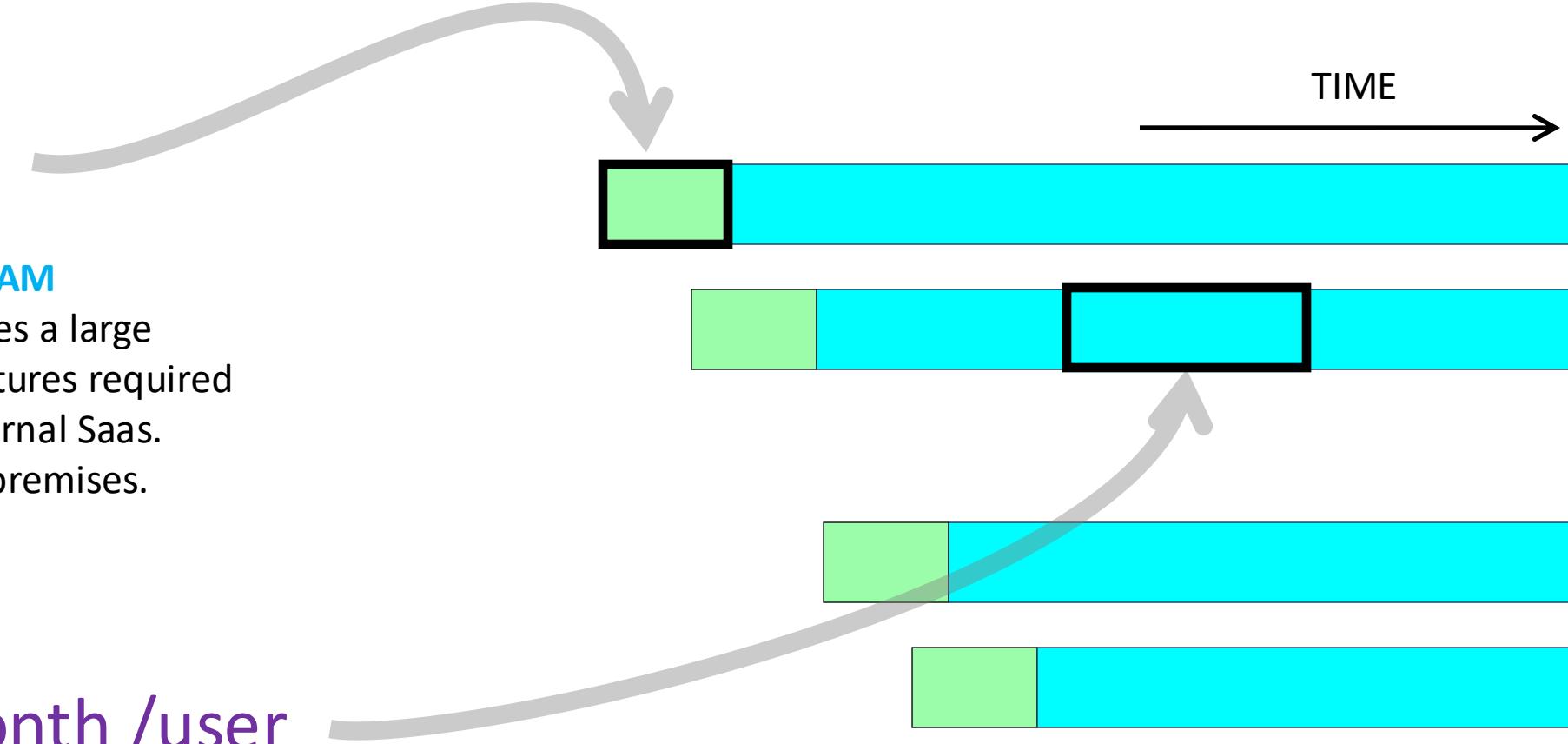
BESPOKE DEV TAILORED TO TEAM

- 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

11

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 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)

Paris

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