

Open Source Doesn't Pay the Bills

But What Does?

An honest account of building a business on open source

Max Pabinger · CEO & Co-Founder, useblocks

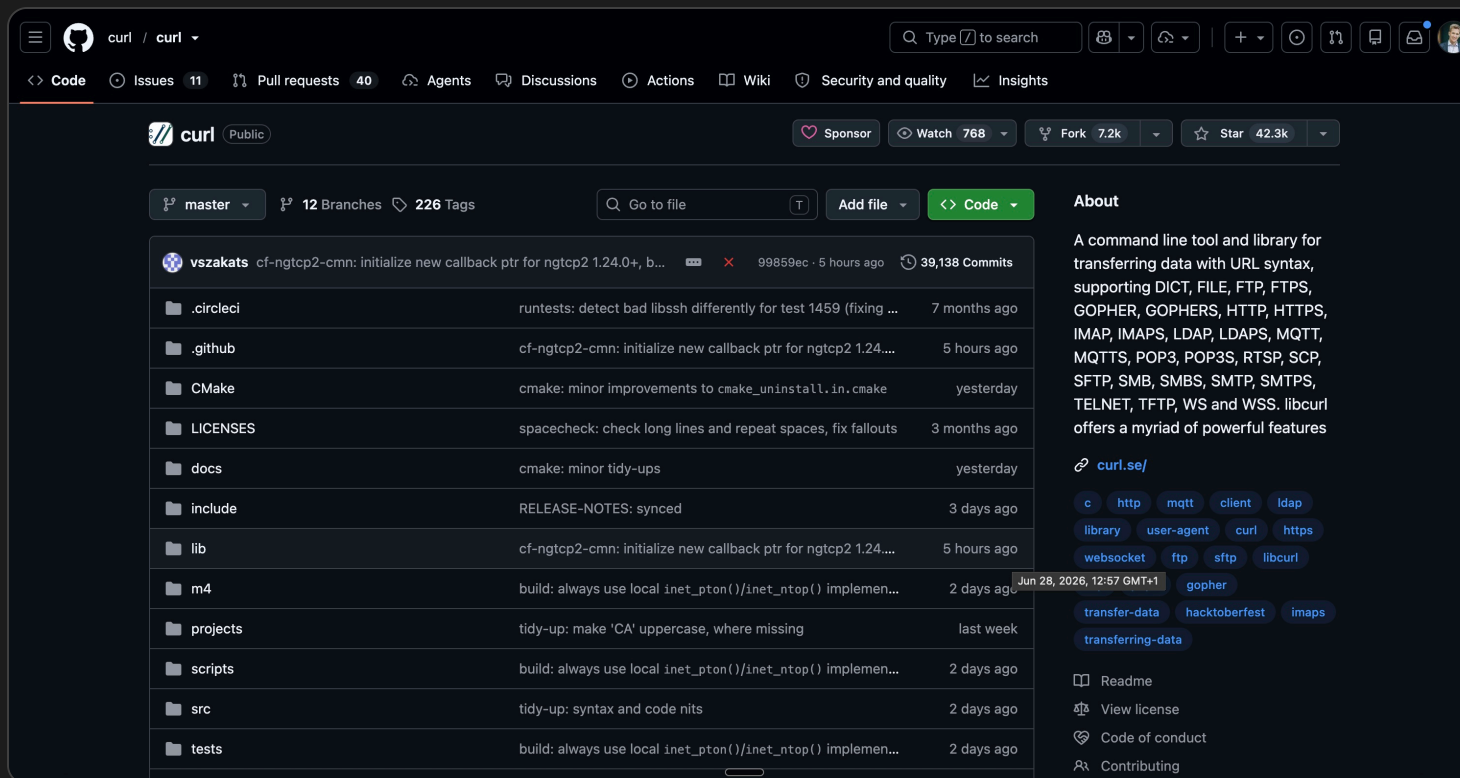
Automotive Open Source Summit · Starnberg · 29–30 June 2026

Raise your hand if you know this button



github.com/sponsors

You already depend on projects that use it



curl — the tool inside every HTTP request you've ever made

Tools the whole industry relies on — **asking for donations.**



Who has ever sponsored an open source project?

Raise your hand.



Who has ever *received* money from the community — got paid *because* of open source?

Open source is a collaboration model.
It is not a business model.

"Sponsor me" can feel a lot like **charity**.
So when open source doesn't pay the bills — **what does?**

Today: how useblocks tried to get paid for open source — and what finally worked

1



Who we are

A startup behind Sphinx-Needs — 300K+ monthly downloads, born in automotive.

2



What we tried

Memberships, consulting, grants, procurement — most of it failed.
Honestly.

3



What worked

Finding product-market fit a second time — on top of the open core.

The honest version. The failures included — because that's where the lessons are.

useblocks at a glance



300K+

Monthly Downloads

Sphinx-Needs — the de facto standard for requirements-as-code

5M+

Total Downloads

Community traction has always been real

30

Team Members

Engineers, consultants & product experts around Munich

10+

Enterprise Customers

OEMs, Tier 1s & tech leaders running useblocks in production

72

Participants at Last UGM

Our User Group Meeting — up from 18 in 2024

It started 8 years ago — inside an OEM

~2018 · ORIGIN



Born at BMW

Sphinx-Needs created to manage requirements as code — by engineers, for engineers.



SCALE-UP



Hardened at Bosch

Adopted and pushed further at scale — proving it in serious safety-critical work.



TODAY



Industry standard

300K+ monthly downloads. A community of safety & security engineers worldwide.

The open-source core was forged inside the exact industry it now serves.

What is Sphinx-Needs? Requirements - as code, in Git



📄 SOURCE (.RST IN GIT)

```
4 .. _SWE1_Software_Requirements:
5
6 SWE.1 Software Requirements
7 =====
8
9 .. swreq:: Lane Marking Detection Algorithm
10    :id: SWREQ_001
11    :status: open
12    :links: ARCH_001, REQ_001
13    :author: PETER
14    :github: 4
15
16    Develop software to process camera inputs and
17    accurately identify lane markings under various
18    environmental conditions.
19
20 .. swreq:: Lane Deviation Warning
21    :id: SWREQ_002
22    :status: open
23    :links: ARCH_001, REQ_002
24    :author: ROBERT
25    :github: 5
26
27    Implement a feature to trigger warnings if the
28    vehicle deviates from its lane without proper
29    signaling.
```

🔗 RENDERED (SPHINX-NEEDS)

SWE.1 Software Requirements

SW_Requirement: Lane Marking Detection Algorithm SWREQ_001

status: open
layout: adas
github: [SN Demo #4](#)
links outgoing: [ARCH_001](#), [REQ_001](#), [SWREQ_001](#)
links incoming: [GH_PR_3](#), [SWREQ_001](#), [SWREQ_011](#), [SWARCH_001](#), [IMPL_001](#), [TEST_001](#), [TEST_002](#), [TEST_QUAL_001](#), [TEST_QUAL_005](#)
author: [PETER](#)

Develop software to process camera inputs and accurately identify lane markings under various environmental conditions.

Status: open

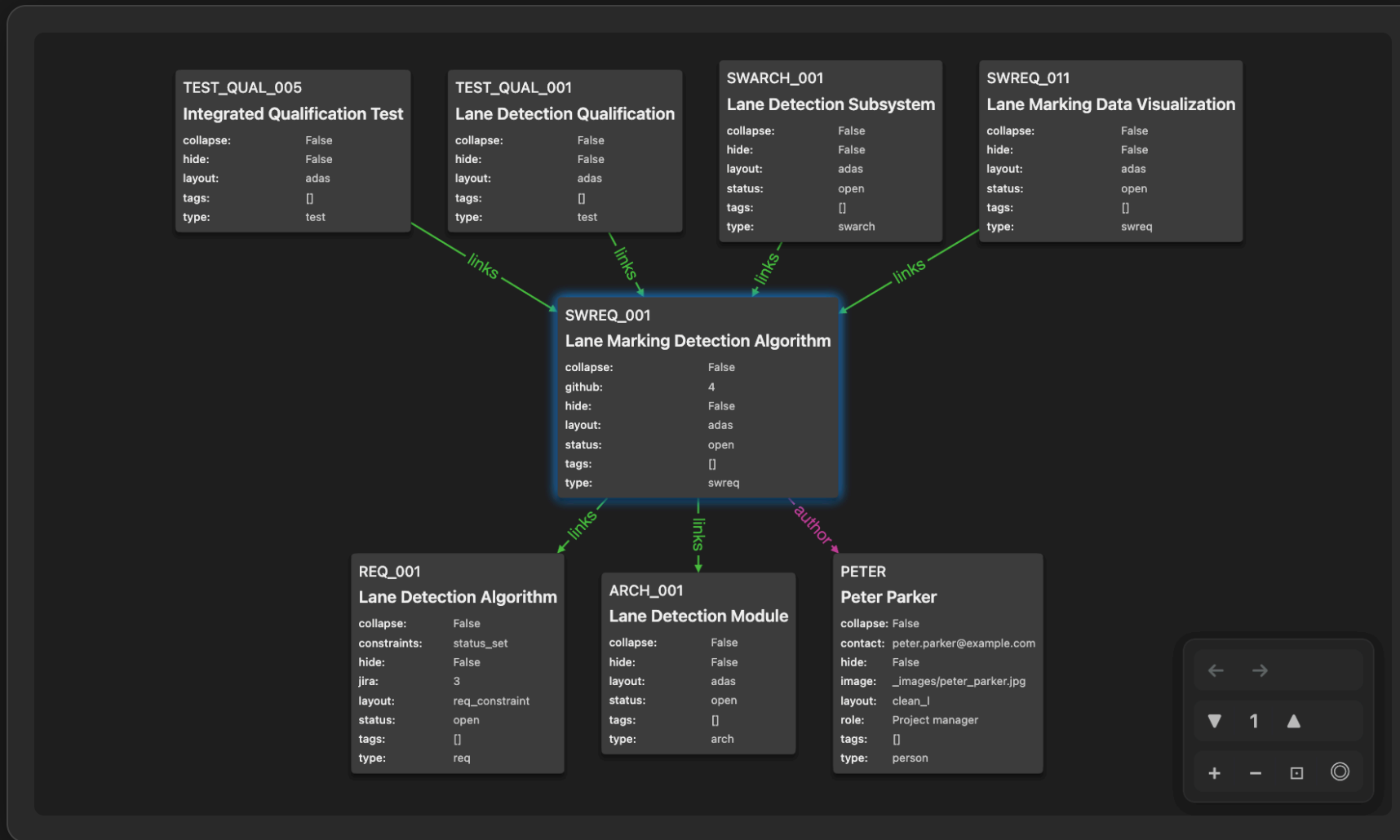
SW_Requirement: Lane Deviation Warning SWREQ_002

status: open
layout: adas
github: [SN Demo #5](#)
links outgoing: [ARCH_001](#), [REQ_002](#), [SWREQ_002](#)
links incoming: [GH_ISSUE_5](#), [SWREQ_002](#), [SWARCH_001](#), [IMPL_002](#), [TEST_001](#), [TEST_QUAL_001](#)
author: [ROBERT](#)

Implement a feature to trigger warnings if the vehicle deviates from its lane without proper signaling.

Status: open

All objects link - the traceability tree



**So what does it actually take to build a
business on open source?**

You have to find Product-Market Fit — **twice**

PMF #1 · OPEN SOURCE

Does the community love it?

A tool people adopt without being sold to. Downloads, stars, contributors, word of mouth.

✓ **Solved — 300K downloads/month**



PMF #2 · BUSINESS

Who pays — for what, and why now?

A paid layer of value on top of the free core. Revenue, not gratitude.

✗ **The hard one. Took years.**

Most open-source startups only ever solve the first. The gap between **downloads and dollars** is where they die.

A quick definition

Product-market fit means being in a good market with a product that can **satisfy that market** — and the market **pulling product out of you.**

— after Marc Andreessen

PMF #1 we already had: developers, not buyers



Git-native

Requirements live where the code lives.
Version-controlled, reviewable, diffable.



No tool switch

Engineers stay in their editor. No
heavyweight ALM suite to log into.

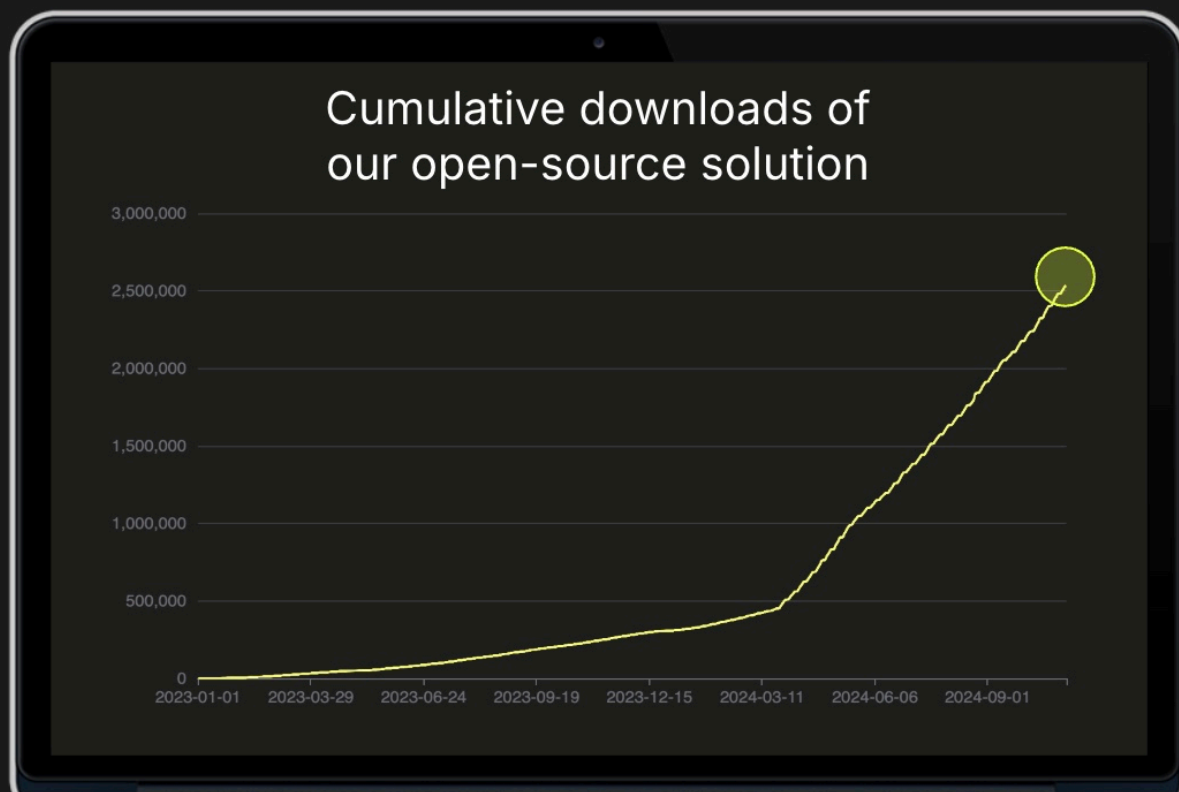


Built for the SDV

The software-defined vehicle treats
everything as code — Sphinx-Needs fits
natively.

The community pull was real. But a developer who loves your tool is **not** the person who signs the cheque.

Sphinx-Needs has real traction in the market

**341k**

Downloads
monthly

5M

Total
Downloads

>30

Enterprise
Users

PMF #2 is harder — because you have to be worth paying for on top of something free

You're not selling against competitors.
You're selling against your own free product.

The OSS commercialization funnel is brutal

~630,000,000

GitHub repositories (raw activity)

~11,400,000

Actual OSS projects (published packages)

~800 (~0.007%)

Ever became VC-backed OSS companies

~100

Ever reached an exit (IPO / M&A) derived: 12% of ~800 ≈ 96

~40

Ever crossed \$100M revenue was "<10" in 2013

Roughly: **1 in ~285,000** OSS projects becomes a \$100M business.

How did others cross the gap?

PROJECT	HOW MONEY IS MADE	THE PATH
Linux (kernel ecosystem)	Corporate maintainers funded by employers; monetized via enterprise distros, support, and integration services	Foundation + enterprise services
Kubernetes (CNCF)	Core project is free; money comes from managed platforms (EKS, GKE, AKS), enterprise tooling, and support	Open standard + cloud services
PostgreSQL	No single vendor owns it; companies monetize with managed DB, HA tooling, and enterprise support	Ecosystem monetization
GitHub	Acquired by Microsoft, 2018 — ~\$7.5B	Acquisition
GitLab	Open-core + SaaS tiers + enterprise subscriptions	Open-core subscriptions
Docker	Developer subscriptions, Docker Hub plans, and enterprise products for teams	Developer SaaS + enterprise
Red Hat	Subscription & support on Linux → IBM, 2019, \$34B	Long game + acquisition
Astral (uv, Ruff)	VC-funded (Accel, a16z) → acquired by OpenAI, Mar 2026	VC money → acquisition
Kùzu (graph DB)	Acquired by Apple, Oct 2025 — repo archived, no longer maintained	Acqui-hire (project ends)

Sources: official announcements & vendor materials (Linux Foundation, CNCF, PostgreSQL, GitHub/Microsoft, Red Hat/IBM, GitLab, Docker, Astral/OpenAI, Kùzu/Apple).

1

What We Tried

Four honest attempts — and why most of them didn't pay the bills

The graveyard — and one survivor

① OSS membership

for enterprises

✗ No urgency to pay

② Consulting on top

services revenue

△ Useful cash, but doesn't scale

③ Förderprogramme

Mod2SDV + AI4SDV

△ Good signal, limited business impact

④ Open core model

value on top + AI

✓ This one worked

Four headstones. One survivor. Let's walk through each.

OSS membership for enterprises

💡 THE IDEA

Companies that depend on Sphinx-Needs pay an annual membership — funding maintenance, support and a stable roadmap.

⚠️ WHY IT DIDN'T PAY

No perceived urgency. The tool already works for free. In cost-saving cycles, memberships were often the first budget line cut. "Why pay for something we're not blocked on?" Free-riding is rational.

Consulting services on top

💡 THE IDEA

Sell expertise — integration, training, custom setup.
Real revenue, real customers, immediately.

⚠️ WHY IT DIDN'T PAY

It works — but it trades hours for euros. Revenue is capped by headcount. It doesn't scale, and it pulls the team away from product.

Consulting kept the lights on. It was never going to build a company.

Förderprogramme: Mod2SDV and AI4SDV



Mod2SDV

Strong project signal from the automotive space.



AI4SDV

Clear AI relevance and ecosystem visibility.

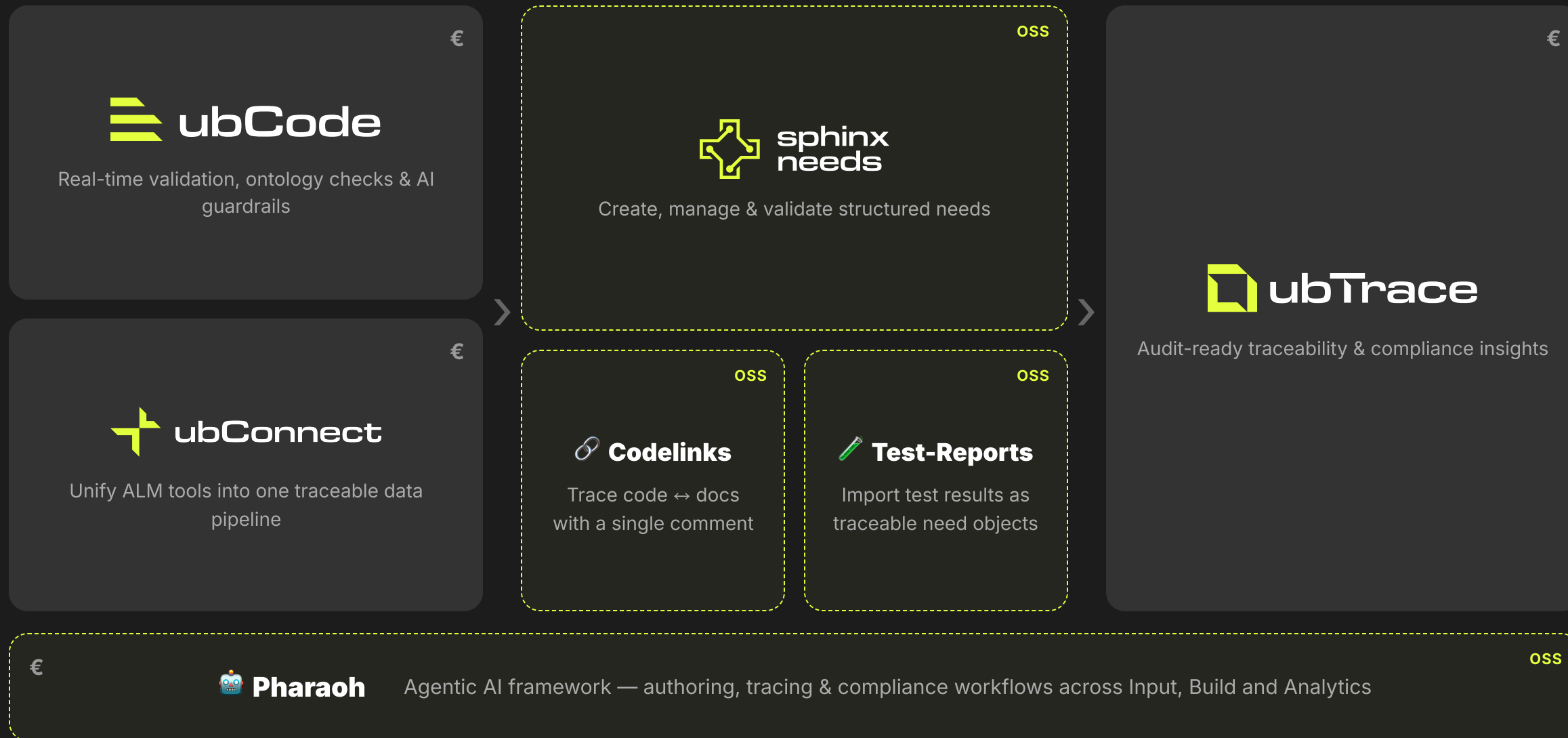
KEY INSIGHT: We truly appreciated collaborating with all partners, but these programs are built far more for enterprises than for startups.

2

What Finally Worked

PMF #2 — found on top of the open core, when AI changed the value equation and VC runway enabled deep product investments

The full ecosystem: from code to compliance

**Input****Build****Analytics**

The enterprise layer customers actually pay for



ubConnect

- **No rip-and-replace:** Integrates existing systems — DOORS, Jira, Polarion, ReqIF — bidirectionally into the intent layer.
- **Adoption bridge:** Teams keep their current ALM tools and investment while gaining x-as-code traceability. No migration risk.
- **The unlock:** Without ubConnect, enterprises with legacy tooling cannot adopt our stack. This removes the last blocker.



ubCode

- **Speed:** Sphinx-Needs OSS builds take up to 1 hour on large projects. Our Rust engine delivers in under 500 ms — same project, real-time feedback as you type.
- **Quality:** Ontology rules enforced in real time. Linting catches structural errors before a single build runs.
- **AI-native:** CLI + MCP server makes spec-driven development with AI agents (SDD) practical and auditable.



ubTrace

- **Access for everyone:** Data analytics and governance for non-coders — quality officers, project leads and auditors work directly in the intent graph without touching code.
- **Live compliance:** Runs HARA, TARA, FMEA and other safety/security workflows on top of the living artifact graph.
- **Audit-ready by default:** Compliance evidence emerges automatically as a byproduct of daily work — not assembled in a last-minute scramble.

VC runway enabled this: The Rust rewrite, the MCP integration, the HARA/TARA workflows — none of this existed two years ago. Capital let us build ahead of the AI shift instead of catching up to it.

Then AI changed the value equation

VC-backed investment enabled the Rust rewrite, live linting, and AI workflow integration when timing mattered.

20% Coding

80% Proof (Traceability, Documentation, Compliance...)

← AI made this cheap

This got even more valuable →

AI made the coding part near-free.
The **proof part — where we live — became the bottleneck.**

“

In the age of AI coding agents,
intent is the new source code,
and **intent is the new type system.**

One prompt. Full V-Model. Fully traced.



"Add an auto-tinted sunroof feature — activate when cabin temp > 30 °C."

One intent triggers a cascade of traced, verified changes across the full V-Model.

OEM-SPECIFIC CURATED CONTEXT

Knowledge

Public coding examples, general practice knowledge →

Standards

A-SPICE, MBSA, SysML, MISRA, AAOS ... →

Guides

OEM process descriptions, coding guidelines, AUTOSAR guides ... →

Context

Existing repos, test reports, issue tracking, change requests ... →



SYS.1-SYS.3 Req. Analysis
+ Arch

**System
Level**

SYS.4-SYS.5 System
Testing



SWE.1 SW Req. Analysis

↓ traced ↓
**Software
Level**

SWE.6 SW Qual. Tests



SWE.2 SW
Architectural Design

↓ traced ↓
**Component
Level**

SWE.5 SW
Integration Tests



SWE.3 SW
Detailed Design

↓ traced ↓
**Unit
Level**

SWE.4 SW
Unit Verif.



Cross-Domain
Implementation



Multi-Agent Orchestrator — powered by GH + MSFT + UB

Sphinx-Needs manages linked objects in Git. Changes are traced end-to-end. **ubCode** provides real-time AI guardrails via Ontology & MCP context.

One change. 15 artifacts. Fully traced.

Erwin Roth from Audi tested this scenario on a real ISO 26262 brake system with **3 vehicle variants** :

The change: Brake response time drops from **100 ms → 50 ms**. A single number changes at the system level - but the impact ripples through the entire Sphinx-Needs graph: requirements, specs, hardware, code, tests, and architecture across all variants.

V-MODEL LAYER	#	WHY IT MUST CHANGE
System Requirement	1	Root timing value — shared across all 3 variants
Variant Requirements	3	Each variant (PC · TR · MC) derives the new 50 ms bound
SW Specifications	3	Base spec + truck override + motorcycle override
HW Specification	1	Brake actuator timing constraint — shared
Implementations	2	PC + truck only (motorcycle inherits, no override)
Test Cases	2	PC + truck only (motorcycle inherits, no override)
Architecture Diagrams	2	Signal flow + timing diagrams via codelinks
Total	15	Pharaoh found 100 % — ubCode validated every change before commit

6 of 15 are hard: they require Pharaoh to traverse the Sphinx-Needs variant graph or follow codelinks - the kind of cross-cutting dependencies that manual reviews routinely miss.

Solving real problems — proven in real OEM projects



Real programs

Deployed in production OEM projects



Value the core can't give

AI guardrails, real-time validation, full traceability under regulation.



Now they pay

Not gratitude — budget. Because the outcome is indispensable.

PMF #2, in one line: **to get paid on top of open source, you must deliver value the open source cannot.**

PMF for the business model = solving real problems



Open source alone

Brings trust, reach and community — but not enough revenue by itself.

Value on top

Customers pay when the layer above the OSS removes real pain in their workflow.

PMF #2

The business model works when it consistently delivers measurable value.

So the question is not: what can we sell? It is: what value can we create that OSS cannot provide alone?

Your strongest OSS asset isn't code — it's community and people



Open-source roots. **5M+ downloads**. A User Group that grew from **18 to 72** — the trust that exists before the revenue does.

The same pattern, at industry scale: S-CORE?

QUESTION 1

S-CORE

What is the PMF for OSS?

QUESTION 2

S-CORE+

What is the PMF for the business model on top?

Let's talk



Maximilian Pabinger

CEO & Co-Founder · useblocks

✉ max.pabinger@useblocks.com

☎ +43 664 451 88 48

★ The open core that started it all: github.com/useblocks/sphinx-needs

If open source should win in automotive — fund the teams building it.