

I'm building a loan engine and I'd like your honest read.

I've spent the last while building fincalc, an engine for the maths every lender runs. Before I put more into it, I'm asking people I trust whether it's heading somewhere worth going. This takes about three minutes to read.

What it is

fincalc works out instalments, rates, what a customer can afford and the true cost of credit, all in one engine.

- It uses exact decimal arithmetic and a written rounding policy, so the same loan always gives the same figures.
- Fees and credit-life insurance are included in the APR, so the rate a customer sees reflects what the loan really costs.
- A compatibility mode can reproduce an older calculator's figures, so a lender can switch with no figure moving.
- When it can't do something yet, it says so and names the rule. It never gives a figure that only looks right.

A worked example

Here is the engine pricing a personal loan for a made-up lender, Acacia Credit:

Acacia Credit · personal loan			R60 000 · 36 months
Monthly instalment	Total repayable	Cost of credit	Balance after last payment
2 574.28	92 674.18	32 674.18	0.00
• A customer with a R2 500 monthly budget can borrow up to R58 100.00. • The APR is 30.82%, including fees and credit-life insurance, against a 22.75% nominal rate. • On a simpler Acacia loan without fees, an introductory offer runs inside the schedule itself: 3 months at 1 934.62, then 2 284.07 for the rest of the term. • 100 amount-and-term options come back in about a tenth of a second.			

Where I think it could fit

It's strongest where someone has to recheck many existing loans and prove the answer. These are the five places I'm weighing. I want to know which ones are real.

SA

Loan-book compliance checks

Recompute every loan in a book and compare it with the National Credit Act caps on interest and fees. The recomputation is in the engine today; the caps check would be built for this. The caps are tied to the repo rate, which has gone up twice in 2026 to 7.25%, so the check has to be repeated. There are 8,147 registered credit providers.

Sources: [NCA Reg 42](#), [eNCA on the September hike](#), [NCR Annual Report 2024/25](#) (providers at 31 Mar 2025). Accessed 8 Oct 2026.

SA

An engine for loan-software vendors

The smaller firms that sell loan software to SA lenders each build their own credit-act maths. fincalc could be that piece, kept current with every rate change.

ANY

Proving a system migration

When a lender changes core systems, show loan by loan that the new system gives the same instalments, interest and balances as the old one before switch-over, and explain any difference.

UK • PL

Checking customer refunds

The UK's car-finance redress scheme covers 12.1 million agreements and about £7.5bn of redress, within a £9.1bn total cost to firms. Parts of it are suspended until a tribunal hearing on 16–26 February 2027, so payments start in 2027 at the earliest. Redress figures will need checking, and re-running if the scheme changes. In Poland, the EU's top court upheld the rule that a wrongly stated loan cost can leave the borrower repaying capital only, and lawsuits have followed.

Sources: [FCA statement](#), [FCA PS26/3](#), [MPA on the suspension](#), [hearing dates](#) (accessed 15 Oct 2026); [CJEU C-472/23](#) (accessed 8 Oct 2026).

An independent check of the quoted rate

The EU's new consumer-credit rules apply from 20 November 2026, with one set formula for the annual rate shown to customers. fincalc could check that figure independently: the actuarial method behind it is already in the engine, and the EU's specific assumptions would be added.

Source: [Directive \(EU\) 2023/2225](#). Accessed 8 Oct 2026.

What I'm asking you

1. **Gut check.** Which of these sounds like a real need, and which sounds weakest? Is this worth building further at all?
 2. **Introductions.** Do you know anyone who works on any of them? Twenty minutes with them would help a lot. I'm learning, not selling.
 3. **Circles.** Where do these people talk shop: associations, forums, events, group chats?
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I'd love to show you the engine running live on a 20-minute call. Just reply to my message and we'll find a time.

Dario

This is early-stage work. Acacia Credit and its products are made up, and every figure in the example came from the engine. Even "this won't fly because..." helps me.

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