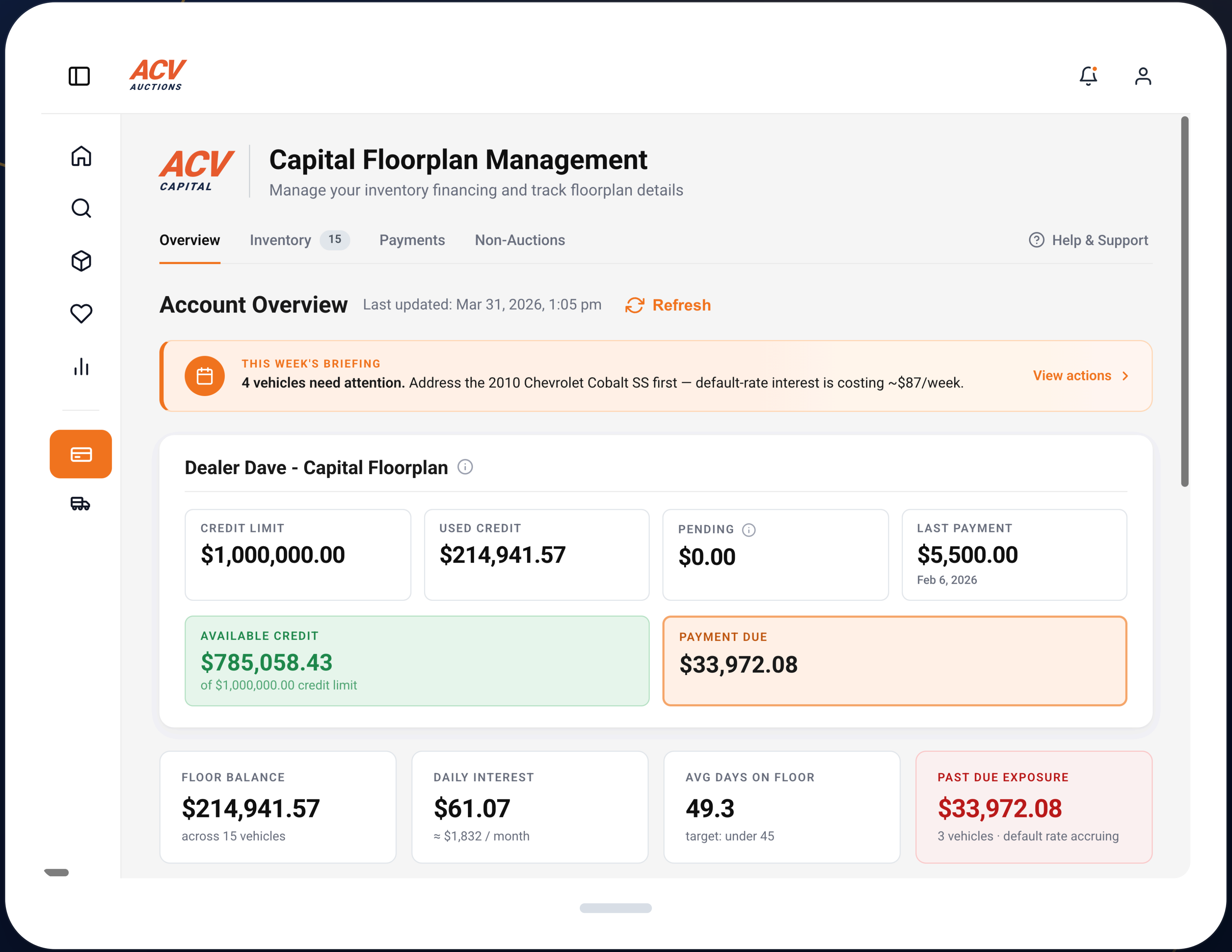
PRODUCT DESIGN CASE STUDY

Fintech | B2B Marketplace | 0 → 1

ACV Capital Floorplan Platform

A self-serve platform for dealers to manage floored inventory, maturities, and payments in real time.

"Self-serve, real-time financial visibility"



Margaux Kan | Senior Product Design Manager

Dealers, financing, and the black box this platform replaced

Quick context before the story: who the dealers are, what a floor plan loan is, and how it used to work.

CAR DEALERS

The customers

Independent, high-volume vehicle dealers, from small family-run lots to multi-rooftop operations, running the business from a phone, between appraisals and the lot.

THE LOAN

A "floor plan"

A revolving line of credit dealers use to buy inventory instead of paying cash upfront. They borrow to "floor" a car, then repay when it sells.

THE OLD PROCESS

A manual black box

Credit, balances, and payments lived in phone calls and spreadsheets: manual, fragmented, and invisible to the dealer until they called in.

> *"I have no idea how much credit I have available unless I call someone."*
>
> Independent dealer, research interview

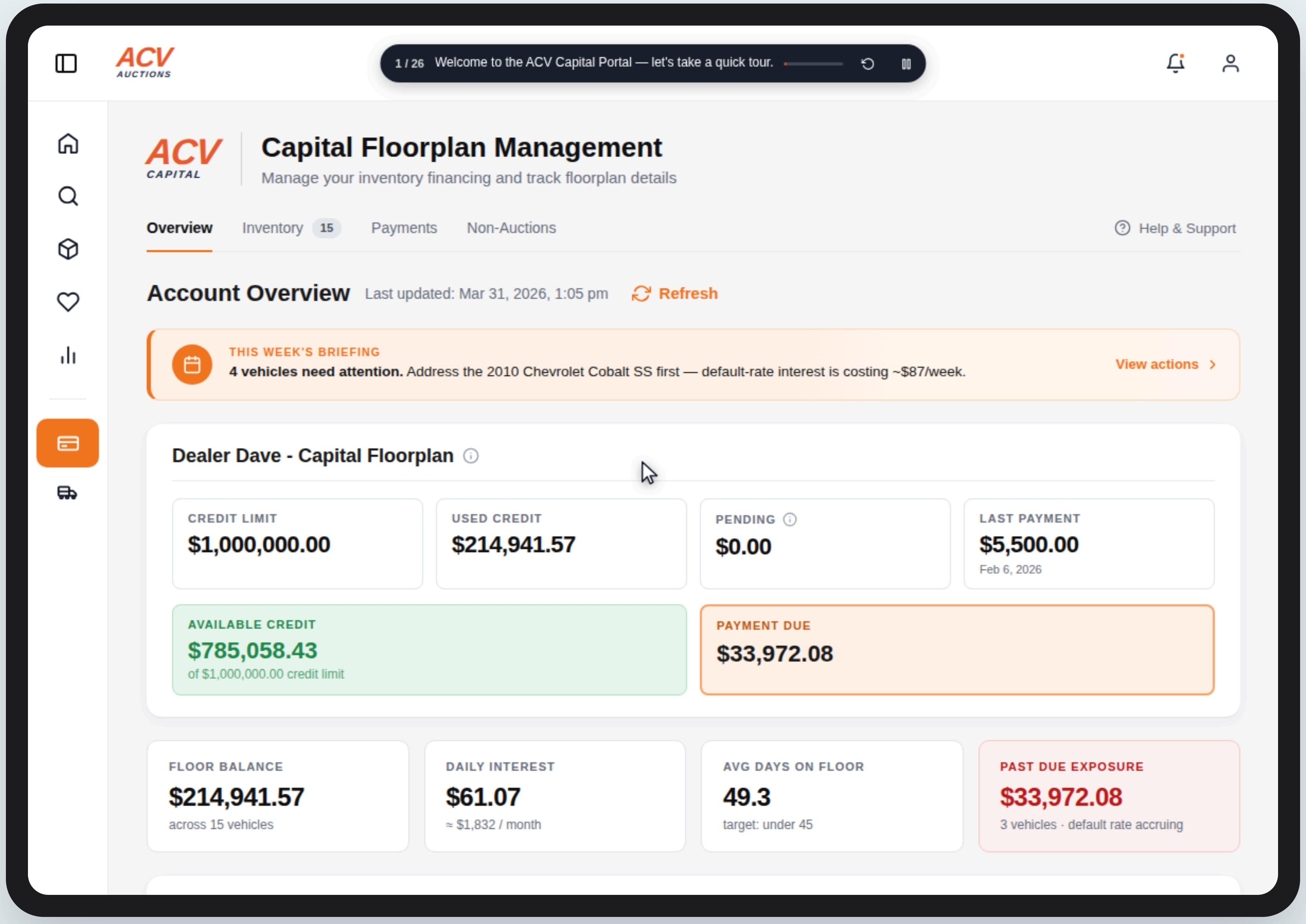
Explore Prototype ↗

 ROLE AND OUTCOME

Turning dealer financing into a self-serve, real-time platform

MY ROLE

- Led 0 → 1 design for the Capital Floorplan platform, end to end
- Owned design direction and the real-time balance rollout call; directed a team of 3 designers
- Aligned Product, Engineering, Data Science, Ops, and Compliance from discovery to launch



OUTCOME

Replaced a black-box, phone-based process with a self-serve floorplan platform: real-time inventory, maturities, and payments that grew payment volume, retained top dealers, and cut operational drag.

4.6 / 5
Dealer satisfaction score, post-launch survey (up from 3.1 pre-launch)

↓ 52%
Drop in inbound service calls for balance & payment questions vs. pre-launch

90 days
From launch to active, recurring use across the platform

Explore Prototype ↗

1 UNDERSTAND → 2 FRAME → 3 EXPLORE → 4 VALIDATE → 5 DELIVER

A high-volume financing business, still run by phone

Mission: replace phone-based financing with self-serve, real-time control of inventory, maturities, and payments.

ACV AUCTIONS

B2B Wholesale Vehicle Marketplace

ACV CAPITAL

Dealer Financing Service

PRIMARY PERSONA

Synthesized from orchestrated dealer interviews & usability sessions: a living profile, not a static list

Independent dealer, lean team, high transaction volume

From small family-run shops to large multi-rooftop operations. $500K to multi-million credit lines, lean teams, and limited digital tooling, running the business from a phone, between appraisals and on the lot.

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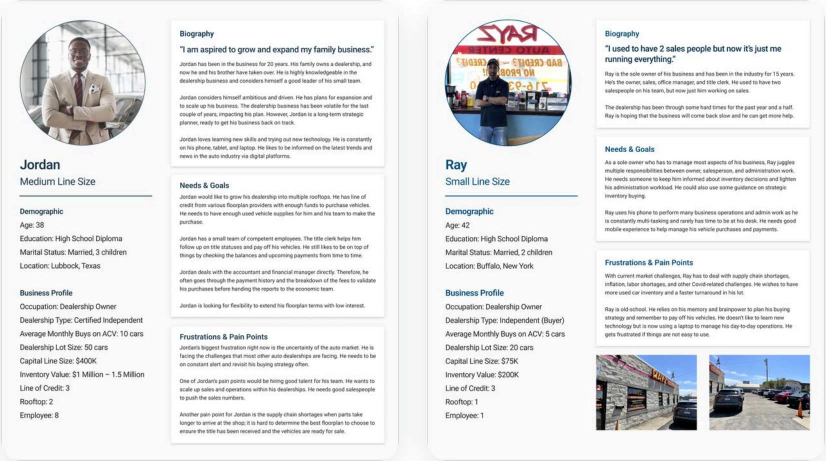
> Independent dealer, research interview



Small and Medium Line Size: core users of the Capital platform

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1 UNDERSTAND → 2 FRAME → 3 EXPLORE → 4 VALIDATE → 5 DELIVER

A retention and scale crisis, not a design polish

Executive framing: not a UI refresh, a platform bet.

THE PROBLEM

- Payments were manual and fragmented, mostly by phone
- Dealers had no real-time view of credit or balances
- Ops absorbed high-volume, low-leverage inquiries

→

BUSINESS RISK: WHY IT MATTERED

- Top dealers threatened to churn
- Manual operations couldn't scale
- Transparency gaps eroded trust in a financial product

CROSS-FUNCTIONAL & TECHNICAL

Framing this risk meant aligning Product, Engineering, Data Science, Ops, and Compliance around a shared root cause. It also meant surfacing the real-time balance data dependency early, before it became a launch blocker.

HANDS-ON

I personally mapped the problem and sketched early concepts to pressure-test feasibility with engineering before committing the team to a direction.

Explore Prototype ↗

1 UNDERSTAND → 2 FRAME → 3 EXPLORE → 4 VALIDATE → 5 DELIVER

Framed it as business-critical, then de-risked the hardest dependency

WHAT I LED

- Positioned the work as a business-critical bet, not a UI fix
- Aligned Product, Sales, Ops, Engineering & Compliance on one goal
- Drove the call on the riskiest technical dependency, right down to the phased rollout

HOW I GREW THE TEAM

- Delegated ownership of core flows; coached through ambiguity & tradeoffs
- Ran weekly critiques and 1:1s; set the bar for craft and rationale
- Coached a mid-level designer through stakeholder conflict to own the repayment flow

THE HARD CALL

Real-time balance API

Engineering flagged the live balance feed as the riskiest dependency: compliance exposure and data-accuracy risk that could have sunk the launch.

1. **Phase 1: ship value fast**
   Cached, read-only balances at launch
2. **Phase 2: real-time, gated**
   Live feed behind compliance gates + audit logging
3. **Phase 3: full real-time**
   Rolled out across the whole portfolio

Result: Unblocked launch without betting the product on one dependency.

Explore Prototype ↗

1 UNDERSTAND → 2 FRAME → 3 EXPLORE → 4 VALIDATE → 5 DELIVER

Embedded design early to drive strategy, not just execution

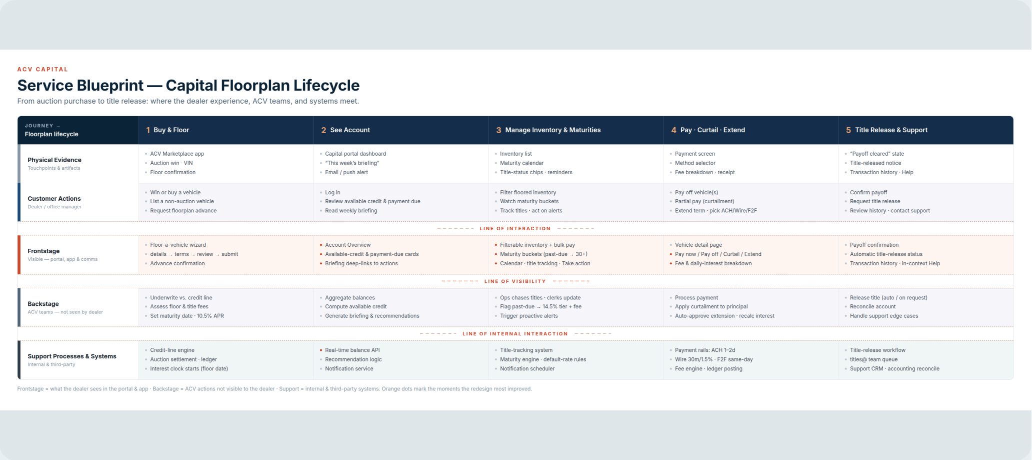
GOAL Validate where trust and financial clarity were breaking down, across every perspective.

HOW I RESEARCHED

- 10 dealer interviews & usability sessions
- On-site visits + Ops workflow walkthroughs
- Embedded sessions: Sales, Product, Compliance

Dealer interview, on-site

Field visit: Buffalo, NY



ACV CAPITAL

Service Blueprint — Capital Floorplan Lifecycle

From auction purchase to title release: where the dealer experience, ACV teams, and systems meet.

JOURNEY → Floorplan lifecycle	1 Buy & Floor	2 See Account	3 Manage Inventory & Maturities	4 Pay · Curtail · Extend	5 Title Release & Support
Physical Evidence Touchpoints & artifacts	ACV Marketplace app Auction win · VIN Floor confirmation	Capital portal dashboard "This week's briefing" Email / push alert	Inventory list Maturity calendar Title-status chips · reminders	Payment screen Method selector Fee breakdown · receipt	"Payoff cleared" state Title-released notice Transaction history · Help
Customer Actions Dealer / office manager	Win or buy a vehicle List a non-auction vehicle Request floorplan advance	Log in Review available credit & payment due Read weekly briefing	Filter floored inventory Watch maturity buckets Track titles · act on alerts	Pay off vehicle(s) Partial pay (curtailment) Extend term · pick ACH/Wire/F2F	Confirm payoff Request title release Review history · contact support
LINE OF INTERACTION					
Frontstage Visible — portal, app & comms	Floor-a-vehicle wizard details → terms → review → submit Advance confirmation	Account Overview Available-credit & payment-due cards Briefing deep-links to actions	Filterable inventory + bulk pay Maturity buckets (past-due → 30+) Calendar · title tracking · Take action	Vehicle detail page Pay now / Pay off / Curtail / Extend Fee & daily-interest breakdown	Payoff confirmation Automatic title-release status Transaction history · in-context Help
LINE OF VISIBILITY					
Backstage ACV teams — not seen by dealer	Underwrite vs. credit line Assess floor & title fees Set maturity date · 10.5% APR	Aggregate balances Compute available credit Generate briefing & recommendations	Ops chases titles · clerks update Flag past-due → 14.5% tier + fee Trigger proactive alerts	Process payment Apply curtailment to principal Auto-approve extension · recalc interest	Release title (auto / on request) Reconcile account Handle support edge cases
LINE OF INTERNAL INTERACTION					
Support Processes & Systems Internal & third-party	Credit-line engine Auction settlement · ledger Interest clock starts (floor date)	Real-time balance API Recommendation logic Notification service	Title-tracking system Maturity engine · default-rate rules Notification scheduler	Payment rails: ACH 1–2d Wire 30m/1.5% · F2F same-day Fee engine · ledger posting	Title-release workflow titles@ team queue Support CRM · accounting reconcile

Frontstage = what the dealer sees in the portal & app · Backstage = ACV actions not visible to the dealer · Support = internal & third-party systems. Orange dots mark the moments the redesign most improved.

▶ Full service blueprint

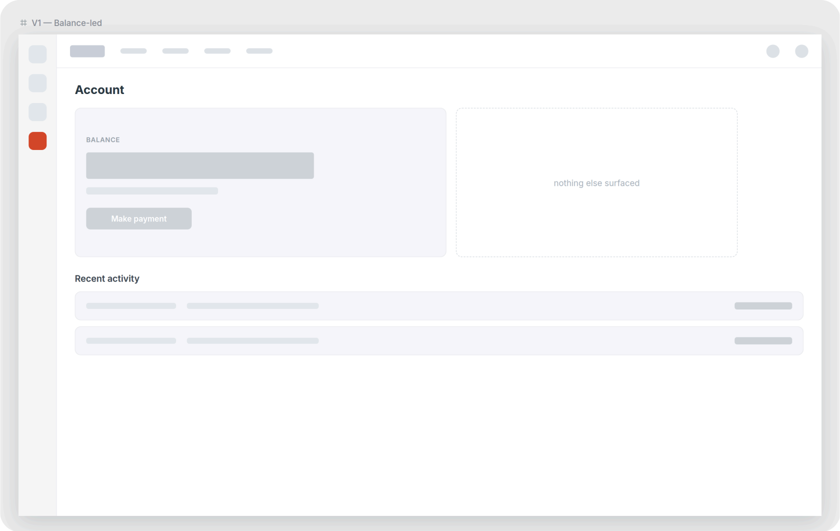
One shared view of the lifecycle, built from field visits, dealer interviews, and cross-functional workshops, gave Sales, Ops, Underwriting & Engineering a common language, and pinpointed where the redesign would pay off.

Explore Prototype ↗

1 UNDERSTAND → 2 FRAME → **3 EXPLORE** → 4 VALIDATE → 5 DELIVER

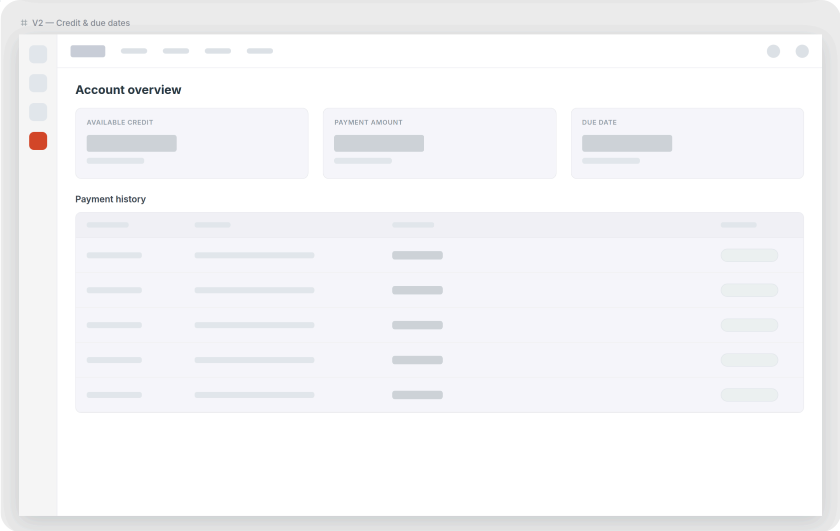
Three directions, stress-tested with dealers before committing

GOAL Find the framing that actually reduced calls and rebuilt trust, not just the cleanest screen.



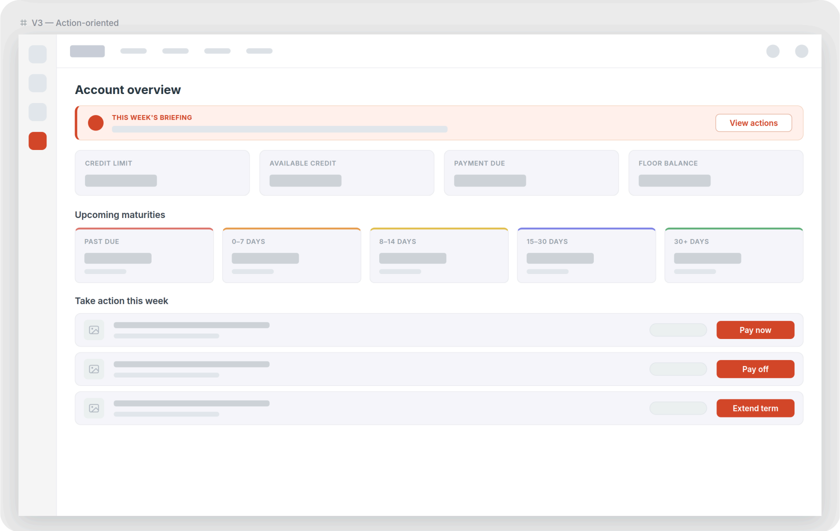
V1 · Balance-led

Led with the raw balance: clear, but it didn't answer "what do I do next?"



V2 · Credit & due dates

Led with available credit and upcoming due dates, mapped to what dealers actually decide on



V3 · Action-oriented

Surfaced one recommended next action per vehicle, ahead of any numbers

HOW THEY WERE TESTED

Moderated usability sessions with dealers, walking through realistic scenarios like checking available credit or resolving a past-due balance, and scored on clarity, trust, and task success.

Results didn't point to a single winner. They pointed to which patterns to keep, and which to drop. That decision carried into Validate.

Explore Prototype ↗

 VALIDATE · USER INSIGHTS & STRATEGIC REFRAME

1 UNDERSTAND → 2 FRAME → 3 EXPLORE → **4 VALIDATE** → 5 DELIVER

Reframing the experience around what dealers actually decide on

V1 · Balance-led	DROPPED
V2 · Credit & due dates	ADOPTED
V3 · Action-oriented	ADOPTED

How we narrowed: tested against clarity, trust, and task success. V2 and V3’s strongest patterns were combined into the final design; V1’s balance-first framing was dropped.

01

Shifted the hierarchy from raw balances to available credit, payment amounts, and due dates

→

02

Surfaced account details and payment history to cut calls to Support

→

03

Added calendar visibility and proactive due-date notifications

KEY LEARNING

!

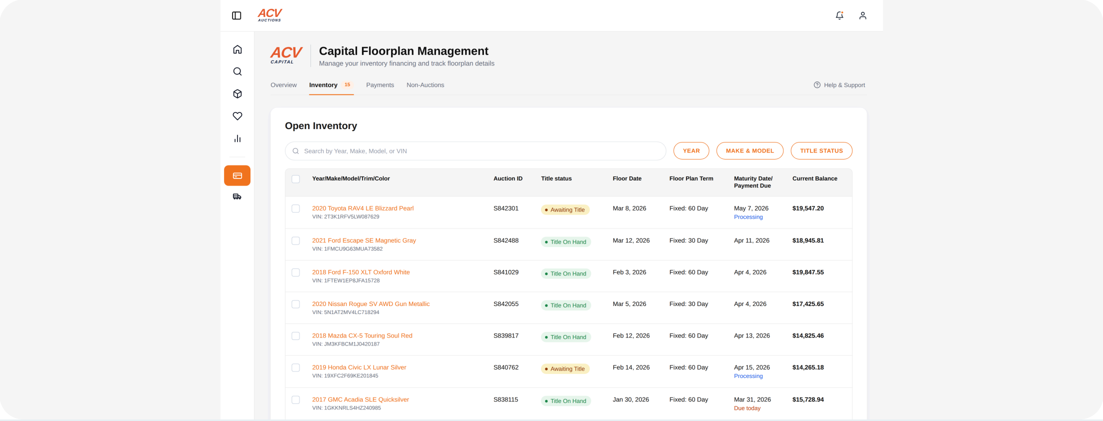
Designing around credit, due dates, and history, not balances, improved clarity and reduced Support calls. We built a decision tool that points dealers to the right action.

Explore Prototype ↗

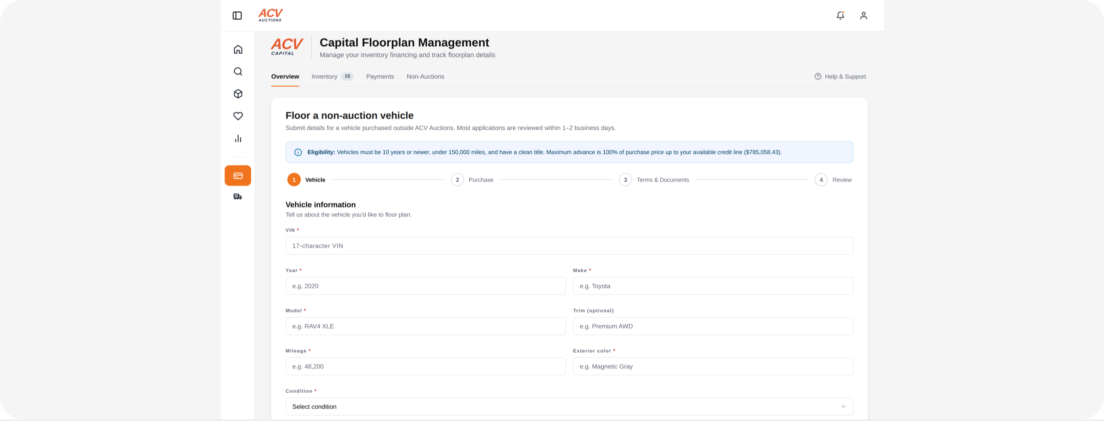
1 UNDERSTAND → 2 FRAME → 3 EXPLORE → 4 VALIDATE → **5 DELIVER**

A self-serve floorplan platform with real-time control

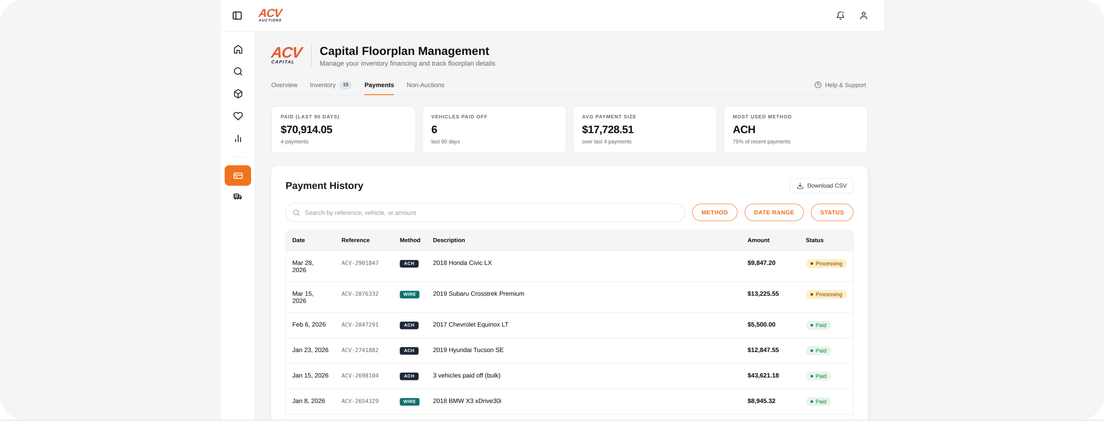
Real-time visibility over inventory, maturities, and payments that replaces the phone calls and the black box.



Inventory: filters, title tracking, bulk pay



Floor a vehicle: self-serve flow



Payments: methods, history & status

On-time ↑
Higher on-time payoff rate; fewer late fees

90 days
To active, recurring use

4.6 / 5
Dealer satisfaction, post-launch survey

~2×
Fewer routine inquiries to Ops vs. baseline

DESIGN SYSTEM Reusable patterns contributed to ACV's Global Design System.

LAUNCH Rolled out in phases, then scaled to all ACV Capital customers within six months.

DELIVERY Coordinated Engineering, Data Science, Ops & Compliance through launch, resolving real-time balance and payment dependencies as they surfaced.

HANDS-ON Stayed in the design tool through final execution: interaction details, edge-case states, and copy, not just direction.

"My office managers stopped calling us about balances and titles. They just handle it in the portal now. It changed how we run the floor."

— Shayan K., GM, Capital Operations

*Impact measured against pre-launch baselines from internal reporting. Specific figures redacted for confidentiality.