Redline Labs — FY2027 Operating Plan (Case Facts)

Problem Set 2 Model Pack • MGT 816 • This PDF mirrors `case_facts.txt` word for word — use the `.txt` when you paste the facts into your AI tools.

Redline Labs is a synthetic company built for this problem set, so do not go looking for it in the wild. It sells an AI contract-review copilot to mid-market law firms — software that reads a redline, flags the risky clauses, and drafts the markup a junior associate would have written. The founder is a former VP of Product at DocuSigner, so the go-to-market is the legal vertical she already knew cold. The pricing is the model every AI-SaaS company is running in 2026: a subscription base plus metered usage. Your job is to forecast FY2027 on a monthly grid, January through December.

> Here is everything the plan assumes. **Treat it as the contract.** If a number you need is not written here, do not invent it — flag it and move on.

Pricing

Every active firm pays a platform fee of **$2,500 per month**. On top of that, each firm gets an allowance of **1,000 reviewed documents per month** included in the base; every document above 1,000 is billed at **$2**. Documents per firm are not flat — they climb with account tenure on a three-step curve. In a firm's first six months on the platform it runs **1,030** documents a month; in months 7 through 12 it runs **1,360**; from month 13 on it runs **1,720**. Documents are whole numbers.

The starting book

On January 1, 2027 there are **54 active firms**, all billing month-to-month. They are spread across tenure by age: 16 firms are in their second month, 14 in their third, 10 in their fourth, 8 in their fifth, and 6 in their sixth. The whole opening book sits in the low-usage step and climbs the curve as the year runs. Opening deferred revenue is zero.

New logos

Redline sells through account executives (AEs). **Four AEs** are on the roster January 1 and are already fully ramped. New AEs join in March, May, July, two in September, and one in November. A newly hired AE produces nothing in the month of hire — a one-month ramp — and from the following month on carries a quota of **3 new firms per month**.

Churn

A firm cannot churn in its first three months: logo churn is 0% for months 1 through 3. After that, seasoned firms churn at **1.5% per month**. "Seasoned" means a monthly-billing firm with tenure of four months or more. Each month, churned firms = ROUND(1.5% × the beginning-of-month count of seasoned monthly firms, 0). That rounded total is allocated across the seasoned cohorts in proportion to cohort size, using the largest-remainder method, with ties broken in favor of the oldest cohort. Firms that prepaid annually are under contract and do not churn inside FY2027.

Prepay and deferred revenue

40% of each month's new firms prepay a full year up front; the rest stay monthly. Prepay firms = ROUND(40% × new firms, 0), and the remainder bill monthly. A prepay firm is billed 12 × $2,500 with a **10% discount** — **$27,000** — in cash at signing, and Redline recognizes **$2,250** of platform revenue per month for the following twelve months. Monthly firms simply pay $2,500 each month they are active. Roll deferred revenue forward the usual way: beginning balance + new prepay billings − revenue recognized = ending balance.

Commissions

Sales commission is **8% of first-year platform ACV**. First-year platform ACV is 12 × $2,500 = $30,000, so commission is 8% × 12 × $2,500 = **$2,400 per new firm**. It is expensed when the firm signs but paid in cash quarterly, at the end of March, June, September, and December.

COGS

Three pieces. First, **inference**: every document processed costs money to run through the model. That cost starts at **$0.18 per document** in Q1 and declines **5% each quarter** as the models get cheaper. Second, **hosting**: a fixed **$19,500 per month**. Third, **customer-success payroll**: Redline staffs one customer success manager (CSM) for every **15 active firms**, and it hires them one month early — the CSM count for a month is ROUNDUP(next month's ending active firms / 15, 0). CSMs are paid **$78,000** a year.

Operating expenses

Sales & marketing is AE salaries + commissions + demand-generation spend. AEs earn **$96,000** a year. Demand-gen follows a given monthly ramp, from $150,000 in January up to $347,000 in December (the monthly schedule is in the model). Engineering runs on its own hiring plan — 9 on payroll in January, then 10, 12, 13, 15, 16, 18, 19, 21, 22, 23, and 24 by December — at **$165,000** each per year; split engineering cost **60% to product support and 40% to core R&D**, both inside R&D opex. G&A is four executives at **$240,000** each per year plus rent of **$28,000** a month.

Timing and mechanics

Compute every monthly quantity — revenue, usage, COGS, headcount ratios — on **end-of-month active firm counts**. There are no taxes, no depreciation, and no capital expenditure in FY2027, so net income equals operating income. Redline starts the year with **$6,600,000 of cash**.

That is the plan. Build the monthly forecast, keep every assumption isolated on one tab, label your units, and let the schedules — not hardcoded numbers buried inside formulas — do the work.

Quick reference (every value above, one table)

Platform fee	$2,500 per firm per month
Usage	1,000 docs/month included; $2 per document above
Usage curve (docs/firm/month)	months 1–6: 1,030 months 7–12: 1,360 month 13+: 1,720
Opening book (Jan 1, 2027)	54 monthly firms (tenure: 16/14/10/8/6 in months 2–6); deferred revenue $0; cash $6,600,000
AEs	4 ramped on Jan 1; hires Mar, May, Jul, Sep×2, Nov; one-month ramp; quota 3 new firms/month
Churn	0% months 1–3; then 1.5%/month of seasoned monthly firms; ROUND(...,0), largest-remainder allocation, oldest-first ties; prepay firms do not churn
Prepay	ROUND(40% × new firms, 0); $27,000 cash at signing (12 × $2,500 less 10%); recognize $2,250/month for 12 months
Commission	$2,400 per new firm (8% × $30,000 ACV); expensed at signing, paid end of Mar/Jun/Sep/Dec
COGS — inference	$0.18/document in Q1, declining 5% per quarter
COGS — hosting	$19,500 per month, fixed
COGS — CSMs	ROUNDUP(next month's ending active firms / 15, 0), hired one month early; $78,000/year each
S&M	AE salaries $96,000/year + commissions + demand-gen ramp ($150,000 Jan → $347,000 Dec; schedule in the model)
Engineering (R&D opex)	headcount 9, 10, 12, 13, 15, 16, 18, 19, 21, 22, 23, 24 (Jan→Dec); $165,000/year each; 60% support / 40% core R&D
G&A	4 executives × $240,000/year + rent $28,000/month
Mechanics	all monthly quantities on end-of-month active firms; no taxes, depreciation, or capex; net income = operating income