

# Unit Economics for Business Owners — Workbook

This workbook turns the course into a working model of your own business. You will define your unit, classify your costs, calculate contribution margin and break-even, measure a fully loaded CAC, project LTV from churn and margin, and combine them into payback period and the LTV:CAC ratio. Work each section as you study the matching module, fill the worksheets with your real numbers, and use the three templates to keep your model and decisions in one place.

## What Unit Economics Are and Why They Decide Your Fate

Define the right unit for your business and confirm you understand why profitable units can still run out of cash.

### Worksheet: Define Your Unit of Analysis

Decide the single unit you will measure profit on, based on how often your customers actually buy, and lock it in for every calculation in this workbook.

Business model (subscription / ecommerce / service / retail / marketplace)

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How often a typical customer buys (once / a few times / ongoing)

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Chosen unit (one customer / one order / one job / one transaction)

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Revenue line for one unit (price, average order value, or recurring fee)

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Where you will pull this data from (QuickBooks, Stripe, Shopify, POS)

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### Exercise: Spot the Cash-Flow Trap in Your Own Numbers

Estimate the gap between when you pay to acquire a customer and when they pay you back, so you can see the timing risk before you scale.

- Roughly what do you spend to acquire one customer, and when do you pay it (up front, or over time)?

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- How much margin does that customer return per month or per repeat order, and over how long?

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- If you doubled new customers next month, would your bank balance rise or fall in the short term, and why?

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### Checklist: Foundations Readiness

- I have chosen one unit of analysis and written it down
- I can explain why I measure profit per unit, not just total profit
- I understand that growth multiplies whatever sign my unit economics carry
- I know that a profitable unit can still drain cash during fast growth
- I know where every number I need lives in my accounting and sales tools

## Contribution Margin: The Foundation of Every Decision

Classify your costs, calculate contribution margin per unit, and find the exact volume you must sell to break even.

### Worksheet: Classify Every Cost as Variable or Fixed

Go through your accounting software line by line and tag each cost, splitting any semi-variable cost into a fixed base and a per-unit portion.

Variable costs per unit (COGS, payment fees, packaging, shipping, per-unit labour)

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Total variable cost for one unit (dollars)

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Monthly fixed costs (rent, salaries, software, insurance, accounting)

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Semi-variable costs and how you split them (fixed base vs per-unit)

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Total monthly fixed costs (dollars)

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### Exercise: Calculate Contribution Margin and Break-Even

Using your classified costs, compute contribution margin per unit two ways, then find your break-even and margin of safety.

- What is your unit price minus unit variable cost, in dollars and as a percentage of price?
  - Dividing fixed costs by contribution margin per unit, how many units must you sell each month to break even?
  - How far are your actual sales above break-even, and what is your margin of safety as a percentage?
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### Worksheet: Compare Margins Across Your Products

List your main products or plans and rank them by both dollar and percentage contribution margin to find your most profitable mix.

Product or plan name

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Price (dollars)

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Variable cost per unit (dollars)

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Contribution margin (dollars) and contribution margin (%)

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Share of total sales (%) and ranking by profitability

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### Checklist: Margin Readiness

- Every cost is tagged variable, fixed, or semi-variable
- I have a correct contribution margin in dollars and percent for each product
- I have calculated break-even units and break-even revenue

- [ ] I know my margin of safety and how far sales can fall before a loss
- [ ] I have flagged any product with a negative or weak contribution margin

## CAC, LTV, and the Two Numbers That Decide Growth

Build a fully loaded CAC, project LTV from margin and churn, and validate it with a cohort table.

### Worksheet: Build a Fully Loaded CAC

Add up every dollar of acquisition spend in a recent month, including people and tools, then divide by new customers won for both blended and channel-level CAC.

Paid media spend (Google, Meta, TikTok, LinkedIn) for the month (dollars)

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Acquisition salaries and sales commissions (dollars)

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Marketing and sales software plus content and agency fees (dollars)

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Total acquisition spend and number of new customers won

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Blended CAC (dollars) and CAC for your top channel (dollars)

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### Exercise: Project LTV From Margin and Churn

Use the formula that fits your model, always on gross margin, and test how sensitive LTV is to retention.

- For subscriptions: monthly revenue per customer times gross margin %, divided by monthly churn rate, equals what LTV?

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- For ecommerce: average order value times gross margin % times average orders per customer, equals what LTV?

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- If you cut churn in half (or added one repeat order), how much does your LTV rise, and what does that imply about retention?

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### Worksheet: Read Your Cohort Retention Curve

Group customers by the month they joined and track how many remain and how much cumulative gross profit they produce over the following months.

Cohort month (when these customers first bought)

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Percent of the cohort still active at month 1, 3, 6, and 12

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Cumulative gross profit per customer at month 1, 3, 6, and 12

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The month cumulative gross profit first exceeds CAC (true payback month)

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Is the curve flattening (sticky) or still falling (leaky)?

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## Checklist: CAC and LTV Readiness

- My CAC includes ad spend, acquisition salaries, commissions, and tools
- I have both blended CAC and CAC for each major channel
- My LTV is built on gross margin, not revenue, with conservative churn
- I have a cohort table showing real retention over time
- I have identified the actual month each cohort pays back its CAC

## Putting It Together: Ratios, Levers, and the Decision to Scale

Combine CAC and LTV into payback and LTV:CAC, choose a lever to pull, and run the green-light test for scaling.

### Exercise: Calculate Payback Period and the LTV:CAC Ratio

Bring your CAC, monthly gross profit per customer, and LTV together to compute the two ratios that govern growth, and compare them to the benchmarks.

- CAC divided by monthly gross profit per customer gives what payback period in months, and is it under 12?  
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- LTV divided by CAC gives what ratio, and is it at or above the 3 to 1 benchmark?  
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- Read together, do your two ratios say a customer is worth getting and that you can afford to get many quickly?  
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### Worksheet: Choose One Lever to Pull This Quarter

Pick a single lever in order of leverage (churn, price, frequency, then CAC), set a target, and define how you will measure the effect on your ratios.

Lever chosen (reduce churn / raise price / increase frequency / lower CAC)  
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Current value of the metric and your target value  
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Specific action (onboarding fix, price test, upsell, channel shift)  
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Expected effect on contribution margin, LTV, payback, or LTV:CAC  
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How and when you will measure the result  
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### Checklist: Green-Light Test for Scaling

- Contribution margin per unit is clearly positive across my main products
- LTV:CAC is at least 3 to 1 on conservative, cohort-based LTV
- CAC payback fits within the cash runway I can actually fund
- Cohort retention curves are flat or improving, not decaying
- If any test fails, I will fix it with a lever before scaling, not after

## Your Action Plan

1. Define your unit of analysis and pull your last full month of revenue and cost data from QuickBooks, Stripe, or your POS
2. Classify every cost as variable, fixed, or semi-variable and total the variable cost of one unit
3. Calculate contribution margin per unit in dollars and percent for each product or plan
4. Compute break-even units and revenue, and your current margin of safety
5. Build a fully loaded CAC for the month, blended and by channel, including salaries and tools
6. Project LTV on gross margin using your churn rate or repeat-order count, kept conservative

7. Build a cohort retention table and find the real payback month for recent cohorts
8. Calculate CAC payback period and the LTV:CAC ratio and compare them to the 6 to 12 month and 3 to 1 benchmarks
9. Pick one lever (churn, price, frequency, or CAC), set a target, and run a measured test this quarter
10. Run the four-part green-light test and either scale the proven channels or fix the failing metric first









