

Start up

METRIC

Cheat sheet



The Numbers Every Early-Stage
Startup Should Obsess Over

Contents



—	Why This Exists	03
—	How to Use This Stage check: where are you? · The Metrics Map	04
01	Growth Metrics MoM Growth Rate · Activation Rate · Viral Coefficient	06
02	Engagement Metrics DAU/MAU Ratio · Retention Curves · Core Action Rate	11
03	Revenue Metrics MRR · Revenue Churn Rate · ARPU	15
04	Unit Economics CAC · LTV · LTV:CAC Ratio · CAC Payback Period	19
05	Runway & Survival Burn Rate · Months of Runway · Default Alive vs. Default Dead	24
—	Worked Example Osu Ledger, a fictional Accra startup, through all 16 metrics	28
—	The Cheat Sheet All 16 formulas and benchmarks on one page	30
—	The One-Page Dashboard	31
—	The Stage-by-Stage Playbook	32
—	Common Traps	33
—	Further Reading & Final Word	34

● WHY THIS EXISTS

Most founders are building *in the dark*.

They ship features, run ads, post on LinkedIn, and “stay busy”, but when someone asks “how’s the startup going?” the answer is vibes. Good energy. Promising conversations. “We’re growing.”

That’s not a business. That’s a feeling.

This document is the cheat code. It’s the list of numbers that actually tell you whether your startup is working or dying, and most importantly, what to do about each one.

No MBA jargon. No 47-slide framework. Just the metrics that matter when you’re early, scrappy, and building something real.

Print it. Pin it. Revisit it every week.



Maxwell Cofie

Founder, Sandbox Réseau

16

metrics that tell you if it's working

5

buckets: growth to runway

3–5

to obsess over at any one stage

30 min

a week is all it takes

How to use this

Every metric in this document follows the same structure:

ELEMENT	WHAT IT TELLS YOU
What it is	Plain-English definition
Why it matters	Why you should care, specifically at the early stage
How to calculate it	The actual formula
What good looks like	Benchmarks for early-stage startups
Red flag	The number that means you have a problem
The move	What to do if the number is off

If you're pre-revenue, some of these won't apply yet. That's fine. Skip to the ones that match your stage. But know what's coming.

Benchmark tables use the same four signals throughout: ● strong, ● okay, ● needs work and ● danger. The words in each row always say which.

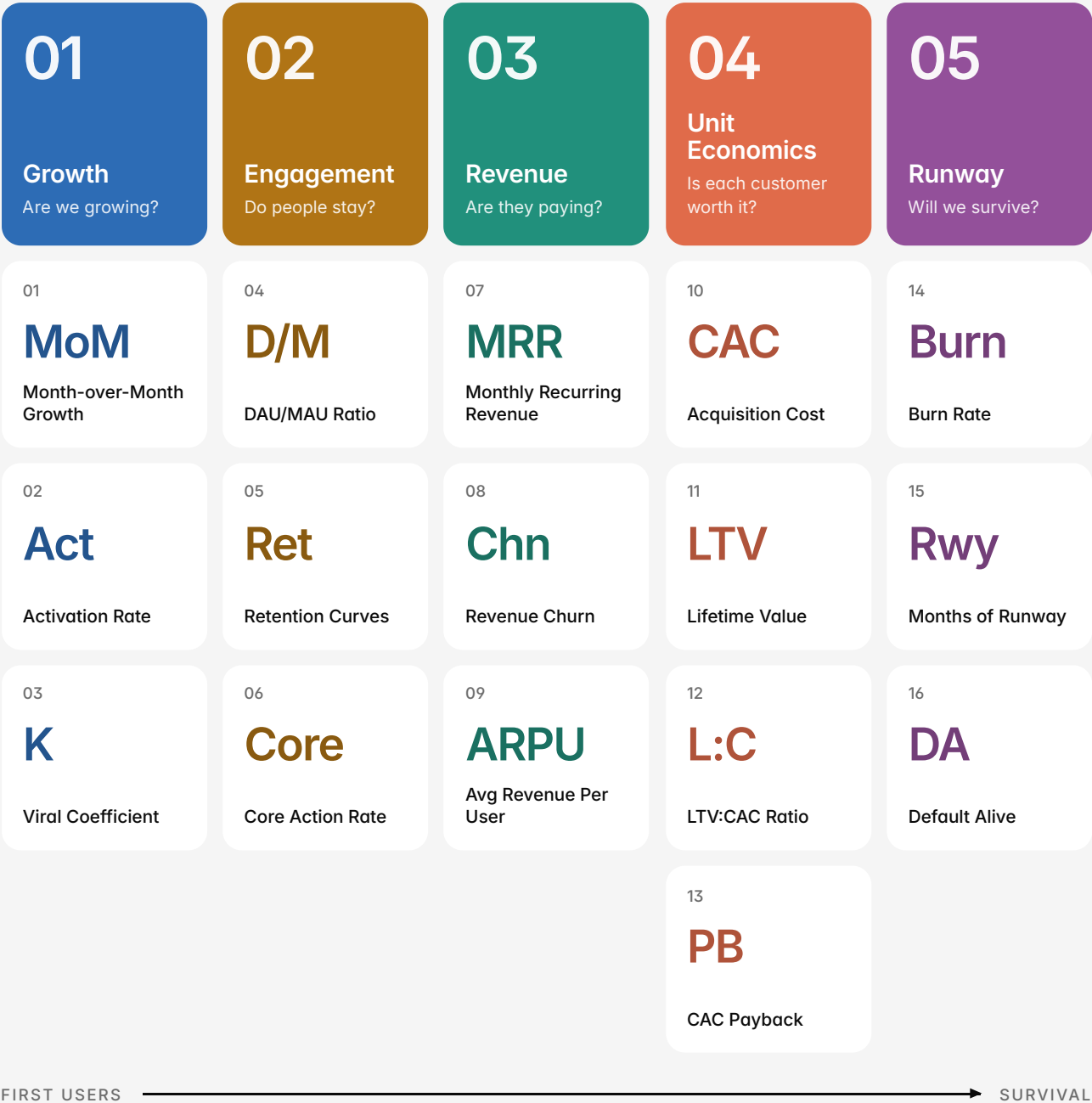
Stage check: where are you?

STAGE	FOCUS ON	IGNORE FOR NOW
Idea / Pre-MVP	Problem validation (qualitative, not metrics)	Everything in this doc. Go talk to people.
MVP / First Users	Activation rate, Core action rate, Retention	Revenue metrics, Unit economics
Post-PMF Signal	MoM growth, Retention, MRR, Burn rate	Viral coefficient, LTV:CAC precision
Scaling	All of them. You need the full dashboard.	Nothing. You're a real company now.

● AT THE IDEA STAGE?

If you're at the idea stage, close this document. Seriously. Go have 30 conversations with potential users. Metrics don't help you until you have a product people can touch.

FIGURE 0.1 | **The Metrics Map**
Sixteen numbers in five buckets, read left to right from your first users to survival.



Rule of thumb: at any given stage, you should be obsessing over 3–5 of these. Not all of them. The ones that matter depend on where you are.

01

GROWTH METRICS

Are we growing, and is the growth real?

These tell you whether your startup is growing, and whether that growth is real or manufactured.

01 MoM Growth Rate · **02** Activation Rate · **03** Viral Coefficient

● METRIC 01 · GROWTH

01 Month-over-Month (MoM) Growth Rate

What it is: The percentage your key number (users, revenue, transactions) grew compared to last month.

Why it matters: This is the single number investors will ask you first. But more importantly, it's the number that tells you if what you're doing is working. Consistent MoM growth is the clearest signal that you've found something real.

HOW TO CALCULATE IT

$$\text{MoM Growth Rate} = ((\text{This Month} - \text{Last Month}) / \text{Last Month}) \times 100$$

EXAMPLE

You had 200 users last month. You have 240 this month. $\rightarrow ((240 - 200) / 200) \times 100 = 20\%$

MoM growth

What good looks like

GROWTH RATE

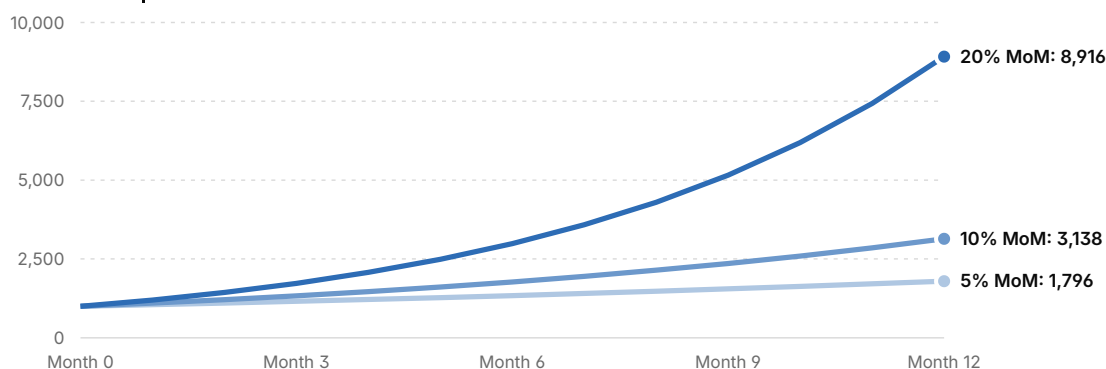
SIGNAL

● 15–20% MoM	Strong. You're in YC territory.
● 10–15% MoM	Solid. Keep pushing.
● 5–10% MoM	Okay, but something needs to change.
● < 5% MoM	Stalling. Diagnose immediately.

FIGURE 1.1

Small differences compound

1,000 users growing at a steady monthly rate for 12 months

**Note**

Users after 12 months = $1,000 \times (1 + \text{monthly growth})^{12}$. 10% MoM roughly triples you; 20% grows you almost ninefold.

● RED FLAG

Three consecutive months below 5%. You're plateauing.

● THE MOVE

If growth is slowing, the answer is almost never “more marketing.” It’s usually one of three things:

- **Your activation flow is broken** (people sign up but don’t get value).
- **Your retention is leaking** (you’re adding users but losing old ones).
- **You’ve exhausted your current channel** (time to find a new acquisition source).

● METRIC 02 · GROWTH

02 Signup-to-Active Rate (Activation Rate)

What it is: The percentage of people who sign up and actually do the thing your product is built for.

Why it matters: This is where most early-stage startups silently die. You celebrate signups. You post “We hit 1,000 users!” on LinkedIn. But 800 of them signed up and never came back. **A signup is not a user.** A user is someone who experienced the core value of your product.

First, define your **activation event**, the one action that means someone “got it”:

PRODUCT TYPE	ACTIVATION EVENT EXAMPLE
Fintech app	Completed first transaction
Marketplace	Listed first item OR made first purchase
SaaS tool	Created first project/document
Social/Community	Posted or commented for the first time
E-commerce	Added item to cart (or completed first order)

HOW TO CALCULATE IT

Activation Rate = (Users who completed activation event / Total signups) × 100

What good looks like

RATE	SIGNAL
● > 40%	Excellent. Your onboarding works.
● 25–40%	Decent. Room to improve.
● 10–25%	Problem. Your onboarding is losing people.
● < 10%	Emergency. Most people don’t understand your product.

RED FLAG

Below 15%. You're spending money (or effort) acquiring people who never become real users.

THE MOVE

- **Map the drop-off.** Where exactly do people leave? After signup? After the first screen? Use a simple funnel (even manual tracking in a spreadsheet works).
- **Reduce time-to-value.** How fast can someone experience the "aha" moment? If it takes 10 steps, cut it to 3.
- **Kill the friction.** Every field you ask them to fill, every screen they have to navigate, every permission they have to grant: each one is a point where people leave.

METRIC 03 · GROWTH

03 Viral Coefficient (K-Factor)

What it is: How many new users each existing user brings in, on average.

Why it matters: If $K > 1$, your product grows by itself. Every user brings in more than one new user, and you have exponential growth without spending on acquisition. This almost never happens, but even a K of 0.3–0.5 means your users are doing a meaningful amount of your growth for you.

HOW TO CALCULATE IT

$$K = (\text{Average invites sent per user}) \times (\text{Conversion rate of those invites})$$

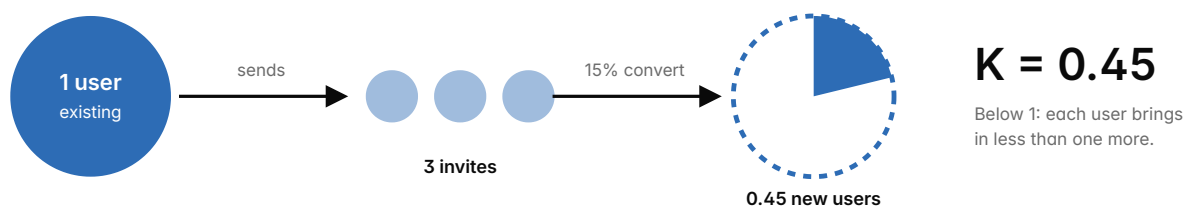
EXAMPLE

Each user invites 3 people. 15% of those invites convert. $\rightarrow K = 3 \times 0.15 = 0.45$

FIGURE 1.2

The viral loop

How the K-factor example works: invites sent $\times$ invite conversion



What good looks like

K-FACTOR

SIGNAL

● > 1.0	Viral. Extremely rare. You've won.
● 0.5 – 1.0	Strong word-of-mouth. Growth is partially organic.
● 0.2 – 0.5	Some organic pull. Your product has advocates.
● < 0.2	No organic growth. You're paying for every user.

● RED FLAG

K near zero AND you're spending heavily on ads. You're on a treadmill.

● THE MOVE

- **Build sharing into the product.** Not a "share with friends" button nobody clicks. Make the product better when used with others (e.g., split payments, shared workspaces, referral rewards that actually matter).
- **Make the invite selfish.** "Invite a friend and you both get X" works because the person inviting gets something too.

02

ENGAGEMENT METRICS

Do the people who show up actually stay?

These tell you whether people who show up actually stay and use your product.

Growth without engagement is a leaky bucket.

04 DAU/MAU Ratio · 05 Retention Curves · 06 Core Action Rate

● METRIC 04 · ENGAGEMENT

04 DAU/MAU Ratio (Stickiness)

What it is: Daily Active Users divided by Monthly Active Users. It tells you what percentage of your monthly users come back every day.

Why it matters: This is the stickiness test. A high ratio means people are coming back daily. A low ratio means they use you once in a while. Neither is inherently bad (it depends on your product), but you need to know which you are.

HOW TO CALCULATE IT

$$\text{Stickiness} = \text{DAU} / \text{MAU} \times 100$$

What good looks like

RATIO	SIGNAL	TYPICAL FOR
● > 50%	Extremely sticky. Daily habit.	Messaging apps, social media
● 25–50%	Very engaged.	Productivity tools, fintech
● 10–25%	Normal for many products.	E-commerce, marketplaces
● < 10%	Low engagement.	Utility apps used occasionally

Context matters. A travel booking app with 5% DAU/MAU isn't broken; people don't book flights every day. A messaging app with 5% DAU/MAU is dead.

● RED FLAG

Your DAU/MAU is declining over time, regardless of the absolute number.

● THE MOVE

- **Build a daily trigger.** Notifications, streaks, daily content, or a reason to open the app. But don't spam; give genuine value.
- **Find your natural frequency.** Not every product is daily. If yours is weekly, measure WAU/MAU instead.

● METRIC 05 · ENGAGEMENT

05 Retention Curves

What it is: The percentage of users who come back after Day 1, Day 7, Day 30, and Day 90.

Why it matters: Retention is the only metric that cannot be faked. You can buy signups. You can inflate

revenue with discounts. You can manufacture growth with paid ads. But you cannot force someone to come back to a product they don't want. If your retention curve flattens (stops dropping), you have product-market fit. If it drops to zero, nothing else matters.

Track a cohort (e.g., everyone who signed up in Week 1) and measure what percentage is still active at each interval:

HOW TO CALCULATE IT

Day 1 Retention = Users active on Day 1 / Users who signed up × 100

Day 7 Retention = Users active on Day 7 / Users who signed up × 100

Day 30 Retention = Users active on Day 30 / Users who signed up × 100

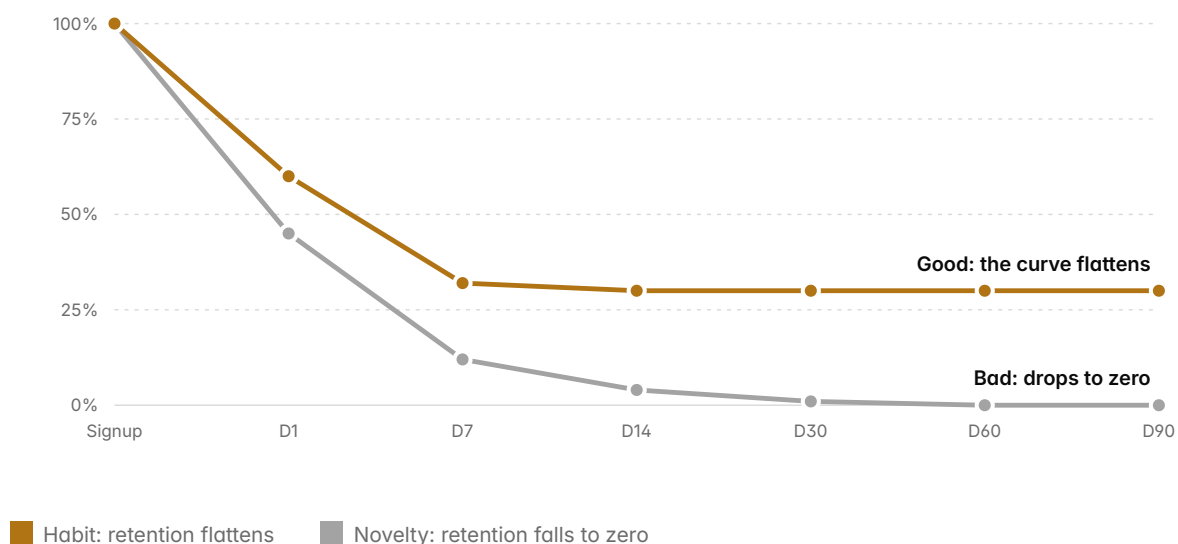
What good looks like

INTERVAL	STRONG	OKAY	DANGER
Day 1	> 60%	40–60%	< 40%
Day 7	> 30%	20–30%	< 20%
Day 30	> 15%	10–15%	< 10%

FIGURE 2.1

The curve that matters

Share of a signup cohort still active, by day (illustrative)



Note

Illustrative curves, redrawn from the original cheat sheet. Your own cohort data replaces them.

If the curve flattens, you have something. If it keeps falling, your product is a novelty, not a habit.

● RED FLAG

Day 30 retention below 5%. You're churning faster than you can grow.

● THE MOVE

- **Day 1 retention is an onboarding problem.** Fix the first experience.
- **Day 7 retention is a value problem.** People tried it and didn't find enough reason to return.
- **Day 30 retention is a habit problem.** You need to become part of their routine.

● METRIC 06 · ENGAGEMENT

06 Core Action Rate

What it is: The percentage of active users performing the primary action your product exists to deliver.

Why it matters: "Active user" is often defined too loosely. Opening the app doesn't count. Scrolling doesn't count. The core action is the thing your product exists to do. If people are "active" but not doing the core thing, your engagement numbers are lying to you.

Define your core action:

PRODUCT	CORE ACTION
Payment app	Sent money
Marketplace	Completed a transaction
Learning platform	Finished a lesson
CRM tool	Logged a contact/deal
Content platform	Published or consumed content

HOW TO CALCULATE IT

Core Action Rate = (Users who performed core action / Total active users) × 100

What good looks like: > 50% of active users performing the core action regularly.

● RED FLAG

< 20%. People are in your product but not using it for its purpose.

● THE MOVE

- Make the core action the first thing users see when they open the product.
- Remove everything between the user and the core action. Every extra tap, screen, or decision is friction.

03

REVENUE METRICS

Are people paying, and do they keep paying?

These matter once you're charging. If you're pre-revenue, read them so you know what's coming.

07 MRR · **08** Revenue Churn Rate · **09** ARPU

● METRIC 07 · REVENUE

07 Monthly Recurring Revenue (MRR)

What it is: The total predictable revenue you earn every month from subscriptions or recurring payments.

Why it matters: MRR is the heartbeat of a subscription business. It tells you how much money you can count on next month (assuming no churn). Investors care about MRR more than total revenue because it's predictable.

HOW TO CALCULATE IT

MRR = Number of paying customers × Average revenue per customer per month

For non-subscription businesses, calculate your **Monthly Revenue Run Rate** instead, but know that investors discount non-recurring revenue.

What good looks like (early stage)

MRR

SIGNAL

● \$0 – \$1K	Pre-product-market fit. Normal for the first 6–12 months.
● \$1K – \$10K	Something is working. Time to understand why people are paying.
● \$10K – \$50K	Real traction. You can start thinking about fundraising.
● \$50K+	Strong. You have a business.

● IN THE AFRICAN CONTEXT

Adjust for local currency. GH¢5,000–10,000 MRR for a product selling to Ghanaian SMEs is meaningful traction. Don't compare yourself to US SaaS benchmarks.

● RED FLAG

MRR is flat or declining for 3+ months.

● THE MOVE

- **Flat MRR** = new customers are exactly replacing churned customers. You have a retention problem, not a growth problem.
- If MRR is growing but slowly, **experiment with pricing**. Most early-stage founders undercharge.

● METRIC 08 · REVENUE

08 Revenue Churn Rate

What it is: The percentage of your revenue that disappears each month due to cancellations or downgrades.

Why it matters: You can add all the new customers you want. If existing customers keep leaving, you're filling a leaking bucket. Revenue churn is the silent killer: it's the metric most founders don't track until it's too late.

HOW TO CALCULATE IT

Revenue Churn Rate = (MRR lost from churned/downgraded customers / MRR at start of month) × 100

What good looks like

MONTHLY CHURN

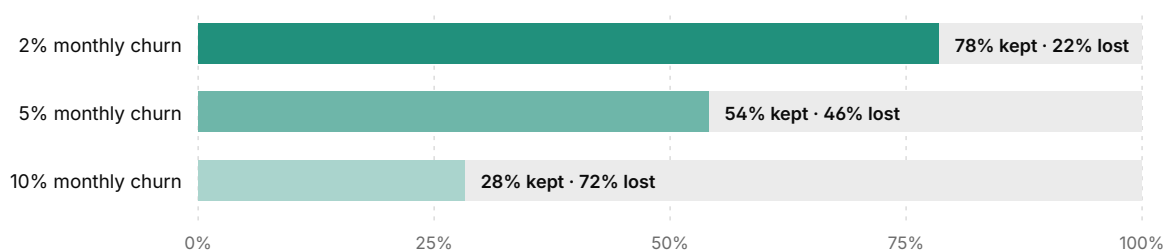
SIGNAL

● < 2%	Excellent. Healthy retention.
● 2–5%	Normal for early stage. Work on it.
● 5–10%	Warning. You're losing too many customers.
● > 10%	Critical. Your product has a value problem.

FIGURE 3.1

The math that kills you

Share of today's revenue still there after 12 months, at a constant monthly churn rate



Note

Revenue kept = $(1 - \text{monthly churn})^{12}$, with no new customers.

The math that kills you: 5% monthly churn means you lose ~46% of your revenue annually. 10% monthly churn means you lose ~72%. At 10%, you need to more than triple your customer base every year just to grow.

● RED FLAG

Churn increasing month-over-month, even if it's still below 5%.

● THE MOVE

- **Exit interviews.** Ask every single person who cancels why. Patterns will emerge fast.
- **Watch for “quiet churn.”** Users who stop using the product but haven’t cancelled yet. They’re already gone; they just haven’t told you.

● METRIC 09 · REVENUE

09 Average Revenue Per User (ARPU)

What it is: How much revenue each user generates, on average, per month.

Why it matters: ARPU tells you how well you’re monetising your users. Two startups can have 1,000 users, one with \$2 ARPU and one with \$50 ARPU. They’re in completely different businesses.

HOW TO CALCULATE IT

$$\text{ARPU} = \text{Total Revenue} / \text{Total Active Users}$$

What good looks like: entirely depends on your business model.

MODEL	TYPICAL ARPU RANGE
Freemium consumer app	\$0.50 – \$5/month
SME SaaS	\$10 – \$100/month
Enterprise SaaS	\$500 – \$5,000+/month
Marketplace (take rate)	Varies by transaction volume
Mobile money / fintech	\$0.10 – \$2 per transaction

● RED FLAG

ARPU declining while user count grows. You’re attracting lower-value users.

● THE MOVE

- **Upsell.** Can you offer a premium tier? More features for more money?
- **Pricing experiments.** Test higher prices with new cohorts. You might be surprised how little pushback you get.
- **Segment your ARPU.** Your top 20% of users probably generate 80% of your revenue. Understand them. Build for them.

04

UNIT ECONOMICS

Is every customer worth more than they cost?

This is where founders either understand their business or go broke. Unit economics tells you whether every customer you acquire is worth more than they cost.

10 CAC · **11** LTV · **12** LTV:CAC Ratio · **13** CAC Payback Period

● METRIC 10 · UNIT ECONOMICS

10 Customer Acquisition Cost (CAC)

What it is: How much it costs to acquire one new paying customer.

Why it matters: If it costs you more to get a customer than that customer will ever pay you, your business model is broken. Full stop. Many startups scale themselves into bankruptcy because they never calculate this number.

HOW TO CALCULATE IT

$$\text{CAC} = \text{Total Sales \& Marketing Spend} / \text{Number of New Customers Acquired}$$

Include everything: ads, salaries of sales/marketing team, tools, events, content costs, agency fees. Don't cheat by excluding costs to make the number look better.

What good looks like (it depends on your LTV, but in isolation)

SCENARIO

SIGNAL

● CAC < 1 month's revenue from that customer	Very efficient.
● CAC = 3–6 months' revenue	Normal for SaaS.
● CAC > 12 months' revenue	Dangerous unless LTV is very high and proven.

● RED FLAG

You don't know your CAC. If you can't calculate this number, you're spending blind.

● THE MOVE

- **Track CAC by channel.** Your Instagram ads might have a \$50 CAC while your WhatsApp referrals have a \$2 CAC. Double down on what's cheap.
- **Organic > Paid.** Content, community (like this one), word-of-mouth, and partnerships have near-zero marginal CAC. Build these channels early.

● METRIC 11 · UNIT ECONOMICS

11 Customer Lifetime Value (LTV)

What it is: The total revenue you expect to earn from a single customer over their entire relationship with your product.

Why it matters: LTV is the other half of the most important equation in startup economics. If you don't

know how much a customer is worth over time, you can't know how much you can afford to spend acquiring them.

HOW TO CALCULATE IT (SIMPLE VERSION)

$LTV = ARPU \times \text{Average Customer Lifespan (in months)}$

or, using churn

$LTV = ARPU / \text{Monthly Churn Rate}$

EXAMPLE

ARPU is \$20/month. Monthly churn is 5%. → $LTV = \$20 / 0.05 = \$400$

What good looks like: LTV should be at least 3× your CAC (see next metric).

● RED FLAG

You're estimating LTV based on hope rather than data. If you've only been operating for 3 months, you don't truly know your customer lifespan yet. Be conservative.

● THE MOVE

- **Increase ARPU.** Upsell, cross-sell, raise prices.
- **Reduce churn.** Every month you keep a customer, LTV goes up.
- **Don't over-project.** Use actual data, not "if we retain them for 3 years..." projections.

● METRIC 12 · UNIT ECONOMICS

12 LTV:CAC Ratio

What it is: The ratio of what a customer is worth to what it costs to acquire them. This is the single most important unit economics metric.

Why it matters: This number tells you whether your business model works. Everything else is detail.

HOW TO CALCULATE IT

$LTV:CAC = \text{Customer Lifetime Value} / \text{Customer Acquisition Cost}$

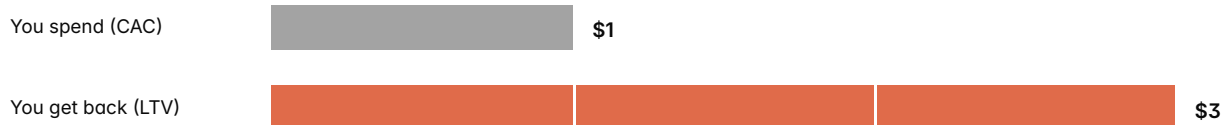
What good looks like

RATIO	SIGNAL
● > 5:1	Excellent. You could be spending more on growth.
● 3:1	Healthy. The gold standard.
● 1:1 – 3:1	Marginal. Workable if improving.
● < 1:1	You're losing money on every customer. Stop scaling.

FIGURE 4.1

The cheat code within the cheat code

LTV:CAC = 3:1, the minimum for a sustainable business



Each block is \$1. At 3:1, every \$1 of acquisition spend returns \$3 over the customer's lifetime.

For every \$1 you spend acquiring a customer, you get \$3 back over their lifetime. That's the minimum for a sustainable business. Below that, you're subsidising your customers. Above that, you have room to grow.

● **RED FLAG** Ratio below 1:1. You are literally paying people to use your product and never making it back.

● THE MOVE

- If LTV:CAC < 3, **don't scale**. Fix the ratio first. Either reduce CAC (cheaper channels, better conversion) or increase LTV (less churn, higher prices, upsells).
- If LTV:CAC > 5, **spend more on acquisition**. You're leaving growth on the table.

● METRIC 13 · UNIT ECONOMICS

13 CAC Payback Period

What it is: How many months it takes for a customer to generate enough revenue to cover the cost of acquiring them.

Why it matters: Even if your LTV:CAC is great, if it takes 24 months to recoup the acquisition cost, you need a lot of cash to survive until then. The shorter the payback period, the faster your business becomes self-sustaining.

HOW TO CALCULATE IT

$$\text{CAC Payback Period} = \text{CAC} / \text{ARPU (in months)}$$

EXAMPLE

CAC is \$60. ARPU is \$20/month. → Payback = \$60 / \$20 = **3 months**

What good looks like

PAYBACK PERIOD	SIGNAL
● < 6 months	Excellent. Capital efficient.
● 6–12 months	Normal for SaaS.
● 12–18 months	Long. You need reliable retention data to justify this.
● > 18 months	Dangerous without significant funding.

● RED FLAG

Payback period longer than your average customer lifespan. You're losing money on the average customer.

● THE MOVE

Same levers as LTV:CAC: reduce CAC or increase ARPU. The payback period is especially important if you're bootstrapping, because it determines how much working capital you need.

05

RUNWAY & SURVIVAL

Will we be alive long enough to make it work?

None of the metrics above matter if you run out of money. These are the numbers that keep you alive.

14 Burn Rate · **15** Months of Runway · **16** Default Alive vs. Default Dead

● METRIC 14 · RUNWAY

14 Burn Rate

What it is: How much money you're spending per month, net of any revenue.

Why it matters: This is the clock ticking. Every month, your burn rate eats into your cash reserves. If you don't know your burn rate, you don't know when you die.

HOW TO CALCULATE IT

Gross Burn = Total monthly expenses (everything)

Net Burn = Total monthly expenses – Total monthly revenue

Net burn is what matters. If you spend GH¢15,000/month and earn GH¢5,000/month, your net burn is GH¢10,000/month.

● RED FLAG

You don't track this. Or you track it but don't include all costs (founder salaries, subscriptions, server costs, transaction fees).

● THE MOVE

Know this number to the cedi. Update it monthly. Build it into a spreadsheet you actually look at.

● METRIC 15 · RUNWAY

15 Months of Runway

What it is: How many months you can survive at your current burn rate before you run out of cash.

Why it matters: This is the countdown. It tells you exactly how much time you have to make the business work, raise more money, or find a new plan.

HOW TO CALCULATE IT

Runway = Cash in Bank / Monthly Net Burn Rate

EXAMPLE

GH¢80,000 in the bank. Net burn of GH¢10,000/month. → Runway = **8 months**

What good looks like

RUNWAY

SIGNAL

● > 18 months	Comfortable. You have time to experiment.
● 12–18 months	Healthy. Start thinking about next raise at 12 months.
● 6–12 months	Urgent. If you're raising, start NOW.
● < 6 months	Emergency. Cut costs immediately or close.

● RED FLAG

Less than 6 months of runway and no clear path to revenue or fundraise.

● THE MOVE

- **Start fundraising when you have 9–12 months left.** Fundraising takes 3–6 months in Africa, often longer.
- **Cut ruthlessly if needed.** That extra developer, that co-working space, those Facebook ads that don't convert: cut them before they cut you.
- **Revenue is the best runway extension.** Every cedi of revenue reduces your burn and extends your life.

● METRIC 16 · RUNWAY

16 Default Alive vs. Default Dead

What it is: A yes-or-no question, coined by Paul Graham: *"If your expenses stay constant and your revenue growth stays on its current trajectory, will you become profitable before you run out of money?"*

Why it matters: This is the ultimate survival diagnostic. It forces you to confront whether your current path leads to sustainability or death.

HOW TO CALCULATE IT

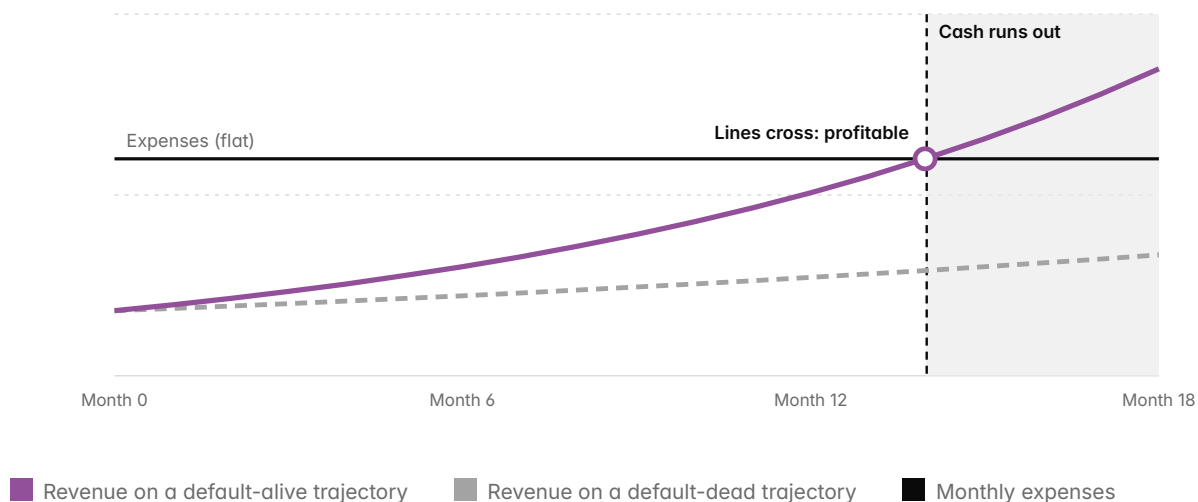
1. Project your revenue growth forward at its current rate.
2. Project your expenses staying flat.
3. Do the lines cross before your cash runs out?

Yes → Default Alive · No → Default Dead

FIGURE 5.1

Default alive or default dead?

Do revenue and expenses cross before the cash runs out? (illustrative)

**RED FLAG**

You're default dead and not actively doing something about it (cutting costs, accelerating revenue, or raising capital).

THE MOVE

If you're default dead, you have three options:

- **Cut expenses** until you're default alive.
- **Accelerate revenue growth.**
- **Raise money.**

Option 1 is the only one entirely in your control. Do it first, then pursue 2 and 3.

Worked example

To see the formulas working together, here is one month of numbers from Osu Ledger, a fictional Accra startup selling a GH¢60/month invoicing and bookkeeping app to small businesses. Every figure below is invented for illustration; the arithmetic is real.

● WHAT THE NUMBERS SAY

Osu Ledger's engine works: growth is strong, LTV:CAC is 4.4:1 and each customer pays back their acquisition cost in 5 months. On its current path it turns profitable in month 9 with about GH¢356,000 still in the bank, so it is default alive.

The two weak spots are a low viral coefficient (every user is paid for) and 10.5 months of runway. The move: start the raise now while the numbers look this good, and build referral rewards into the invoicing flow.

	METRIC	INPUTS · CALCULATION	RESULT	VERDICT
01	MoM Growth	Users went from 400 to 460 $(460 - 400) \div 400 \times 100$	15%	● Strong
02	Activation	80 of 250 signups sent a first invoice $80 \div 250 \times 100$	32%	● Decent
03	Viral Coefficient	2 invites per user, 12% convert 2×0.12	0.24	● Some organic pull
04	DAU/MAU	92 daily of 460 monthly users $92 \div 460 \times 100$	20%	● Normal
05	Retention	Last month's signup cohort $D1 \cdot D7 \cdot D30$	55 · 28 · 14%	● Okay on all three
06	Core Action Rate	253 of 460 sent an invoice $253 \div 460 \times 100$	55%	● Healthy
07	MRR	460 paying businesses at GH¢60/month 460×60	GH¢27,600	● Real traction for SMEs
08	Revenue Churn	18 customers left (GH¢1,080) $1,080 \div 24,000 \times 100$	4.5%	● Normal; work on it
09	ARPU	Every active user pays $27,600 \div 460$	GH¢60	● Stable; test pricing
10	CAC	GH¢23,400 spent, 78 new customers $23,400 \div 78$	GH¢300	● 5 months' revenue: normal
11	LTV	ARPU ÷ monthly churn $60 \div 0.045$	GH¢1,333	● More than 3× CAC
12	LTV:CAC	LTV ÷ CAC $1,333 \div 300$	4.4:1	● Healthy
13	CAC Payback	CAC ÷ ARPU $300 \div 60$	5 months	● Excellent
14	Net Burn	Expenses GH¢85,000, revenue GH¢27,600 $85,000 - 27,600$	GH¢57,400/mo	● Watch it fall as MRR grows
15	Runway	GH¢600,000 in the bank $600,000 \div 57,400$	10.5 months	● Urgent: start raising now
16	Default Alive	15% monthly revenue growth, flat expenses Do the lines cross first?	Yes	● Profitable in month 9

The cheat sheet

All 16 metrics on one page. Print it. Pin it. Revisit it every week.

METRIC	FORMULA	GOOD	RED FLAG
● PART 01 · GROWTH			
01 MoM Growth	$(\text{This} - \text{Last}) \div \text{Last} \times 100$	● 15–20%+	● < 5% for 3 months
02 Activation Rate	$\text{Activated} \div \text{Signups} \times 100$	● > 40%	● < 15%
03 Viral Coefficient	$\text{Invites/user} \times \text{Invite conversion}$	● > 0.5	● ≈ 0 while spending on ads
● PART 02 · ENGAGEMENT			
04 DAU/MAU	$\text{DAU} \div \text{MAU} \times 100$	● 25–50%+	● Declining over time
05 Retention	$\text{Active on Day N} \div \text{Signups} \times 100$	● D1 > 60 · D7 > 30 · D30 > 15%	● D30 < 5%
06 Core Action Rate	$\text{Did core action} \div \text{Active users} \times 100$	● > 50%	● < 20%
● PART 03 · REVENUE			
07 MRR	$\text{Paying customers} \times \text{Avg monthly revenue}$	● Growing MoM	● Flat 3+ months
08 Revenue Churn	$\text{MRR lost} \div \text{Starting MRR} \times 100$	● < 2%	● Rising MoM
09 ARPU	$\text{Total revenue} \div \text{Active users}$	● Growing or stable	● Falling as users grow
● PART 04 · UNIT ECONOMICS			
10 CAC	$\text{Sales \& marketing spend} \div \text{New customers}$	● < 1 month's revenue	● You don't know it
11 LTV	$\text{ARPU} \div \text{Monthly churn}$	● > 3× CAC	● Based on hope, not data
12 LTV:CAC	$\text{LTV} \div \text{CAC}$	● 3:1 to 5:1	● < 1:1
13 CAC Payback	$\text{CAC} \div \text{ARPU (months)}$	● < 6 months	● > customer lifespan
● PART 05 · RUNWAY			
14 Net Burn	$\text{Monthly expenses} - \text{Monthly revenue}$	● Decreasing	● Not tracked
15 Runway	$\text{Cash in bank} \div \text{Net burn}$	● > 18 months	● < 6 months
16 Default Alive	Do revenue and expenses cross before cash runs out?	● Yes	● No, and no plan

The one-page dashboard

If you take nothing else from this document, build this dashboard. Track these numbers weekly or monthly. Put them in a spreadsheet, a Notion page, or a whiteboard above your desk. **If you can't fill in every row, you don't understand your business yet.**

METRIC	YOUR NUMBER	BENCHMARK	STATUS
● GROWTH			
MoM Growth Rate	_____ %	> 15%	○ On track ○ Watch ○ Off track
Activation Rate	_____ %	> 25%	○ On track ○ Watch ○ Off track
● ENGAGEMENT			
Day 1 Retention	_____ %	> 60%	○ On track ○ Watch ○ Off track
Day 7 Retention	_____ %	> 30%	○ On track ○ Watch ○ Off track
Day 30 Retention	_____ %	> 15%	○ On track ○ Watch ○ Off track
DAU/MAU Ratio	_____ %	Depends on product	○ On track ○ Watch ○ Off track
Core Action Rate	_____ %	> 50%	○ On track ○ Watch ○ Off track
● REVENUE			
MRR	\$ _____	Growing MoM	○ On track ○ Watch ○ Off track
Revenue Churn	_____ %	< 5%	○ On track ○ Watch ○ Off track
ARPU	\$ _____	Growing or stable	○ On track ○ Watch ○ Off track
● UNIT ECONOMICS			
CAC	\$ _____	< ⅓ of LTV	○ On track ○ Watch ○ Off track
LTV	\$ _____	> 3× CAC	○ On track ○ Watch ○ Off track
LTV:CAC	_____ : 1	> 3:1	○ On track ○ Watch ○ Off track
Payback Period	_____ months	< 12 months	○ On track ○ Watch ○ Off track
● RUNWAY			
Net Burn Rate	\$ _____ / month	Decreasing	○ On track ○ Watch ○ Off track
Runway	_____ months	> 12 months	○ On track ○ Watch ○ Off track
Default Alive?	Yes / No	Yes	○ On track ○ Off track

The stage-by-stage playbook

What to watch, week by week, from launch to scale.

Week 1–4

You just launched

OBSESS OVER

1. **Activation Rate.** Are people who sign up actually using the product?
2. **Core Action Rate.** Are they doing the thing your product exists to do?
3. **Day 1 and Day 7 Retention.** Are they coming back?

IGNORE

Revenue metrics, CAC, LTV. You don't have enough data yet. Focus on building something people want to use.

Month 2–6

You have early users

OBSESS OVER

1. **Day 30 Retention.** This is the PMF signal. If this number is healthy, you're onto something.
2. **MoM Growth.** Is the user base expanding?
3. **Burn Rate & Runway.** How long can you keep going?

START TRACKING

MRR (even if small), ARPU, early churn signals.

Month 6–12

You're charging money

OBSESS OVER

1. **MRR Growth.** The business is real when revenue is real.
2. **Revenue Churn.** The silent killer. Catch it early.
3. **CAC & LTV:CAC.** Do the economics work?
4. **Runway.** Start fundraising prep at 12 months of runway.

YOU SHOULD NOW KNOW

Every metric in this document, even if some are rough estimates.

Month 12+

You're scaling

OBSESS OVER

1. **All 16 metrics.** You're a real company.

THEN

Build the dashboard. Review it weekly. Make decisions based on data, not vibes.

Common traps

Five ways founders fool themselves with their own numbers.

01 Vanity Metrics

Downloads, page views, total signups, social media followers. These feel good. They mean nothing without engagement and retention data. A startup with 100 active users who come back every day is worth more than one with 10,000 downloads and 98% churn.

02 Averages That Lie

Your “average” user doesn’t exist. If half your users use the product daily and half never return, your “average” usage looks moderate. Segment your data. Look at cohorts, not averages.

03 Premature Optimisation

Don’t optimise metrics you haven’t validated yet. If you don’t have product-market fit, optimising your onboarding flow is rearranging deck chairs on the Titanic. Get retention right first. Everything else follows.

04 Measuring Too Late

If you wait until investors ask for your metrics, it’s too late. Start tracking from Day 1, even if the numbers are small. The trend matters more than the absolute number. “We went from 5 to 50 users with 40% Day-7 retention” is a better story than “We have 500 users” with no retention data.

05 Africa-Specific Blindspots

A few things unique to building on the continent:

- **Payment success rates matter.** In markets where mobile money dominates, track what percentage of attempted payments actually succeed. Failed payments = lost revenue.
- **Data costs affect usage.** If your app is data-heavy, users in price-sensitive markets will use it less. Track usage patterns around payday vs. end-of-month.
- **Offline behaviour is real.** Some of your “churned” users might just have intermittent connectivity. Build for this.
- **FX fluctuation.** If you report in USD but earn in local currency, your MRR can swing 10–20% without gaining or losing a single customer. Track in local currency for operational decisions. Convert to USD only for investor reporting.

Further reading

If this document sparked something, go deeper:

"Lean Analytics" by Alistair Croll & Ben Yoskovitz

The definitive book on startup metrics by stage · leananalyticsbook.com

YC's Essential Startup Advice

The metrics YC looks at when evaluating startups · www.ycombinator.com/library/4D-yc-s-essential-startup-advice

Lenny's Newsletter

Deep dives on retention, growth, and product metrics · www.lennysnewsletter.com

Baremetrics Open Startups

Real SaaS dashboards from real companies, public data · baremetrics.com/open-startups

Paul Graham: "Default Alive or Default Dead?"

The essay that defined the concept · paulgraham.com/aord.html

a16z: "16 Startup Metrics"

Andreessen Horowitz's framework for evaluating companies · a16z.com/16-startup-metrics

Final word

Here's the truth: metrics don't build companies. People build companies. But metrics tell you whether what you're building is working. They're the difference between building intentionally and building blindly.

You don't need a fancy analytics tool. You need a spreadsheet, honesty, and 30 minutes a week.

Know your numbers. Make better decisions. Ship faster. Cut what's not working. Double down on what is.

That's the cheat code.



Maxwell Cofie

Founder, Sandbox Réseau · maxwellcofie.com · The Reverb Podcast

Sandbox Réseau: high-signal, no fluff. Accra's builder community.



Know your numbers. Build intentionally.

Startup Metrics Cheat Sheet · July 2026 · Accra Early-Stage Edition
Sandbox Réseau: high-signal, no fluff. Accra's builder community.
maxwellcofie.com