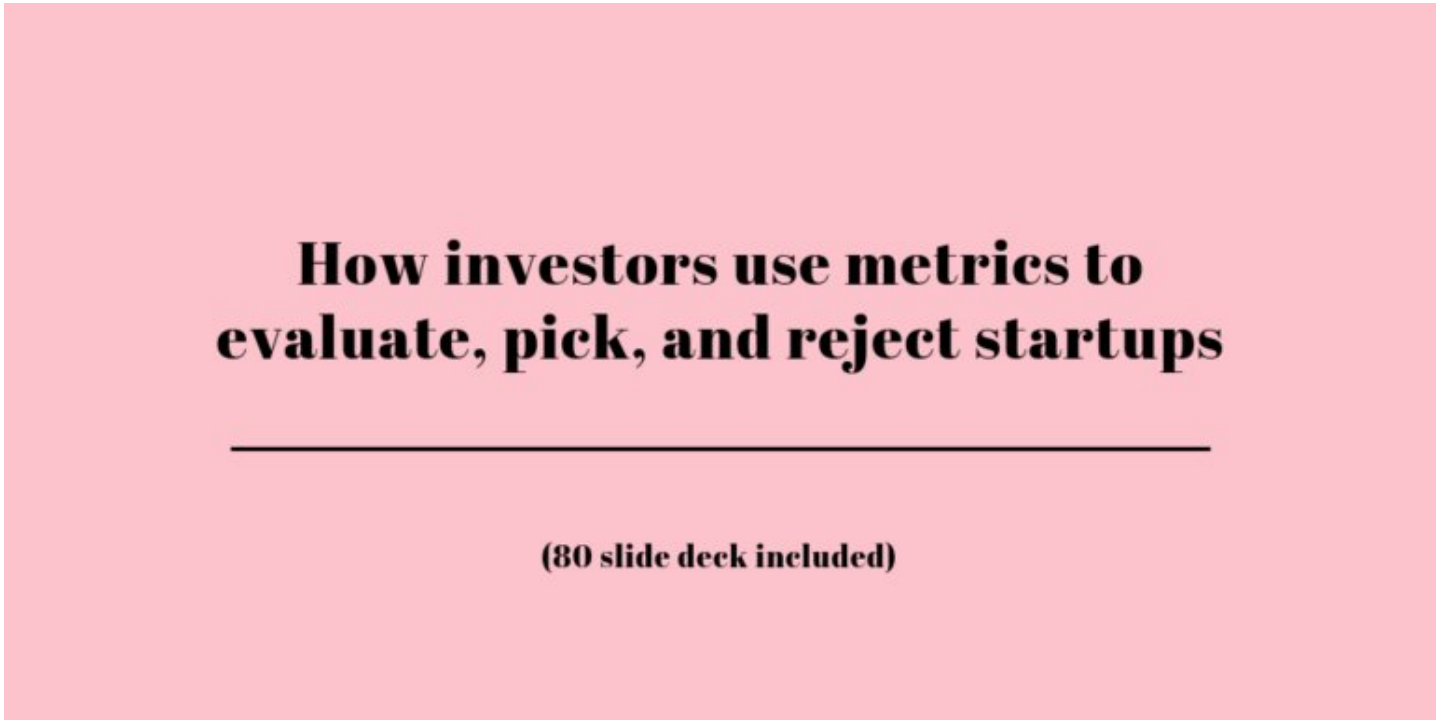
Twitter Thread by Andrew Chen



Andrew Chen
@andrewchen

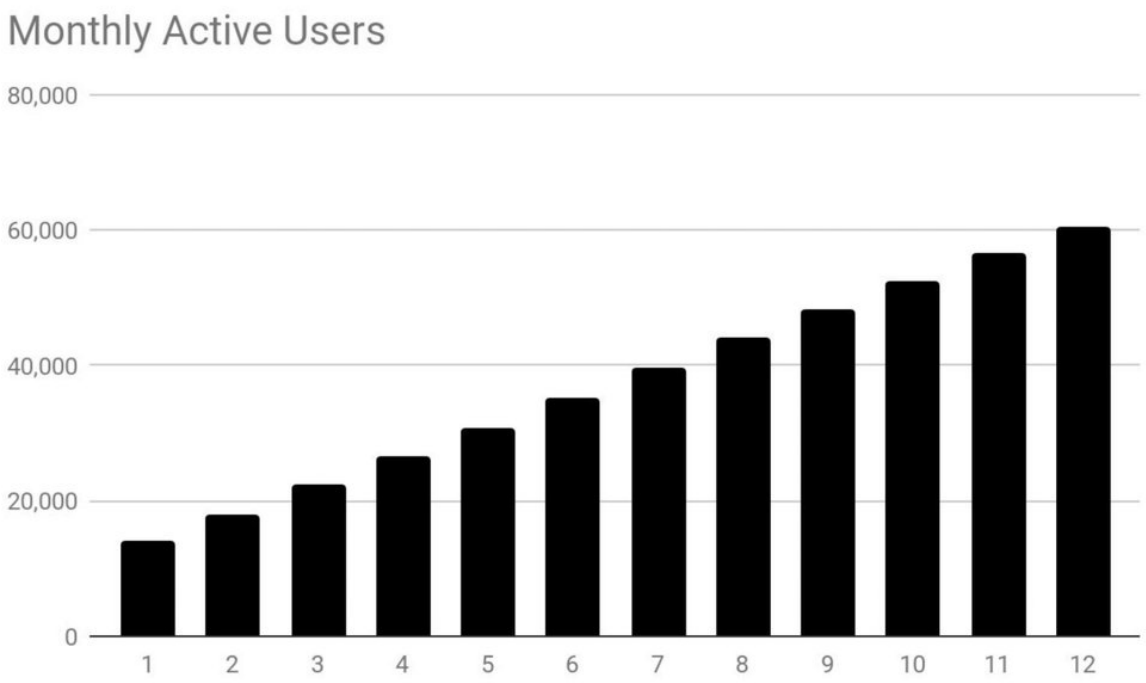
■Thread.

Published a new essay: The red flags and magic numbers that investors look for in your startup's metrics – 80 slide deck included!



This was a deck that I created on my (longish) interview process with @a16z. It was a long path, starting with meeting folks at the firm 10 years ago. But the purpose of the deck was to explain how I would use my superpower in an investing context

Here's what I explain in the deck. As investors (whether angel or VC) we're often confronted with an up-and-to-the-right graph. Is it going to go up? Or down?



One solution to forecast these growth curves is the Growth Accounting Framework, where you add up New+Reactivated and subtract churned users. In each time period that gives you the difference in monthly actives.

The Growth Accounting Framework

+	New+Reactivated	5,000
-	Inactive	1,000
=	**Net MAU**	**4,000**
+	Engaged	10,000
=	MAU	14,000

The problem with this is that it's a lagging metric, not a leading one. We need to go one level deeper and look at the underlying loops that drive these numbers, to understand the quality.

Problem: Growth Accounting gives lagging metrics

It's just the current snapshot!

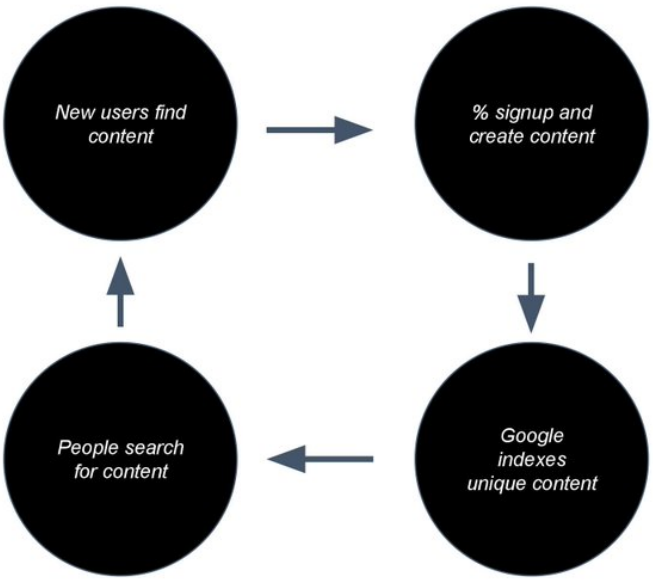
You wouldn't invest based on a startup's P&L, Balance Sheet, etc.

Same with Growth Accounting - it talks outputs but not inputs

Not actionable for product teams

For acquisition loops, I go through a number of different models. SEO+UGC, Viral, and Paid marketing.

Acquisition Loop: User generated content + SEO





In the deck, I break down how to get more granular on each step, and case studies for how to optimize the loop.d

Paid Marketing Loop - in more detail



From a metrics standpoint, it's important to analyze the acquisition mix, the quality of the signups, and the platform dependencies. In the deck, I talk through a bunch of the red flags I'm looking for.

Loops/Channels Mix

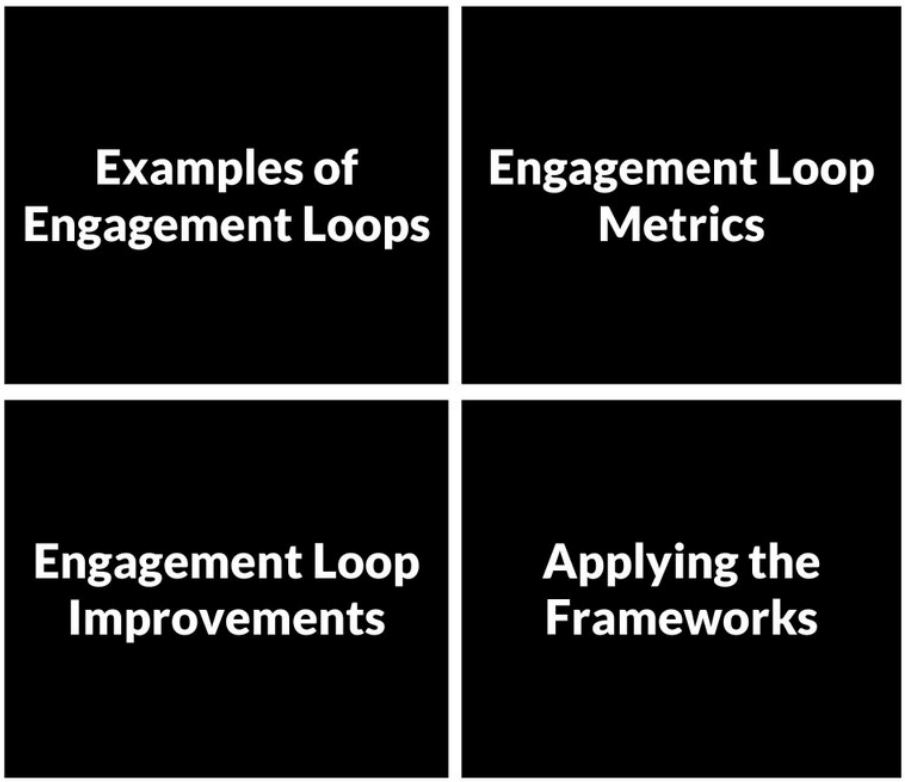
Signups broken down by:
- Channels and Loops
- Time period

Quality indicators
- Proprietary channels and loops
- Repeatable/scalable loops
- Low platform risk
- 33/33/33 on organic plus two loops

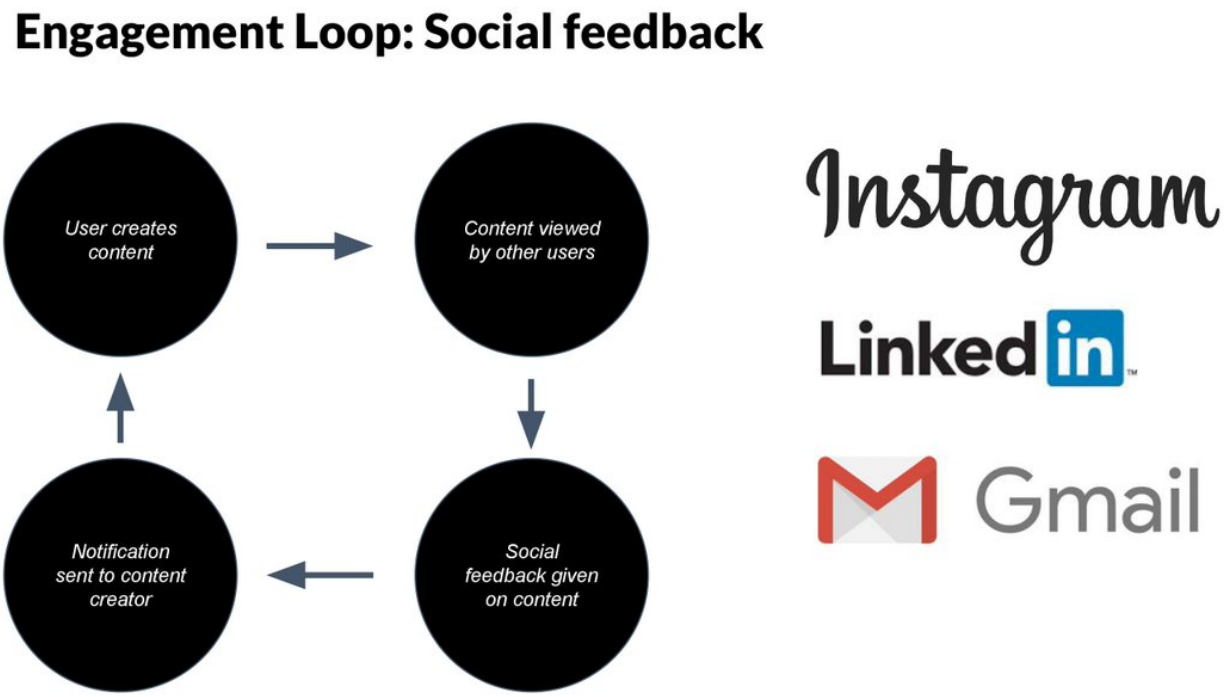
Red flags
- New, unsustainable traffic
- Spiky acquisition - ads?
- Brittle dependence on one loop
- Loops that are actually linear channels

	Dec	Jan	Feb	Mar	Apr
brand / Google					1,000
non-brand / Google				10,000	10,000
seo / Google	10,000	10,500	11,025	11,576	12,155
homepage / Organic	2,000	2,100	2,200	2,300	2,400
product hunt / Partner		25,000	2,000	1,000	500

I go through the same discussion for the Engagement Loop too. Examples, Upside, Metrics, and Forecasting.



Two kinds of engagement loops- Social Feedback and Content Personalization. There's obviously many others, but these are two that are particularly useful to think about.



I use examples from Pinterest, Twitter, and Uber. Both increasing the activation of users to get them pinning more, how to build a network, and unblocking users who've lost their password.

Kicking off the engagement loop

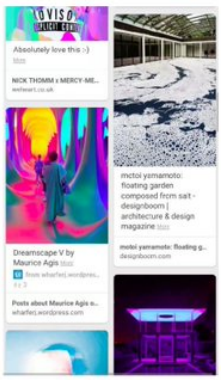
Activation bends the cohort curve early

Examples from Pinterest's growth team:

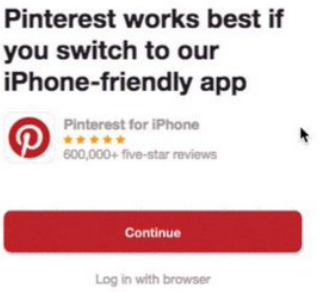
- "Save" instead of "Pin It"
- Interstitial from Mobile web to app
- Pin Education
- Simplifying Home Feed

+100% lift to activation
(Weekly repinners / Signups)









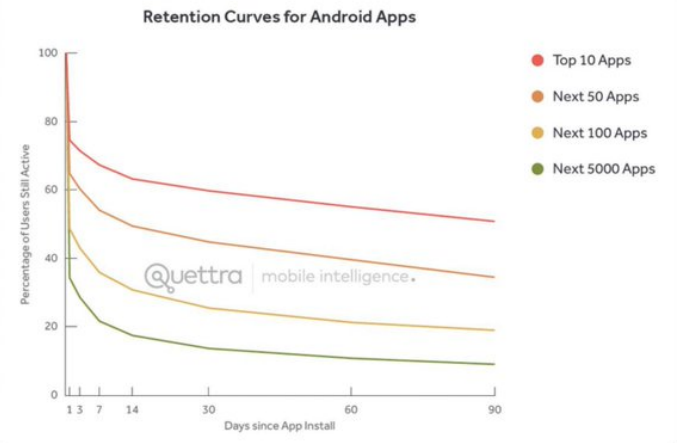
From a metrics perspective on engagement loops, I'll look at cohort retention curves, frequency analyses, and analyzing notifications too. I don't mention it, but the Power User Curve is important too: https://t.co/kdgO8PIspq

Cohort Retention

Loops versus Linear
- Don't want one-time spikes in retention
- What value is created on each visit?
- Are the loops improving over time?

Actions, not just sessions
- Not just a session!
- D1/D7/D30 and month-to-month
- Segment by acq source, geo, etc

What I'm looking for:
- Active/Reg flattens out to >20%
- TAM * 2y cohort * ARPU
- Inactives aren't viral! Key to acquisition too



Once you have the Acquisition and Engagement Loops mapped out, and the potential upside, then you can build a forecast for MAUs. This lets you answer the questions you want to answer - where will this curve go?

Hope you enjoy the deck! Again, here's the link:
https://t.co/Kp7YSHTTs6

Thank you @bbalfour @ShaunMClowes @onecaseman @bubba @aatif_awan and the other folks who helped me along the way.