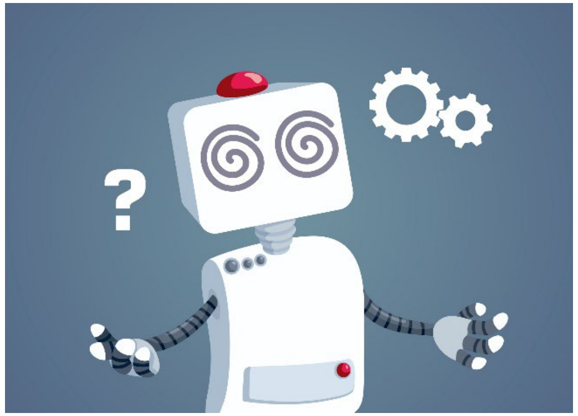


How AI Startups Hallucinate Revenue: CARR vs. ARR and What "Recurring" Means

Back to the Basics: Definitions of Recurring, Annualized, and "Expected" vs. "Reality"

Annualized Recurring Revenue: What?

Since ChatGPT released in late 2022, **hallucinations** have been a problem with chatbots and various AI tools.

But they have become more reliable, and hallucinations are more manageable now (if you know the subject…).

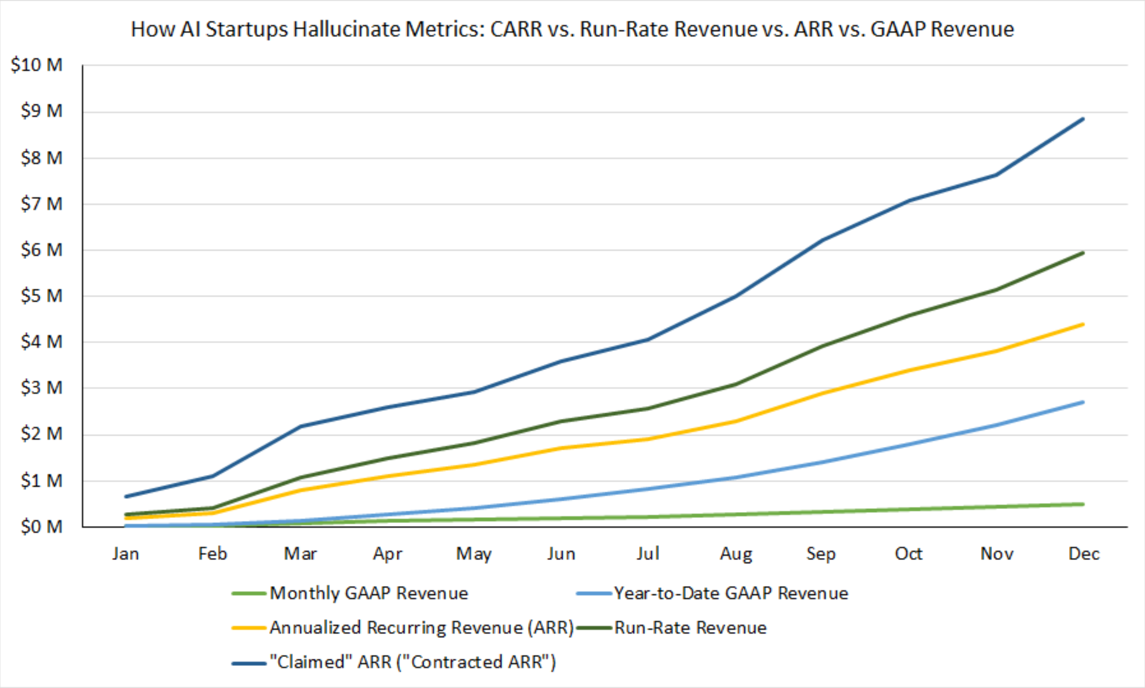
Annualized Recurring Revenue: What?

But many AI startups seem to be **"hallucinating" their revenue.**

They do not understand Revenue, Annualized Recurring Revenue, Run-Rate Revenue, Contracted Recurring Revenue, Bookings, Billings…

Annualized Recurring Revenue: What?

And this creates major issues with **performance reporting** and how the **extremely gullible media** writes about it:



BREAKING INTO WALLSTREET

This Lesson: "AI Revenue," ARR, and CARR

For the files and resources, please go to:

https://breakingintowallstreet.com/kb/venture-capital/carr-vs-arr/

(*Related to* topics in our VC & Growth Equity Course, but not a direct excerpt.)

ARR vs. CARR and AI Revenue: Overview

Part 1: The Short Version

- Principles of **Annualized Recurring Revenue (ARR):**

  - Sales should correspond to **annual contracts** or multi-year ones with no early cancellation options (annualizing monthly contract revenue is not "wrong," but is questionable in our view)

  - Contracts should have **fixed pricing** set in advance, based on users or company size rather than usage (with ARR linked to the *initial* pricing)

  - It should annualize the revenue based on a **reasonable period**, such as 1 month or 1 quarter rather than 1 day of a "Big Sale"

  - It should **not** correspond to usage-based revenue, token revenue, services, license fees, royalties, transaction fees, etc.

Part 1: The Short Version

- **Why This Matters:** Many AI startups offer *heavily discounted* subscription plans and services to win new customers (often with negative Gross Margins!), plan to raise prices, and then count the "eventual" price within their *current* ARR

- **But:** Beyond the obvious problems, this is also problematic because churn rates tend to be higher, as companies often trial and cancel these products easily (unlike traditional SaaS)

- **Our View:** The concept of "ARR" may not make much sense for companies that sell AI mostly based on usage, services, or unprofitable subscriptions; you should rely on other metrics

Part 2: Excel Examples of ARR and CARR

- **Scenario:** High-growth AI startup with revenue from subscriptions, tokens, and implementation services

- **Contracts:** Based on 3-year terms, but they're cancellable at the end of each year, and they scale up over time (e.g., $200K, $400K, and $600K)

- **Subscription Revenue:** Based on the Year 1 Contract Values / 12 and extended across the months of Year 1

- **ARR:** Effectively, it's Subscription Revenue * 12 here

Part 2: Excel Examples of ARR and CARR

- **Total Revenue:** Subscription Revenue + Token Revenue + Services Revenue, where the latter two are %'s of Subscriptions

- **"Contracted Annualized Recurring Revenue" (CARR):** Takes the normal ARR and adds *future bookings, expansions, and downgrades* (sometimes reasonable, sometimes not)

- **Many AI Startups:** Claiming their "Year 3" contract values in this CARR calculation, which could overstate ARR by 2 – 3x!

- **Also:** Some count virtually everything – tokens, services, etc. – in "ARR," which is obviously wrong

Part 2: Excel Examples of ARR and CARR

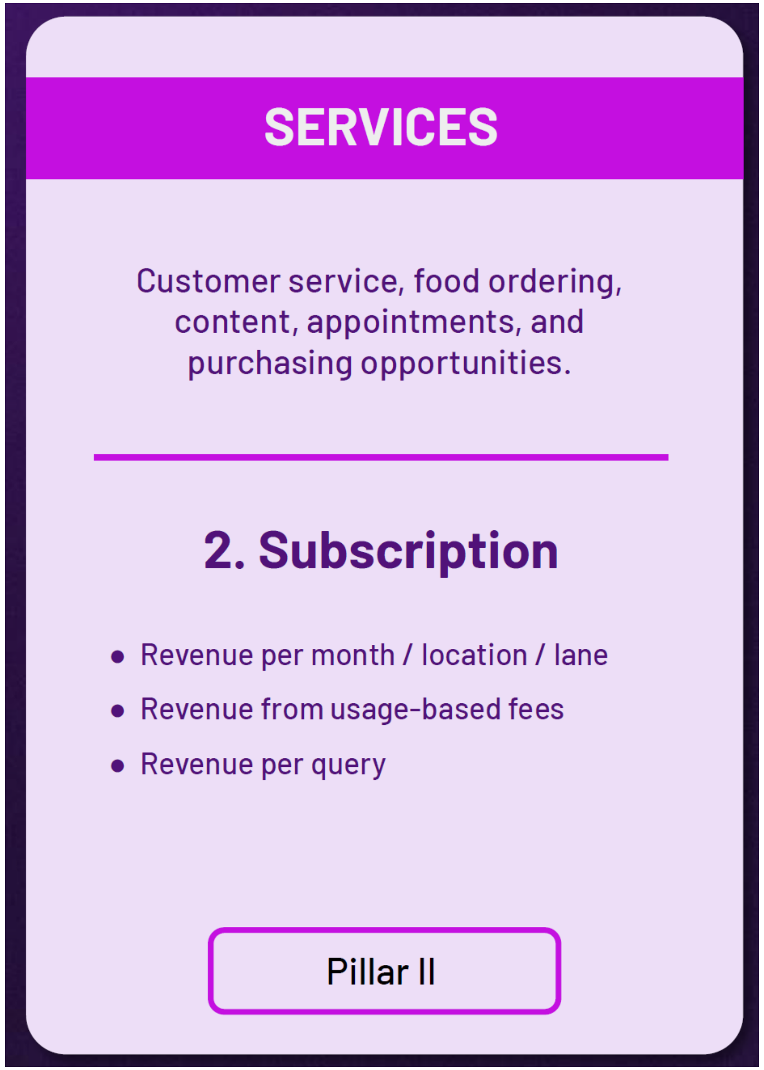
- **Problem:** The whole point of ARR is to approximate something that will happen with ~100% certainty *over the next year*

- **Startup Playbook:** Go out and fundraise based on these fake "CARR" metrics and hope that investors, the media, etc., don't notice or ask questions (and it often works!)

Part 3: How Public Companies Get “ARR” Wrong

- **Confusion:** Not just limited to questionable startups bending the truth! Even public companies seem to be confused (SoundHound AI below)

- **Bottom Line:** If we wanted to value SoundHound by applying different multiples to each of its revenue streams, we couldn’t even do this properly because the company doesn’t seem to understand what “Subscription” means



Part 4: The Subtext Behind ARR

- **Online Sources:** Always present the calculations for ARR and examples, but rarely describe *the meaning* or *subtext*

- **Implicit Assumption #1:** The company has high Gross Margins (70%+), which makes it easier to earn a cash profit on this ARR
    - **True** for most traditional enterprise SaaS; far more questionable for AI due to the high inference costs (and possibly training costs!)

- **Implicit Assumption #2:** The Retention Rates are also high and predictable, so ARR tells you something about the future
    - **Traditional** enterprise SaaS had churn rates < 10%; this is much higher for many AI companies (perhaps 30 – 40%? Not much real data)

Part 5: Dealing with AI Revenue Hallucinations

- **First:** If you are analyzing an "AI company" or one that relies heavily on it, focus on GAAP Revenue and **apply lower valuation multiples** (less visibility, lower margins, etc.)

- **Second:** Focus more on metrics like Gross Retention, Net Retention, and Gross Margins to assess product "stickiness" and the company's eventual cash flows

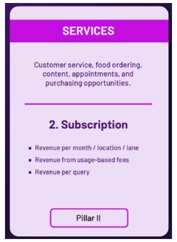
- **Third:** Do not take "Subscription Revenue" or "ARR" at face value – always ask for a breakout of revenue by source or the calculation methods used

Recap and Summary

- **Part 1:** The Short Version

- **Part 2:** Excel Examples of ARR, CARR, and Typical AI Revenue

- **Part 3:** How Public Companies Also Get "ARR" Wrong



- **Part 4:** The Subtext Behind ARR and Why It Matters

- **Part 5:** How to Deal with AI Revenue Hallucinations