# **Not Boring Memo: Composer**

Packy McCormick

23-29 minutes

Welcome to the 819 newly Not Boring people who have joined us since last Thursday! If you're reading this but haven't subscribed, join 7,302 smart, curious folks by subscribing here!

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Hi friends 👋,

Happy Thursday! It's Not Boring Investment Memo Day!

True to our name, Not Boring Investment Memos are unlike traditional investment memos. I only write Memos about companies I'm excited about and investing in (full disclosure) and I write them like I write about other companies I'm fascinated by - full of enthusiasm and optimism.

Not Boring Investment Memos are different than a typical Not Boring essay, too. As always, I hope that everyone can learn about a company, industry, and strategy by reading, but with an NBIM, accredited investors also have the opportunity to **join the Not Boring Syndicate to learn more and potentially invest in the company together**.

Recently, I wrote about Apt, and the company raised money through Jonathan Wasserstrum's Syndicate. Today, for the first time, we can invest together through Not Boring's. Here's how it works. If you're an accredited investor interested in investing in Composer, you can apply to join the Syndicate at the link, and I'll send more details.

Note: Joining the Syndicate is NOT a commitment to invest, it just lets you see deals.

Join the Not Boring Syndicate

Let's get to it.

For an investment memo in your ears: Composer (Audio Edition)

#### **Introducing Composer**

Personal investing has gotten so chaotic that most people either ignore the risks and just go for it or give their money to someone else, either software, mutual fund, or human, to figure it out for them. They're leaving money on the table.

As I wrote about in *Entropy Theory*, once entropy increases in a market, there's no putting the genie back in the bottle. That means new opportunities for new companies, Entropy Wranglers, that bring order to the chaos. So who are the personal investing Entropy Wranglers?

The personal investing landscape is like *Goldilocks and the Three Bears*: Wealthfront is too automated and boring, Robinhood is too chaotic and manual, Composer is jussssst the right blend of customization and automation to attract "prosumer" investors.

Robinhood allows anyone to trade stocks or even options, from their phone, with almost zero friction. Robo-Advisors ("robos") like Wealthfront take human emotions out of the equation and replace them with algorithms that make cool-headed, if unpersonalized, decisions.

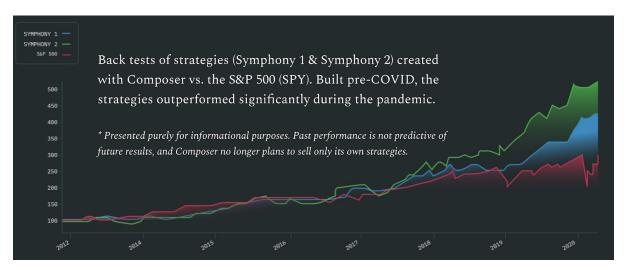
I don't think either Robinhood or Wealthfront is just right, though. I think the personal investing Entropy Wrangler looks a lot more like the subject of today's Not Boring Memo: Composer.

I'm bullish on Composer for five reasons:

- 1. Business Model Aligns Incentives. Customers pay, so customers aren't the product.
- 2. **Entropy Wrangling.** Combining a smart product with a sensible strategy to wrangle personal investing entropy.
- 3. **Nerds are Already Doing This**. Nerds are spending months trying to build just a piece of what Composer will let them do in minutes.
- 4. Intersection of Powerful Trends. No-Code, Online Investing, and Unbundling Excel.
- 5. The Team is Smart, Flexible, and Driven. I would never bet against Ben.

I first saw the seeds of the idea that grew into Composer over hundreds of text messages with the company's co-founder and CEO, Ben Rollert, my former colleague at Breather and the smartest person I know. When Ben gets a problem in his head, he doesn't quit until he figures out the answer. For Ben, trained as a data scientist and evolved into a VP Product, the problem was: **there isn't an easy way for a relatively savvy investor to get the type of market-beating risk-adjusted returns that hedge funds and their clients have access to.** 

If I got a hold of that question, I would study it, talk to some smart people, write about it, and move onto the next thing. But Ben is different. Ben is both relentlessly curious and highly technical. He went into the hole, spending hours and hours on nights and weekends to build and backtest a strategy, and a way to automatically trade it depending on market conditions. And it worked. First in years-long backtests, then in this incredibly entropic COVID-induced market we're in today, Ben's first strategy kicked the shit out of market returns. Then his second kicked even harder.



Ben was on to something, so he recruited Ronny Li, another one of the smartest people we worked with at Breather, and Ananda Aisola, a McGill classmate with the finance and operations experience needed to build this idea into a company. Ben doesn't just build machine learning algorithms, he's kind of like a machine algorithm himself. Working together, Ben, Ananda, and Ronny have taken in thousands of inputs - from conversations with industry experts to analyses of competitors' business models to customer interviews - and iterated on the product.

Today, Composer is no longer an asset manager that allows you to trade Ben's strategies. It's a platform that lets you mix, tweak, test, and implement strategies and generate better risk-adjusted returns. Over time, that means more money with less risk.

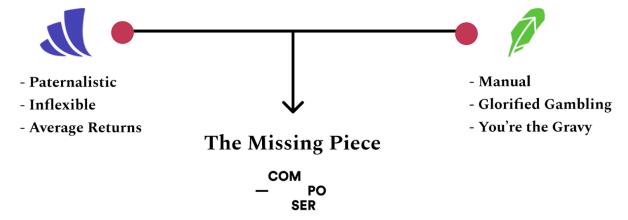
Even though I'm a Wealthfront and Robinhood customer already, I can't wait to use Composer, and I'm thrilled to invest in the company itself. To explain why, let's start with a look at the incumbents and the limited options they give us to control our financial destiny.

## Wealthfront is Quibi and Robinhood is Napster

The history of financial markets exhibits the entropic cycle - things get more chaotic over time, and companies capture value by bringing order to the chaos. The Dutch established the first stock exchange, the Amsterdam Stock Exchange, to trade stocks and bonds on just one company -- the

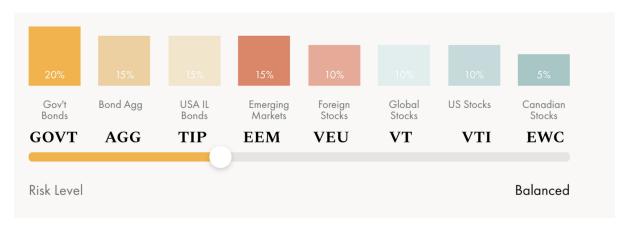
Dutch East Indies Company. Today, nearly anyone with a smartphone can trade stocks, bonds, and options right from their phone at any time. It's super entropic.

Wealthfront and Robinhood represent the two extremes of the approaches new entrants have taken to capture value from the entropy.



**Wealthfront** is a leader among the growing number of robo-avisor startups, so named because they use software to offer services like tax loss harvesting, direct indexing, and automatic rebalancing. Robo customers set a target risk profile, and sit back as the software does the rest. Customers have very little agency, but for many, the ability to "set it and forget it" is valuable.

Wealthfront has stalled out around \$21 billion in assets under management (AUM) as it faces stiff competition from well-funded incumbents, and it still loses a lot of money. It charges only 0.25% of every dollar it manages for accounts with over \$5,000. Everything below that is free, but the company still needs to pay to acquire and support those smaller accounts. Plus, it faces the same challenge as many personal finance apps: it costs Wealthfront hundreds of dollars to acquire a customer. Even worse? The company doesn't really have a moat, as evidenced by the ease with which startups and incumbents have entered its space and taken market share. Composer even worked out how to reconstruct a robolike portfolio with ETFs:



Wealthfront is like Quibi. It spends a lot of money to acquire customers and doesn't have a real moat to retain them. It applies the old paradigm (financial advisers) using new technology (software). Like Quibi, the level of entropy has increased past the point at which Wealthfront is the best solution on the market.

**Robinhood**, on the other hand, gives people control... maybe too much control. And so far, people are loving it. Robinhood has added **3 million** accounts since the beginning of COVID, and those accounts are trading frequently. Importantly, it only costs Robinhood about \$10 to acquire a customer, and it makes more money off of each customer than its competitors via order flow. As someone who's made my fair share of dumb investing mistakes, though, there are a few things that make me wary of Robinhood's long-term success:

- 1. Many people are going to lose A LOT of money. Here's how the progression goes in a bull market like the one we're in, at least for people who treat investing as a substitute for gambling.
  - 1. Buy some stock: It's going up! This is fun!

- 2. Hear about options: Woah! My friends are making even more money than I am!
- 3. **Buy a couple of options:** This is even more fun! Man, my options are performing way better than my stocks. I'm a fucking genius.
- 4. Sell stock to buy options: Why get 10% daily returns on TSLA when I could get 50% daily returns?!
- 5. Hold an irresponsible amount of the portfolio in high-volatility options on high-volatility stocks and do well for a while: I'm a super-genius! Can't believe those losers are buying stocks. TSLA is going to explode when it beats earnings!
- 6. Get hit by vol crush and lose most of your money: Wait, TSLA beat earnings, why are all of my options down? Or worse: holy shit, TSLA missed earnings, 90% of the value of my options got wiped out!
- 7. I need a smarter way to invest.
- 2. **Trading is going to lose its allure in a bear market or a flat market.** Being at a hot Blackjack table is fun. Even losing some big hands once in a while is a rush. But only the worst addicts continue to gamble day after day when they're losing. Most can't afford to. Robinhood right now is like a hot Blackjack table. Everyone is winning, and the people who are losing are losing so spectacularly that it heightens the experience for everyone. When the table cools down -- markets don't normally stay on runs like the one they're on right now -- and things become a lot less volatile, a lot of the thrill-seekers will cash out.

Additionally, as Ranjan Roy highlights, Robinhood customers don't pay for the product; they *are* the product. Worse, Robinhood traders are "the gravy," the unsophisticated counterparties on whom the hedge funds that buy Robinhood's order flow make huge margins. Want proof? Hedge funds pay Robinhood huge amounts of money - 10 - 100x more than competitors - to buy its customers' orders. This, too, is more acceptable in a roaring bull market, when everyone is making money, than a snoozing bear market.

# Total Payments From High-Frequency Trading Firms

What retail brokers make from selling customer orders, per dollar in the the average account.



Note: Revenue in the first quarter of 2020 from all professional trading firms for every dollar in the average customer account. Unlike other firms, Robinhood does not provide data on customer holdings, but Alphacution estimated that the average account holds \$4,800, based on customer cash holdings listed in financial filings.

By The New York Times | Source: Alphacution Research Conservatory based on company filings

I think that **Robinhood might be Napster**. It's not wrangling entropy; it's creating it. It uses game mechanics to get less sophisticated traders to trade more, and makes wacky things happen in the market. Remember Hertz?

Despite challenges, Robinhood is doing well. Its business model works better than the robos, and it recently raised \$280 million at an \$8.3 billion valuation. Robinhood may add tools to help its clients make better decisions or better navigate flat or down markets.

But there is a hole in the market for more sophisticated investors and those who are ready to graduate from Wealthfront and Robinhood. Just as many B2B SaaS companies took inspiration from consumer software -- the "consumerization of enterprise SaaS" -- Composer is building a prosumer investing product with a consumer-quality UI and professional-grade guts.

# Composer: The Personal Investing Entropy Wrangler

There is a reason that Wealthfront, Robinhood, and their competitors have raised so much money and are willing to spend a lot of it to acquire customers: the equity markets are huge. \$50 trillion dollars are traded every year, and an increasing proportion of that money flows through self-directed personal accounts. The personal investing market has not yet been won; there is still a lot of entropy left to wrangle.

Composer has a chance to become the personal investing Entropy Wrangler by democratizing access to high quality, personally directed, algorithmically executed trading strategies.

Composer's mission is to close the gap in return on capital through the power of well-designed software. Today, an adult with world-average wealth grows his or her wealth by just 2.1% per year while the top 1/(20 million) grow their wealth by 6.4% every year!

Why? They have access to more sophisticated options than the average investor -- hedge funds, private equity, venture capital, family office, and more -- while the rest of us are stuck choosing between average returns with Wealthfront and risk-it-all glorified gambling on Robinhood.

## What does Composer do?

Composer makes it easy for prosumer investors to build, test, and manage automated investment strategies without a single line of code. The company will build or license strategies - or Symphonies, in Composer parlance - and allow customers to edit and combine them, backtest, and live trade them at the click of a button.

An example is useful. The Not Boring Portfolio includes high-growth, high-beta tech stocks like WORK, AMZN, SNAP, and SPOT. Composer makes it easy to build a strategy that adds VXX (market volatility) into the mix at the appropriate level to hedge my downside while maintaining a target upside. For the finance folks, Composer allows me to build a strategy with a higher Sharpe Ratio than I would on my own, and rebalances it automatically based on my targets.

But here's the real magic. Composer lets me add more Symphonies to my portfolio, and test how they'll perform together. Would adding a Wealthfront-like Symphony to the Not Boring Portfolio improve my risk-adjusted returns? What if I added a Symphony that adjusts based on market volatility?

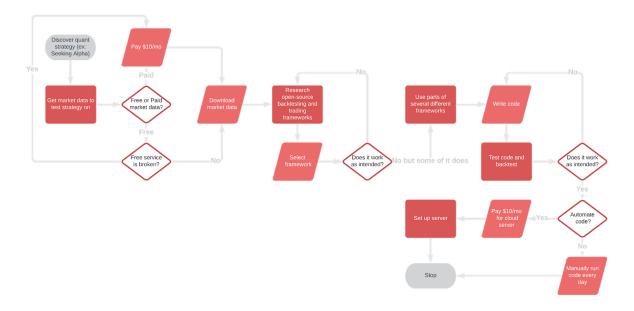
Ultimately, I can "compose" a strategy comprised of dozens of Symphonies that adjusts based on market conditions, meaning better returns with less risk than anything I could currently build on my own. It's like having a hedge fund quant at my fingertips.

# Who is Composer's Customer?

Composer gives its customers the ability to generate better risk-adjusted returns. That's something that financially and technically sophisticated people are spending months of their lives figuring out how to hack together today.

The nerds know that this is the way they *should* be investing, and there are entire subreddits dedicated to figuring out how to do it. To paraphrase Paul Graham, if you want to see 10 years in the future, look at what the nerds are talking about building on Reddit. But it's really hard.

Even for technical people, this is what it would look like to implement just one of Composer's strategies:



Not Boring readers are smarter than your average bear, but do you want to try to figure that out?

Composer is targeting these relatively technical and financially literate prosumer early adopters - in other words, nerds. Think software engineers at successful startups or investment banking analysts -- people who know *what* they should be doing, but don't have the skill, time, or patience to do it.

To acquire early customers, Composer is building a free backtesting tool to piggyback on an existing behavior: namely, sharing backtests on Reddit and in more verticalized finance networks like CommonStock, and group chats, where investment banter happens today.

Then, Composer will make money the old-fashioned way: by charging customers for the product. Customers can paper trade and back test for free, but will pay \$30/month for brokerage integrations that allow them to trade real money.

Early customers will start the data flywheel: as more strategies are developed on its platform, and more customers start allocating funds to them, Composer can use this aggregate data to generate new opportunities for alpha - which attracts yet more customers, strategies, and so on. Ben is the person who generally yells at me if I ever talk about data moats, but when more and better data directly translates into better returns, the data flywheel is real.

After these early adopters, its go-to-market strategy will be similar to Slack's or Figma's: get adoption among individual investment managers, registered investment advisers, traders, and portfolio managers, and spread via word of mouth within the financial institutions they work for. Nothing spreads more quickly than word about a new way to make money, particularly in a culture that is so competitive around money. When I was a trading intern, the traders on my desk bet thousands of dollars on which intern could eat the most chicken nuggets in an hour. (I came in second.)

As Composer spreads within financial institutions, it will charge companies a monthly fee plus a per seat license for small org accounts that allow teams to build strategies together.

Ultimately, Composer will sell an Enterprise version, featuring security, customization, admin control, and bank-level SLAs - into hedge funds and other large financial institutions. These institutions spend billions annually on IT, and many still run on software invented 35 years ago.

# **Unbundling Excel**

For financial customers, Composer is unbundling Excel, where so much of sophisticated trading strategy development and implementation still occurs.

In 2010, Andrew Parker penned a now famous blog post entitled *The Spawn of Craigslist*. As part of the post, Parker created an infographic that ultimately went viral, showing all the startups being launched as part of an unbundling of various sections of Craigslist. In 2017, Tomasz Tunguz noted a similar phenomenon applied to Excel, described in detail in his post *The Unbundling of Excel*.

A shockingly large number of traders and financial institutions still manage their trading strategies in Excel, in part because Excel has a very low barrier to entry for someone who wants programming functionality without a steep learning curve. In many ways, Excel is still the ultimate no-code tool, and many developers of no-code products will admit behind closed doors that Excel is their "real" competition. That said, none of this changes the fact that Excel is dangerously unsuitable for managing more sophisticated investment or trading strategies. In 2012, JP Morgan posted a \$6 billion loss when a trader nicknamed the "London Whale" accumulated outsized positions in credit default swaps as part of hedging strategy gone wrong - in part because of some standard Excel errors! As Business Insider commented at the time: "Wall Street uses Excel for everything, so this is pretty troubling, but it shouldn't be surprising. Excel is just like any program — numbers can get lost, equations can get written over and a user might not even notice."

The reality is that this *shouldn't* be an expected part of the status quo, and inevitably companies like Composer will disrupt these sorts of inappropriate use cases of such a general and error-prone tool.

## What Are the Risks?

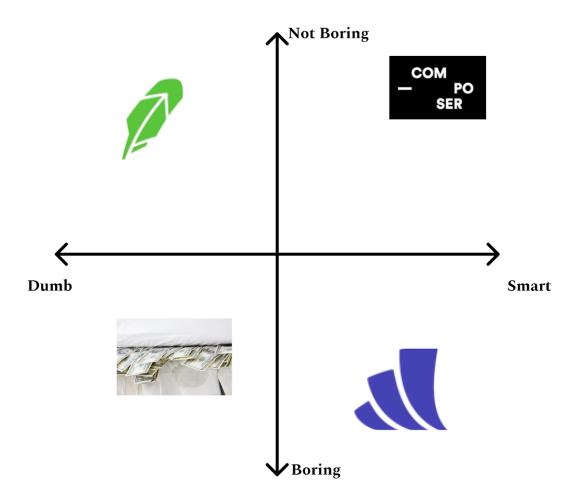
Every early stage startup comes with major risks, and Composer is no different. As with any angel investment, you should assume that an investment in Composer will go to \$0. There are a few main risks that I see to Composer:

- Composer is pre-product. Startup investing is risky, and pre-product is riskier.
- There is potential for increased online trading regulation if there is fallout from reckless Robinhood trading.
- Customer Acquisition Costs in consumer investing can be prohibitively high.
- Many robos don't make money. Composer is **not** a robo and has, in my opinion, a more sensible
  business model that takes robos' mistakes into consideration, but the space has struggled to
  generate many big winners.
- Past performance is not predictive of future results; there is the potential that the strategies Composer offers customers don't outperform the market, ETFs, robos, or any other securities, including cash.
- It sounds like it would cost a lot to rebalance this often, but it's all done for pennies with software on Google Cloud.
- If Composer shows early success, competitors may flood the space. Existing competitors include collective2, a two-sided marketplace for quant strategies, and Vise and Boosted.AI, both B2B tools for RIAs and hedge funds. As happened with robos, even big players like Schwab, TD Ameritrade, and Vanguard may try to enter the space. I do believe that Composer has a more defensible and differentiated product than the robos.

This list is not exhaustive. Again, startup investing is risky and you shouldn't invest any money that you aren't comfortable losing!

## Why Am I So Bullish On Composer?

Composer is the investing version of what I'm going for with this newsletter: Not Boring and smart. It's easier than ever to be not boring and dumb when investing - just buy some out of the money calls into earnings. It's also relatively easy to be smart and boring - Wealthfront and other robos can get you average returns fairly predictably.



Composer is the investing platform I want for myself: one that lets me take risk and hedge it, make my own decisions, and build a portfolio that generates better risk-adjusted returns.

That's why I'm excited to use Composer as a customer. I'm excited to invest in Composer because the business is as smart as the product itself.

- 1. **Business model aligns incentives.** Customers pay for the product, so they aren't the product (or the gravy). A \$30/month price point means that Composer generates 2-3x more ARPU than Wealthfront, and can use early revenue to build out a product to sell to professional investors and financial institutions.
- 2. **Entropy Wrangling.** Composer is able to learn from previous entrants' mistakes, and is building an Entropy Wrangler that integrates UI, backtesting, and implementation on top of high-quality and improving inputs like strategies, data, and brokerages.
- 3. The Team is Smart and Flexible. Ben and the team are incredibly sharp. They walk the line between staying firm on the vision while remaining flexible on the details. Shifting from selling its own strategies to leveraging commoditized strategies and building its own tech on top is just one example. There's zero chance that they know exactly what the right moves are today, but this team will adjust quickly to win.
- 4. **Customers are Already Doing This**. Very smart people who have other high-value ways to spend their time are spending months figuring out how to build just one piece of what Composer allows them to do in seconds. By bringing simplicity to the mix, and making people money, Composer will expand the market size.
- 5. Intersection of Powerful Trends. While I think Total Addressable Market (TAM) is a relatively meaningless number for an Entropy Wrangler (check out predictions for Google's market size from 1998 or Uber's from 2009), Composer sits at the intersection of three big markets. 1) No-Code is expected to grow from a \$13.2 billion market this year to a \$45.5 billion market in 2025.
  2) Online Investing, which has \$1.8 trillion in AUM in self-directed accounts, saw 170% growth in new accounts in Q1 2020. 3) Unbundling of Excel has produced unicorns like Airtable who are going after Office 365's \$30 billion in annual revenue.

I think the time is right for Composer. Millions of people are investing for themselves for the first time, the commoditized inputs are good enough to rely on, and a well-designed UI can give people the power to build an intelligent portfolio in about the same time it takes them to build a dumb one.

Raw returns are so 2020. When Composer is successful, people will brag about their risk-adjusted returns. All the cool kids will be showing off their Sharpe Ratios.

More impactfully, Composer can help close the gap in return on capital through the power of well-designed software. Even people who write a free newsletter will have access to the tools and strategies that the most sophisticated hedge funds use today, and that the smartest funds will be buying from Composer soon.

Here's the fun part. If you're an accredited investor interested in learning more and potentially investing in Composer with the Not Boring Syndicate, you can join at the link and I'll send you the deal with more information, including a deck. If you've already joined the Not Boring Syndicate, you'll receive an invite to the deal shortly.

Join the Not Boring Syndicate

Disclaimer: Startup investing is very risky. You should do your own diligence and don't invest any money you're not comfortable losing.

If you want to sign up for Composer, you can join the waitlist here:

Sign Up for Composer

# **Not Boring Verified**

Since last Thursday, **three** new people have become Verified Not Boring - huge thanks to each of you, and to Joakim Jardenberg, who rocketed to the top of the leaderboard and currently has **204** referrals! Hallå to all our new Swedish friends!

Joakim Jardenberg (Get AI)

Andrew Walker (Yet Another Value Blog)

Sarah Bullard McDaniel (Gusto)

To become Verified Not Boring, head to our referral page and enter your email at the bottom to get your unique code. Then share away - we're making great progress towards our 10k goal!

Thanks for reading,

**Packy**