Is Context Aggregation The Real AI Battleground?

The more context the AI model has, the better the user experience. If one AI company ever owns 100x more context about you than anyone else, they have a deep competitive moat. A context wars is more important than a set of AI browser battles.

7 min read · 4 days ago

Dave Rothschild

What is Context?

Let's say you have been married for 30 years, have 3 kids and live in the USA. Think about all the knowledge you have amassed over those 30 years about life, your family, their preferences, desires, issues, and more. Who would be better answering questions about the last 30 years of your life? Google, Amazon, Meta? Or your spouse? Your spouse of course. They have decades of lived context..

Ask an LLM:

> *"How should I remodel my master bathroom?"*

Again, with just that question, they have no context. They don't know what your current bathroom looks like or how it fits with rest your house. The answer won't be perceived as very good or relevant. So people that are skeptical of AI, if they tried that, would say AI isn't very good. If you asked your spouse that question, you would get a much more relevant answer.

An AI model needs relevant background information about the situation, the questions or conversation to produce accurate, quick and useful answers. Context can include:

- Conversation history in chat
- User intent. What are you trying to accomplish?
- Domain or task. Is this about coding, writing, medical, history, etc.
- External data: data and information on your smartphone, Google Drive, printed material, and more
- World knowledge. Facts about time, place, people, entities involved

This isn't purely a big data problem. Context is rich, connected, time-based, location-aware and continuously evolving knowledge about your world. Think back to the married spouse example: context is just information, it know-how. It's the lived understanding of your preferences, habits, and history. In that sense, context can be thought of as a kind of digital spouse…the AI that truly knows you. (Hmm, sounds creepy, today.)

You can see context in action at Amazon. It knows what you bought and what you searched for. Hence, when you return you see "Pick up where you left off" or suggestions of purchasing things you might like. And, suggesting to rebuy what you bought in the past.

Instagram Reels, for instance, runs a sophisticated algorithm every second to try to provide you more and more reels you might like based on your past watch history. But it doesn't know anything about your Amazon history, or your Google history, your health information, you emails, your travel history, your friends or all the information on your iPhone. What if it did?

This startup, MemO, is going in the direction of saving context. It allows you to save interactions with different LLMs and share those memories across different LLMs to minimize token use and relearning. But in this system, you are in the control of your memory context.

Not Everyone is Using AI Today

Despite the press and market hype, not everyone has adopted AI. For AI companies, the challenge isn't convincing power users . **It's converting the skeptical middle.** That's where most of the market is, and that's where the opportunity lies.

To get the skeptical middle, it is the same set of problems that any new technology faces. What are the benefits? What does it do better than how I do something today? Are my peers/friends using it? Why change?

The skeptical middle won't adopt AI because of model quality; they'll adopt it when AI feels personal, useful, and frictionless; and, it has enough context to deliver a unique class user experience for the jobs the middle wants to get done.

> *You can read more about the well studied patterns of technology adoption in my other article:*

How To Reduce Failure Risk For Your AI Initiative

Overestimating the desire to use new technology is a common mistake. Plan for phased adoption. Don't assume broad-based...

medium.com

Context Aggregation

Context aggregation means continuously collecting and connecting every fragment of a user's life — what they buy, watch, read, write, and say — into a unified understanding. The payoff is an experience so personalized that it feels almost telepathic. Each great answer trains you to give more data, creating a compounding advantage that could dwarf today's search or social moats (see Context Flywheel below).

This benefit causes you to keep feeding the context aggregator so it seems like it knows you better than you know you. That is a **huge competitive moat**, potentially bigger than any other consumer moat to date.

Context aggregation is the approach to become a new AI centric **aggregator**, as defined by in **Aggregation Theory by** Ben Thompson.

By aggregating context of a user, an AI centric company can provide a **unique class user experience** (beyond best in class). Something the user has never experienced. It provides answers and helps them get jobs done better than anything in the past and beyond what they could have imagined.

You can already see partial context aggregation in today's platforms. The problem is that each holds only one fragment of your life.

Your context right now is distributed among many different tech companies. Google is a context aggregator as is Meta. They know a lot about you based on your interactions with their services. But there is a lot they don't know.

You search travel destinations thru Google. They might see email confirmations of flights and hotel reservations but they won't know all the details of what you did. Your smartphone photos probably do, however.

Imagine if you searched travel destinations in ChatGPT and then you wore a OpenAI context capture device you wore around your neck that captured all the places you went, what you ate, where you stayed. Would they be in a better position to suggest future travel given they have all that context? Maybe they would notify you of flight and hotel deals at locations they know you like. If they provide you suggestions and detail that really amaze you, are you more likely to keep feeding them more context? And what if it is all free?

The Friction Problem: Why Multi-modal AI Matters

Current LLMs are text prediction models. Enter and reading text is a friction point for getting the mass market using AI.

Multi-modal input to AI is an accelerator.

Every new input mode — voice, photo, camera, sensor — lowers the cost of giving context. That's why multi-modal AI will spread faster than the web or mobile ever did.

It would seem that voice and photos (or your camera) have much less friction for the skeptical middle to deal with. You can already upload a photo and ask for suggestions to redecorate a room. But this is not widely known. And one photo doesn't give the whole context of the house and how the people living in the house prefer to think about interior design. The photo helps, but it's still a narrow slice of context. It doesn't have the whole house. It doesn't know your previous choices. It doesn't know what preferences your spouse may have.

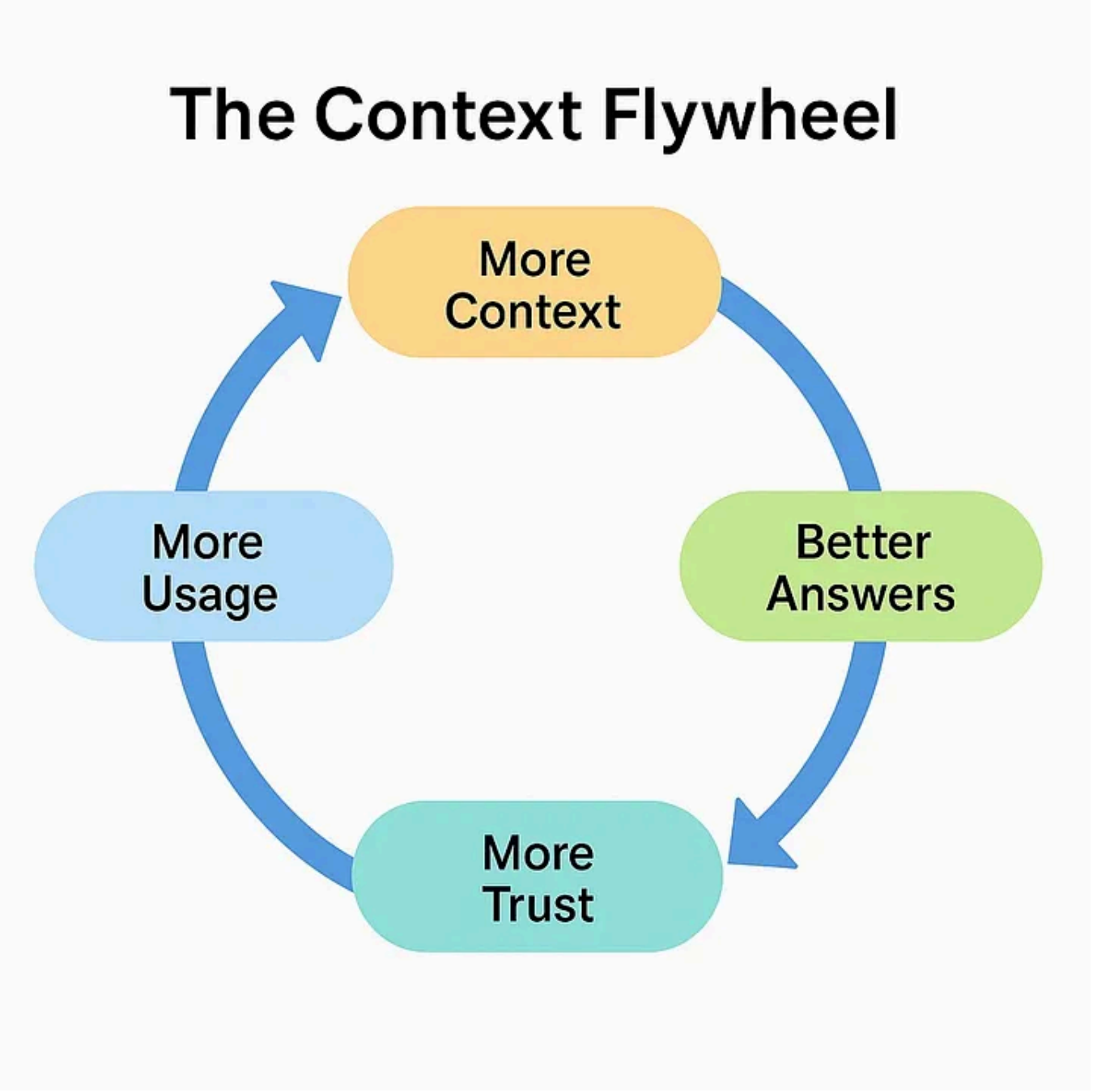
Again, if you were wearing a **device** that captures images of your house as you walk around and allows you to provide voice commentary when you want, then more relevant context is captured with less friction.

Lowering friction not only builds context faster, it strengthens the network effect. Each new user contributes more meaningful context into the system.

The Flywheel of Advantage

Current aggregators like Google, Netflix, Amazon, Meta and Airbnb serve very broad, horizontal markets. As Ben Thompson points out in Aggregation Theory, their services become better the more users they serve.

There are differences here. Trust and privacy will play a much larger role in user's willingness to provide more context. And, without question, the results provided by the AI will have to be amazing, on at least some set things for the flywheel to work.



The context flywheel is like network effects

How would this play out with context aggregation? Is it possible that the AI company aggregates enough context such that they don't need as much context for the incremental user to provide a unique class user experience to that user? Maybe they get enough context from the incremental user to be able to predict much of the context not provided? This would allow the AI company to consolidate their aggregation faster.

Summary

There are, of course, deep ethical and privacy considerations surrounding context aggregation. That is a large, additional topic deserving its own discussion.

And, there is, of course, regulation as another whole topic to discuss.

In this war, winners (or winner) won't be those with the largest models or the best AI browsers. Rather, they'll be the ones with the richest, most trusted context, serving the greatest number of users, that harness their context into a never-before-imagined unique class user experience. This user experience would give the user exactly what they wanted but with a richness that is way beyond what they expected. Such an experience would further cement the context aggregator as the mostly takes all winner in AI.

But, such a user experience, to win, needs to help the masses, the skeptical middle, get things done faster, easier and more affordably than they ever thought possible. And, as I've stated, do it in a way the amazes the user beyond what they ever imagined.

What type of services and devices should an AI centric company develop if its goal is to win a context war? When Sam Altman talks about achieving super intelligence, how does that factor into a context war? Does user need to feel they have super intelligence with context rich AI partner?

As a final thought experiment: Try to think of 2 or 3 things a super intelligent AI would do for you that would cause you to consider trusting it with even more context about you.

For the software developers out there, coding is a good micro example. Tools like Claude Code (and others) know your entire repo, documentation, tests and commit history. You've come to trust them with that context because the results you get back are often amazing.

> That same trust loop — context leading to better results, leading to more trust — will define the winner(s) in the context aggregation war.

AI Context Engineering Aggregation Theory Technology Strategy Product Management

Follow

Written by Dave Rothschild

1.6K followers · 55 following

Innovation guy, iOS developer, Apple, Netscape, AOL, Sun, HP, Motorola, Intel, CEO 3 tech startups; @daverothschild; https://www.linkedin.com/in/daverothschild/

Responses (4)

Bgerby

What are your thoughts?

Saif Bugti
1 day ago

Spot on. The next AI battle isn't about bigger models — it's about deeper context. Whoever owns the most relevant memory wins.

-- Reply

Hemesh KR
1 day ago

Very nice bro but do follow my page and encourage my work

https://medium.com/@iam_tex/what-is-taking-over-social-media-da6d073d6a99

-- Reply

See all responses

More from Dave Rothschild

Dave Rothschild

How To Reduce Failure Risk For Your AI Initiative

Overestimating the desire to use new technology is a common mistake. Plan for phased adoption. Don’t assume broad-based adoption.

Oct 5 •••

Dave Rothschild

Enterprise Context: The Secret Weapon for AI UX

Enterprise apps already know who you are, what your general intent is, and which data matters. That built-in context can help you design AI...

Oct 5 •••

Dave Rothschild

Why One Player Will Mostly Take All in AI—and How the AI Browser Plays a Role

Winner takes most in AI, just like in Internet search. So, accelerate adoption and customer loyalty, now.

Oct 26 •••

In Jobs to be Done by Dave Rothschild

6 Factors Consumers Use To Evaluate Simplicity

Make it simple. Sure. But what does that mean?

Aug 26, 2015 •••

See all from Dave Rothschild

Recommended from Medium

Aakash Gupta

Amazon Just Fired 30,000 People After $60B in Profits. Here's What They're Not Telling You.

Amazon is laying off 30,000 workers.

5d ago •••

In Entrepreneurship Handbook by Joe Procopio

AI Porn Is Here—and We're All Pretending It'll Be Fine

Sam Altman has decided that five years is enough of a head start for the porn companies

Oct 31

In The Generator by Thomas Smith

The Right Way to Use AI At Work

An experiment from Stanford shows why we're all doing it wrong

Oct 28

Ignacio de Gregorio

Continual AI Learning, Finally Solved?

A Smart Trick for a Hard Problem

6d ago

In Stackademic by Dylan Cooper

Meta Axes 600 AI Roles—Including Star Researcher Yuandong Tian—But TBD Lab Keeps Hiring

Zuckerberg's AGI Overhaul Sparks Backlash: "Agility" or Power Struggle?

Oct 29

In Ai-Ai-OH by Linda Caroll

AI Threatens and Blackmails People and No One Really Knows Why

OpenAI's CEO recently said a growing number of ChatGPT users have ended up hospitalized, divorced or dead

3d ago