



Autocapture:

The Secret Sauce of Product Teams

FIVE ADVANTAGES OF AUTOCAPTURE :

- 01. **It collects everything.** All behavioral data, all the time. Your dataset is always complete. Have a question? The data is there. Want to search for new correlations or insights? The data is there.
- 02. **No need for engineering.** Let your engineers focus on more important things (like building your product). Autocapture collects your data from the beginning. Evolve your product? Change your events? The data's still there.
- 03. **A complete, retroactive dataset.** No need to wait for data to roll in. Forget to track an event? No problem. Have a question about something new? No problem.
- 04. **More and better answers.** Ask questions, then follow-up questions, then follow-ups to the follow-ups. Each question leads you down a new path of discovery. Autocapture ensures the data is there.
- 05. **Exploration = insights.** Want to know what behaviors impact conversion or retention? The data is there. If people who watch your demo video convert more often? If people from large companies are more likely to use mobile or desktop? The data is there.



The Case for Analytics

For product companies, there's no substitute for analytics. Knowing how and why people interact with your product is critical for knowing what to build and figuring out priorities. Regardless of company size, **understanding user behavior is the quickest path to product-market fit**, and the easiest way to ensure your product evolves with the market.

Whatever your industry, product analytics simply gives you a faster, more thorough understanding of how people act in your product.

Only a good analytics tool can answer questions like:

- What do people click on in our product?
- What do they do before and after clicking?
- Where do they drop out of our funnel?
- How many trial customers are converting?
- What marketing channels are most effective at driving sign-ups?
- What in-app behaviors (visiting the FAQ page, leaving a review, downloading a white paper) best predict retention?

“Heap is the first place I go to start answering questions.”

DAVIS GODBOUT
SENIOR PROJECT MANAGER

splunk>





Why Autocapture?

By now, multiple companies have developed analytics tools. The problem is that most use a framework that's, well, archaic: decide which events you want to track, assign an engineer to write tracking code for them, wait for data to (hopefully) roll in, then perform your analyses.

It's a good system as long as... well, actually, no it isn't. **It's a terrible system.** There are so many flaws it's hard to know where to start. The most obvious one: you have to decide upfront which events you want to capture and analyze. When it's three months later and you have a question about an event you haven't been tracking? Oops.

There are plenty more in this vein. How do you know in advance what events you want to track, anyway? How can you tell you've tracked them correctly? How do you keep your tracking up-to-date as your product evolves?

Problems with engineering are a separate issue. To make this system work, you have to get engineers involved, take them off of more important work (a legitimate problem if you're a company that needs its engineers to spend their time building stuff), and force them to maintain the code they've set up. Then there's the problem of having to wait months for data to come in.



A Better Solution

Luckily, there is a better solution: autocapture. The idea behind autocapture is the belief that instead of trying to figure out upfront which user interactions we care about and tracking each one, we should capture all of them. **Automatic data capture means we always have the dataset we need.**

How does autocapture work? Simple: you insert a single code snippet into your product, and poof! We start collecting data. All the data. What people click on, what they swipe, what forms they fill out, where they come from, who they are, and more (without, of course, collecting Personally Identifiable Information). This happens from the instant you set the snippet loose.

Do you need engineers? No. Just insert the snippet and you're good to go. Product evolves? No problem — we're still collecting data. There's never a moment when we're not capturing data. Every event gets tracked, whether you've thought about it beforehand or not.

Autocapture makes sure you never say "I don't know."

"It used to take a week to answer a question. Using Heap, we can take action in less than 15-20 minutes."

DAVID LEE
FORMER CTO





The Advantages

Advantages of this approach are multiple. For one, you no longer have to decide in advance what events you want to track. Don't know what questions you'll want to ask a year from now? No problem. Know you'll probably be launching new features, but don't want to worry about tracking every event in them? Again, no problem.

Other benefits include:

- **It collects everything.** Any question you want to ask, any relationship you want to analyze, any behavior you want to investigate: with autocapture, the data's all there. Notice a drop off in your funnel, and want to dig in and learn more? Great! The data's all there.

We often describe this as "never having to say 'I don't know.'" Which is true — whatever question you might have (or that someone might ask you), you'll be able to answer. Anything about how people behave in your product, any question about segments or paths or funnels or activation or acquisition or retention or more... it's all there.

- **Save your engineering resources.** Another advantage: you can save your engineers. All analyses are things you can do yourself. You never have to worry about getting engineers involved, even if your product changes, you update your website, or you want to track all the events of a new feature.

For small companies especially, who need their engineers to spend their time building their product, this is an enormous advantage.

- **More insights. More answers.** On a larger level, the true advantage of autocapture is that it allows for the possibility of far more insights. When you're tracking only the things you know matter, your analytics can help you report on them. When you're tracking everything, you leave yourself the possibility of discovering insights that can profoundly change the way your product operates.

Dig through your data and find out that visiting the blog drives conversion? Great - push more people to the blog! Interested in what paths people take to conversion? Great! Set up a paths query and find out. Want to know which acquisition channel brings in more visitors, and (more important!) whether those visitors or more likely to convert? Autocapture's got your back.

There's no substitute for analytics, and finding valuable insights in your data is a fundamentally iterative process: a question exposes something curious, which you follow into another question and another. Fifteen questions later, you discover that a campaign is performing poorly for customers who have previously read a whitepaper, or a key call-to-action is below the fold on mobile browsers.

These questions are only answerable if you're tracking everything with a good analytics tool.

“I honestly sleep better at night... if I ever want to evaluate something, I know the data is there.”

EUGENE HSU
VP OF PRODUCT MANAGEMENT





Four common misconceptions about autocapture:

01. It doesn't *really* capture everything. You still have to do manual tagging.

As we see it, there are two classes of things businesses should collect manually. The first is events that may unintentionally collect Personally Identifiable Information (PII). As a matter of security, we do not like to autocapture these. The second is backend data companies may want to bring in to merge with their autocaptured data. Each company is unique, and we offer powerful APIs to help companies track things like “Payment Processed” or “Sign Up Submitted.”

That said, just over 90% of the events used in Heap Reports come from autocaptured data; only the remaining 10% are manually tagged. You decide if that's more or less desirable than a dataset that's 100% manual.

02. It's too messy.

It is true that autocapture gives you a far larger set of data than manual tagging will. (That's the point!) Luckily we've created an elegant system for managing it all: Virtual Events.

Briefly, a virtual event is a way to apply labels to raw data without modifying that data. With virtual events, you can assign multiple labels to the same autocaptured interaction, even retroactively. This gives you extreme flexibility, and — more importantly — keeps your dataset clean.

With manual tracking, you have to decide in advance what to track. With autocapture, you still have to label your events. But you also gain the option of labeling any event, any time, in whatever way(s) most suit your analyses.

To learn more about Virtual Events, visit heap.io/product/virtual-events.

03. It's not secure.

Protecting customer data is our #1 priority. Out of the box, Heap autocaptures only actions, not the content of those actions. (So if a user enters a social security number into a field, Heap will track that something was typed into the field, but not what was captured.) If you want to capture non-sensitive user-level data, you have to do so deliberately.

Because we're aware that APIs can be prone to receiving sensitive information, we've built automatic PII detection into Heap to recognize when sensitive data is being collected and eliminate potential issues quickly. Additionally, we have a user deletion API that makes it simple to handle user deletion requests under GDPR, and a host of other technical options that provide defense against privacy risks.

04. But I have Google Analytics!

Yes, Google Analytics is free. But no, it can't provide you the information a product analytics tool can provide. GA was built to capture sessions and page views, not clicks, funnels, paths, conversion rates, or other user behaviors. GA can't combine users from different devices into a single profile, nor can it segment users by behavior.

In short, GA can give you minimal information about SEO. But if you're looking for actionable insights about how people use your product, **GA just won't suffice.**

“We'll sometimes be in a meeting, and we'll butt heads on something. Boom. We open up Heap, get that query, get an answer.”

PATRICK CHANDLER
CO-FOUNDER & CMO

**FIGHT
CAMP**