THE ULTIMATE FIGHT GUIDE

HOW MANUAL TRACKING MEASURES UP TO AUTOCAPTURE IN SURFACING ACTIONABLE INSIGHTS

EXPLICIT VS IMPLICIT TRACKING

“MANUAL TRACKING” VS “AUTOCAPTURE”
The Contenders

two tracking champions face off in the fight of the century

Duking it out in the data collection ring

EXPLICIT
aka MANUAL TAGGING

IMPLICIT
aka AUTOCAPTURE

In eight action-packed rounds, we’ll see how these two approaches measure up against each other.

THE GOAL

to crown the ultimate tracking champion
Let’s meet the contenders

Explicit Tracking, aka **MANUAL TAGGING**

“The Bruiser”

Having been around since 1997, explicit tracking has a long history of supplying product teams with usage data. Here’s how it works:

- For every event teams want to track, an engineer goes into the codebase and inserts tracking code.
- Teams have to decide in advance what events to track.
- Engineers have to insert tracking code into each event.
- Teams wait for data to roll in.
- New events require new tracking code.

To be done right, manual tracking requires a robust tracking plan, and strong process skills. But once in place, it can be a reliable solution.

Implicit Tracking, aka **AUTOCAPTURE**

“The Dancer”

Light on its feet, implicit tracking uses autocapture — automatic data capture — to capture all customer data from your app or site. Here’s how it works:

- Your team inserts a javascript snippet into your site header. After that, all event activity is tracked automatically — every click, swipe, form fill, pageview, and more.
- No need to decide in advance what to track.
- No need for engineers.
- All data is collected from the moment the snippet is added. Data remains searchable retroactively.
- New events are tracked automatically.

With just a single line of code, implicit tracking enters the ring ready for action.
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Ease of Use/Self-Service

Explicit Tracking

**MANUAL TAGGING**

Collecting data manually means multiple steps and many stakeholders.

With manual tracking, you have to decide upfront which events you want to capture and analyze.

Next you have to get engineers involved — often taking them off of more important work — so that they can set up and then maintain the code.

Any tweaks you need to make to your app or site require code changes from engineering — essentially restarting the data collection cycle.

Since tracking is centered around single events that matter to specific teams, data is fragmented throughout the org, and teams are left with an incomplete picture of customer behavior.

When teams conduct analysis in silos, insights rarely turn into action.

Implicit Tracking

**AUTOCAPTURE**

Implicit tracking makes analysis available to everyone.

With a single code snippet inserted into your product, autocapture provides immediate access to a complete, retroactive data set. No need for engineering.

Heap’s accessible UI empowers even non-technical teams to self-service, uncovering immediately actionable insights.

Our Data Trust Center lets teams easily control their data, distribute access, and ensure that everything stays reliable, with zero loss of flexibility for end users.

From product to marketing to CS, different teams can access and utilize behavioral data without messing up the schema for everyone else.

Implicit starts off strong with a combination play: easy to implement and easy to use for technical and non-technical teams alike.

**WINNER:**

AUTOCAPTURE

(Implicit Tracking)
Asking Questions

Explicit Tracking
MANUAL TAGGING

Explicit tracking is designed to answer a specific question or set of questions — those that you asked your engineering team to help you answer when they wrote tracking code.

This means that your answers are limited to the questions that you expected to ask when you submitted your tracking plan.

But what happens when three months have passed and you have a question about an event you haven’t been tracking? Oops.

Implicit Tracking
AUTOCAPTURE

With implicit tracking, you can ask endless questions. Want to search for new correlations or insights? The data is already there.

Ask questions, then follow-up questions, then follow-ups to the follow-ups. Each question leads you down a new path of discovery. (If you ever run out of things to ask, we’ve got a whole book of questions you can use.)

Bottom line: With autocapture you can ask anything because you have everything.

Product, marketing, and CS teams have a ton of questions. Far more than most engineers have time to implement code for! For the inquisitive mind, implicit tracking is the clear answer.

Redfin
“I find myself answering questions I didn’t even know I had.”

Nick Smith
Senior Product Manager

WINNER: AUTOCAPTURE (Implicit Tracking)
Surfacing Insights

Explicit Tracking
MANUAL TAGGING

With any tracking solution, you don’t know what you don’t know. With explicit tracking, however, you’ll never find it. Unexpected question? Too bad. You can only analyze what you planned to track.

It’s impossible to surface new insights without a complete data set. With the gaps in your data that come from tracking single events, you miss the full picture of customer behavior — and the surprise connections that come with it.

Digging any deeper means yet another request for engineering to write more tracking code and then a long wait for the data to roll in. Kind of discourages any further discovery, doesn’t it?

Manual tracking is data for reporting, not for exploration.

Implicit Tracking
AUTOCAPTURE

A good tracking solution should let you surface the insights that can profoundly change your product or business.

With autocapture, finding valuable insights in your data is an immediately iterative process: a question exposes something curious, which allows you to go further and deeper. Insights abound with codeless tracking. You’re limited only by your curiosity.

The future of insights will increasingly be automated, as machine learning and data science strategies automatically surface correlations you wouldn’t have found on your own. These strategies only work when you have a complete set of data.

Explicit tracking starts off strong, but suffers from lack of stamina. One or two questions and it’s out of answers! Sigh...

WINNER:
AUTOCAPTURE (Implicit Tracking)
Avoiding Insight Bias

**Explicit Tracking**

**MANUAL TAGGING**

With manual tracking, you’re choosing which events you want to capture. This already biases you towards what you think is important. *With manual tagging, you make the data say only what you want it to say.*

Manual tracking limits your understanding of customer behavior to what’s already happened. This makes it impossible to anticipate micro-trends in customer behavior or predict market shifts that extend beyond your narrow perspective.

Trying to capture dynamic market data with a static tracking agenda? It just doesn’t work.

You can’t explicitly plan to track the insights that you haven’t yet uncovered.

**Implicit Tracking**

**AUTOCAPTURE**

Implicit tracking eliminates bias by tracking *everything* — even the events that you might initially think are unimportant.

*Autocapture allows the data to speak for itself.*

That way, you’re able to keep yourself open to learning new things, and seeing them before other people can. *A full data set provides complete and predictive insight.*

This gives teams the opportunity to be proactive, rather than reactive when prioritizing product updates or outreach to customer accounts.

Biased by definition (prioritizing the capture of specific data), manual tracking doesn’t stand a chance. By staying unbiased, autocapture outmaneuvers explicit tracking at every step. While you’re stuck reacting to past events with manual tracking, autocapture gives you advance signals on what’s coming so you can preempt future events in the present.

**Winner:**

**AUTOCAPTURE**

(Implicit Tracking)
Customer Story

B2B Software company Echosec uses Heap's complete autographed data to validate observations of usability testing on a larger scale than their sample. In a recent usability testing round, the team saw users performing an unexpected behavior. But after investigating in Heap, they realized this wasn't uncommon at all! Echosec was able to avoid drawing inaccurate conclusions from incomplete data, and instead adjusted their UI to clarify the process on the page they were testing. (Learn more about how Echosec uses Heap to avoid insight bias.)

“Autocapture has been incredibly useful for us, and it’s the foundation that makes all of the other features so valuable.”

Erin Kerr
Product Manager
Data Governance/Organization

Explicit Tracking
MANUAL TAGGING

With manual tracking, data capture is governed from the get-go with a tracking plan that defines the data you want to collect and how you’re going to collect it.

It requires time, effort, and money upfront, but the result is clean, quality data (albeit limited to what you included in your initial plan).

There’s a method to what may seem like a maddeningly slow data collection process. Manual tracking offers you high control to ensure consistent and organized data — as long as you’re committed to keeping it that way.

Implicit Tracking
AUTOCAPTURE

At one point teams were worried that autocapture would leave them with piles of messy data. That’s just not true anymore.

Heap’s Data Engine gives you the tools to maintain the quality of your data, ensuring that your data stays clean, organized, and shared across the org.

Heap’s Data Dictionary helps clean, organize, and annotate your data set, while Heap’s Event Verification Flow verifies definitions before they’re used. Naming conventions gets you using language that your entire organization will understand.

The contenders go head to head, with both leaving the ring unscathed.

NO WINNER
IT’S A TIE!
Taking Action

**Explicit Tracking**

**MANUAL TAGGING**

With manual tracking, it can take weeks (or even months!) of waiting to collect new data and understand trends. Even when the new data finally rolls in, you can’t be sure how reliable or complete your data is.

With this approach, it’s nearly impossible to respond to trends, let alone predict them.

In addition, manual data collection tends to be localized to individual teams or PMs, meaning different teams are looking at different data.

So either you’re unable to get the right information quickly enough to know what the right actions to take are. Or if you’re lucky enough to get the info you need, it’s unlikely you’ll be able to distribute the information to the right people in time to make a decision that’s aligned with the rest of org.

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**Implicit Tracking**

**AUTOCAPTURE**

This one is simple: more data means you can identify and analyze trends, rather than simply track isolated events.

In addition, with Heap it’s easy to make data actionable. Heap’s Report Alerts let you set alerts on any event and have Heap send a message via email or Slack when a report’s value changes by a specified amount.

Heap’s Salesforce Data Connector brings Heap data directly into Salesforce, so sales and customer success teams can use quantitative data to measure account health. This lets them identify at-risk customers and easily prioritize engagement efforts.

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This round is almost over before it begins. The speed and agility of implicit tracking leads to problem-solving in real time.

**Winner:**

**AUTOCAPTURE**

(Implicit Tracking)
Customer Story

B2B SaaS company Conductor uses Heap to keep close tabs on account health and act quickly to re-engage at-risk customers.

Before using Heap, different teams relied on disparate tools and processes, making it challenging to unify adoption efforts across the company. Now with the Salesforce Data Connector and Report Alerts, usage insights from Heap are easily delivered across the organization and viewed in people's existing workflows and tools.

When account health metrics cross certain thresholds, key members of the Product, Account, and Services teams are alerted so they can immediately work together to coordinate re-engagement efforts.

“Heap enabled us to implement account health metrics that are accessible to everyone and updated daily. The Heap and Salesforce integration was a breeze — literally, a few minutes of set-up and it’s live the next day.”

Jean McCabe
Director of Product
Since you need to decide what you’re tracking beforehand with manual tracking, you know exactly what you’re collecting and where it’s going.

Predetermining which data you want to capture (and how) in your tracking plan can help you maintain GDPR and SOC 2 compliance.

However, manually instrumenting analytics does introduce the risk of human error in capturing sensitive data. A developer writing tracking code could accidentally track something they’re not supposed to and put your compliance at risk.

By default, Heap autocaptures actions, not the content of those actions. So sensitive data entered in form fields is not implicitly tracked. You have to track that deliberately (read: explicitly).

With Heap’s autocapture, you also know exactly what you’re collecting and what you’re doing with that data. Using Heap Ignore, you can ignore interactions with sensitive elements or form fields. Or you can use Heap Redact to programmatically filter personal information while data is being captured.

Heap’s Team Permissions allow you to control data access for security by setting an environment where only certain people can view sensitive data. Heap also offers an API for user deletion to further automate compliance with CCPA and GDPR.

Ultimately, human error is one of the biggest risks in data security, so automating data capture through autocapture helps to reduce that risk.

The contenders go toe-to-toe. With Heap’s security technology and compliance with GDPR and SOC 2, PII stays just as protected with implicit tracking as it does with manual capture.

**NO WINNER**

**IT’S A TIE!**
Coping With Change

Explicit Tracking
MANUAL TAGGING

Manual tracking is brittle. You might say it has a bit of a glass jaw. If you decide to redo your site, you have to retool everything.

As new pages, features, and elements get added to the site, you need to constantly remember to add new tracking code. If you forget to do this, all of the customer interactions with those things are lost in a data blackout — a period of time where no data was ever collected for an event.

Even if you do remember to track new events, launching changes to your site or app becomes a tedious exercise that is at best an additional step in each sprint, and at worst, a disincentive to moving fast.

Implicit Tracking
AUTOCAPTURE

Autocapture doesn’t mind how often you iterate — it’s always collecting events in the background. No gaps in tracking mean no holes in your data, no matter how many updates you ship.

Heap’s scalable governance tools use smart workflows to alert you to fix outdated definitions and archive ones that aren’t being used. Old data can also be merged with new definitions to maintain retroactive metrics.

A single unexpected play throws explicit tracking for a loop. Manual tracking is not made for rapid change and requires engineers to re-instrument tracking for every site update. Implicit tracking stays standing, no matter what’s happening around it. That’s how it’s earned the name “The Dancer.”

WINNER:
AUTOCAPTURE
(Implicit Tracking)
Data Tracking Champion: Conclusion

At the end of this match, it’s clear that product teams everywhere should have implicit tracking in their data collection corner. Because it collects everything automatically, it’s great for answering quick, just-in-time questions, and for surfacing everything you never knew you needed to know.

Throw in Heap’s governance, security, and organization features, and autocapture is hard to beat. **Unbiased insights that lead to immediate action. It’s no wonder that implicit tracking wears the data championship belt.**

On its own, explicit tracking misses more punches than it lands. But what if it was paired side by side with implicit tracking? Now that’s a sure win.
The Best Win For You: Mixing Autocapture and Manual Tracking

To get full value out of analytics, you will still need to do some explicit tracking in order to augment autocaptured data with contextual information that matters to your core business needs. For nuanced use cases and analysis goals, manual tagging can supplement autocaptured data with additional metadata, providing insight on things like CTA button text, color, or form field entries.

If you have to choose just one tracking method, autocapture is the obvious choice for an implicitly tracked, retroactive data set. But the best solution is a combination of the two.

Heap provides both implicit tracking and explicit tracking for a truly complete data set. With Heap, you can start your analysis by capturing everything through autocapture. Then dig deeper into events that are core to your business by attaching additional relevant data to autocaptured events using snapshots, APIs, and custom properties — all within our UI (no codebase changes needed).

Rolling with the punches,

— The Heap team

Heap empowers companies to focus on what matters — discovering insights and taking action — not building pipelines or manual tagging. With Heap, organizations can remove bottlenecks and gain a comprehensive view of their customers. Our software automatically collects, organizes, analyzes, and connects customer data, so businesses can create valuable experiences.

Visit us at heap.io