



Digital Analytics Buyer's Guide for eCommerce

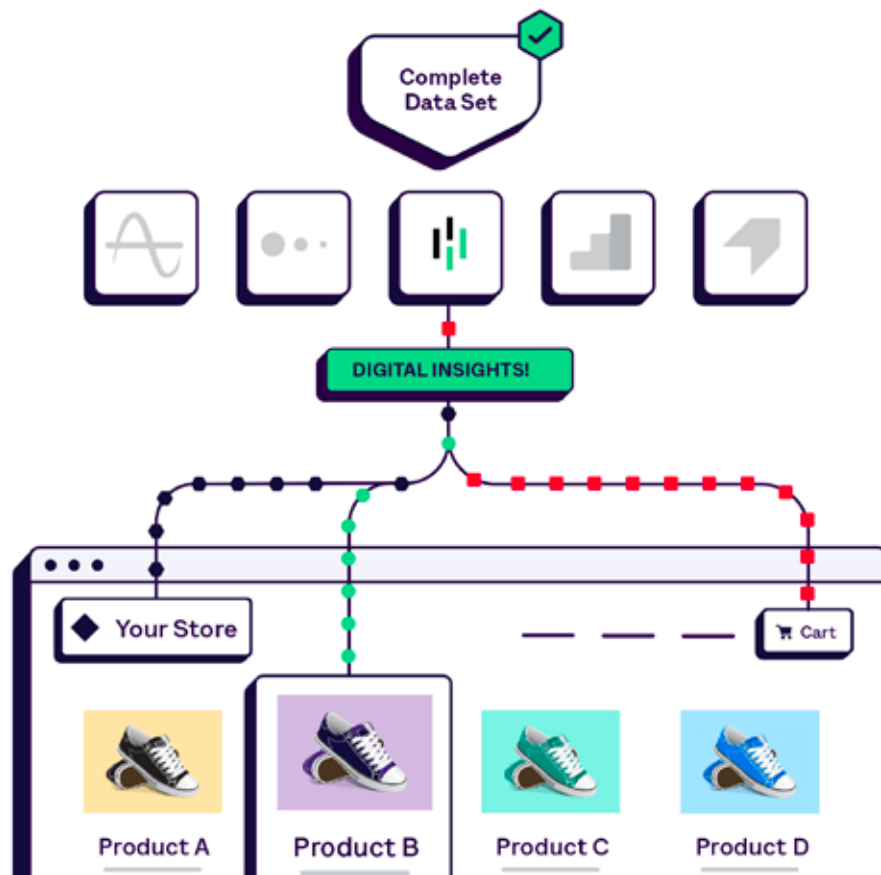


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PART 1

Who needs digital insights —

and why you want a platform that can process 100% of your data.

Our intention with this guide is to give a thorough overview of digital analytics, with practical considerations for bringing it into your business.

What is digital analytics?

Digital analytics is a set of tools that examine the behavior of shoppers within your online store, providing critical information to optimize performance, diagnose problems, and correlate customer activity with long-term value.

Analytics is like having a crystal ball. Instead of guesses, you can craft and test hypotheses. Instead of customer interviews, which don't always yield usable feedback, you can watch people interact with your site in real time. When you truly understand your shoppers' needs, you can evolve your digital experience to anticipate them.

Data science has recently taken digital insights to the next level with the ability to predictively indicate potential hotspots, logjams, and red flags in the checkout flow. A digital analytics platform that can ingest and process every bit of shopper data will help steer your teams towards insightful questions and show them where to look to reap maximum gains.

Ultimately, digital analytics is about making effective decisions with real information. If you're not currently doing so, you either don't have an analytics toolset, or the one you have makes it too cumbersome to collect data and put it into an actionable framework.



What kind of eCommerce companies need digital analytics?

All of them! Every eCommerce business needs to iterate constantly on productmarket fit. Small companies need to find it, growing companies want to expand it, and large ones are trying not to lose it.



Startups need digital analytics to create a quality digital experience in the first place. Addressing productmarket fit through digital analytics gives you the quickest and most actionable feedback. It also offers quantitative direction towards greater effectiveness as you iterate on your MVP.



Post-startup companies need digital analytics to scale properly. Digital insights are key to effective growth at this stage. They give you the ability to leverage key customer segments based on customer behavior, driving upsell, cross-sell, and return buying opportunities. With the right digital analytics platform, you can develop your data value chain, increase customer retention, and maximize conversion rates while reducing customer churn. Integrations with third-party platforms allow you to nurture and engage customers with personalized experiences based on their shopping behaviors.



Enterprise companies need digital analytics to stay nimble. Large orgs need to adapt to evolving customer demands, and to stay ahead of emerging competitors looking to disrupt the market. Digital analytics not only helps enterprise companies refine their digital experience; it also gives them data they can blend with other sources (finance, HR, supply chain, retail, sales, marketing, etc.) to gain a holistic view of the entire business.

Who should read this guide?

If you find yourself among one of the following roles, you can't afford to not read this guide. In fact, the success of your career depends on it.



CRO Managers looking for ways to increase conversion and retention, to create captivating digital experiences, and tie shopper behavior to higher-level business metrics.



Digital Product Managers who want to measure the effectiveness of their team, use data to prioritize the product roadmap, and demonstrate impact to the C-Suite.

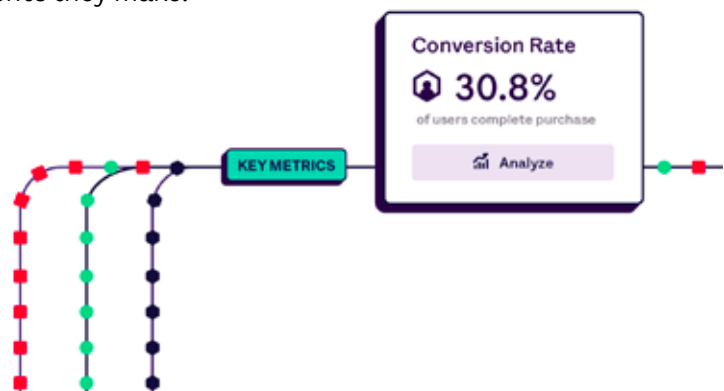


Growth Marketers who want to know the true effectiveness of their emails, social posts, and promotions, and who wish to improve the site experience to maximize conversion.



eCommerce Managers who know that the success of the product is the success of the business. Sharing digital analytics creates transparency across departments and greater understanding of what's happening company-wide.

Every team in the company can improve performance when they have an easily accessible platform that allows them to run experiments, test results quickly, and document the improvements they make.



Here's a scary truth: it's the “unknown unknowns” that make or break digital experiences.

And here most people sit, not even knowing what those factors are, let alone how to evaluate them! This is why your choice of digital analytics is critical.

Is your business more nimble than the competition? How can you tell?

Without seeing for sure what customers are doing on your website... with no way to measure and record the metrics you are responsible for...it's impossible to make accurate decisions. You're like a pilot flying at night without instruments. And when millions of dollars are at stake, relying on hunches and intuition is risky, bordering on reckless.

You need the real facts, based on real data and real insights.

A good digital analytics tool will let you see your digital experience as it really is, at any given moment. When you see where customers have trouble, you can smooth things out for them. You can find out which pages people actually visit, and which they don't. You can chart the paths users take through the checkout flow to see where abandonment occurs. You can segment shoppers and see how specific groups behave, and easily compare them to other subsets of customers. Having this kind of information at your fingertips lets you notice causes and correlations, pinpoint problems, and change workflows accordingly.

Without digital analytics, you're managing your digital experience like a big game of telephone.

Maintaining productmarket fit is equal parts art and science.

It takes constant vigilance. Hard-won ground can easily be lost when you fail to evolve with markets, technology, or social dynamics. Only digital analytics takes basic precepts of the scientific method — hypotheses, experiment, and measurement — and puts them in the service of improving product-market fit. The artistry comes from people across your company who ask insightful questions of the data — and reveal answers that transform your business.

Is it time to move on from Google Analytics?

It's analytics. By Google. And it's free.
What's not to like? **A lot, actually.**

It's nearly twenty years old! That's an eternity in technology. GA was built for SEO and simple page metrics, and never designed to accommodate the depth and sophistication of a modern customer journey.

It requires manual tracking. In order to be measurable with Google Analytics, any events must be specifically defined ahead of time, constraining your ability to explore in your data and forcing you to put in an enormous amount of work to get what still may end up being an inadequate, patchwork set of data.

We can't say this enough: manual tracking does work, but it will never tell you what's really going on. And it's impossible for an algorithm to identify hidden points of friction in a customer journey if it only "sees" a subset of the total customer journey.

Mobile and web? No dice. Consumers now do 70% of their web browsing on mobile devices. They spend most of that time in mobile apps. With people visiting your site from multiple devices and platforms, the solution you choose should be able to link these visits — to tie mobile and web visits together — so you're aware it's the same user. Even many advanced digital insights tools don't do this automatically.

Google Analytics doesn't do it at all.

We're not saying Google Analytics isn't a good tool; it's great for doing what it's made to do, like measuring how people get to your site. But the stakes for success are so much higher now. Analytics that weren't built to ingest and manage a full customer dataset will struggle when your data volume explodes — which is going to keep happening, ad infinitum, especially when your product takes off. To consistently turn shoppers into paying customers, you need a more sophisticated analytics platform.

You can learn more about this and other reasons to upgrade your analytics [here](#).

What GA is good for:



What Heap is good for:



PART 2

How to choose the best digital insights platform

Here are 10 key considerations for evaluating a solution

Our intention with this guide is to give a thorough overview of digital analytics, with practical considerations for bringing it into your business.

1: It should save time and resources, not make life more complicated.

The most important thing to know upfront: is implementation seamless, or will it give your devs extra work to do? Manual setup and tracking eats up scarce and valuable engineering time, which can make you less likely to deploy your expensive new toolset. That's a lose-lose. If a system is making YOU do all the work, it's wasting your time.

Likewise, a tool can deliver all the data you need, but if it's making YOU put the time in to sift through and find the things you need, it'll never deliver the value you want. A good tool gives you the data. A GREAT tool shows you where to look.



2: It should help you become hypothesis-driven.

Digital analytics' most valuable application is in discovery. It allows your PMs to sift through data to uncover new correlations:

- *Where are customers spending their time?*
- *What behaviors most predict Customer Lifetime Value?*
- *How do high-value customers navigate our site, and how can we nudge other shoppers to take those actions?*
- *Which channel brings in the people who purchase our large-ticket items?*
- *At which part of the funnel do people drop off?*
- *Which groups of people drop off more?*
- *Which activities do customers do on web vs. mobile?*

A good tool makes it easy to formulate, test, and discard hypotheses rapidly until you get the answers you seek.

It should give you ALL the data.

This is the only way to be rigorous. A complete, meticulously governed set of customer data lets you test any hypothesis you want, at any point in the development process. Answers to questions you haven't even thought of yet are already there. No manual tracking, advance planning, or engineering time required. Now your data becomes a place to go exploring.



4: It should do the heavy lifting for your teams.

If it takes more time and effort to manage a toolset than to work without it, you're losing ground. Two common time sinks with digital analytics are (a) needing to code events by hand (see "The Basics of Data Tracking" sidebar.) And (b) needing to sift through all the data on your own, hoping to figure out what's most useful. A good digital analytics solution should solve both of those problems for you: it should give you all the data you'll need, and it should find important things in that dataset for you.

5: Its predictive capabilities should be foundational, not bolted on.

When your digital analytics tools are built to ingest raw events, they can mine through the journey data of vast numbers of users and identify meaningful trends and patterns, like suggesting missing steps in a funnel or revealing hidden points of friction. This can point your teams towards actions that will have significant ROI.

6: It should give X-ray vision into areas of opportunity and/or conflict.

These are often issues you never would have thought to consider, that arise from data you didn't think to track in the first place!

- How many "invisible steps" are occurring between two points in a funnel?
- Do desktop users convert at a significantly different rate than mobile users?
- How much **time** are users spending on the step right before dropoff?

7: It should keep your data clean and dependable.

All the data in the world is no good if it's impossible to use. For your data to be maximally valuable, it needs to be clear, organized, and consistent. When the dataset is trustworthy to everyone in the organization, teams can work collaboratively across departments, and you can scale. Because speed is critical to iteration, you can quickly answer questions and raise new ones. You can't do this if your data is a pile of sticky spaghetti.

8: It should be geared toward increasing conversion and retention.

Digital analytics is critical for measuring and systematically improving AARRR, aka the Pirate Metrics:

Acquisition: Where do your customers come from? Which shoppers are the best prospects, which channels they favor, and what are your optimal costs for acquiring each customer?

Activation: What steps does a customer take on your website? Each step on their journey to becoming a paying customer is known as a microconversion. Wouldn't it be a great idea to optimize the effectiveness of each one?

Retention: Are your customers staying or leaving? Digital analytics helps you make happy customers happier, and steer you towards ways to win dissatisfied customers back.

Referral: Are purchasers talking up your product or disappearing? Digital analytics helps you measure customer loyalty through their actions, social posts, etc.

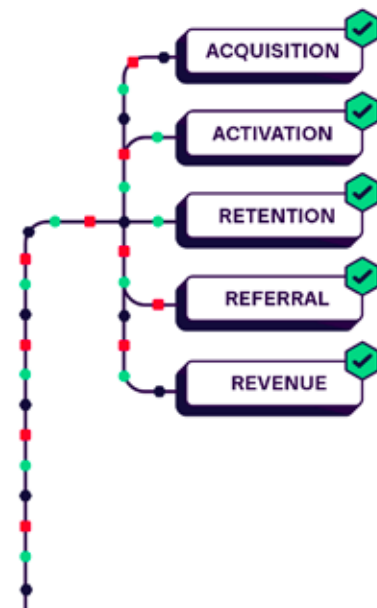
Revenue: How do you make money with your product? Streamlining your sales funnel with digital insights will help you reduce acquisition costs and increase the value of the customers you retain.

9: It should give you advanced comparison skills.

Behavioral Segmentation allows you to isolate groups of shoppers and evaluate differing responses to identical situations. It shows you who your best customers are and what they like to do, so you can entice high-value customers with more of what they like, and less of what they don't. Not all tools can do this.

- *Where is the drop-off in the funnel?*
- *What did shoppers do immediately before dropping off?*
- *What sources brought them in?*
- *What other behaviors tend to predict drop-off?*

And so on. Being able to explore the data from every possible angle is key.



10: It should easily connect to your data warehouse.

The larger your organization, the more important it is to centralize your dataset and blend website information with other BI data, while using minimal engineering resources. A system that automatically pushes behavioral data to your data warehouse while keeping it organized means your data teams can spend less time munging data, and more time generating insights.

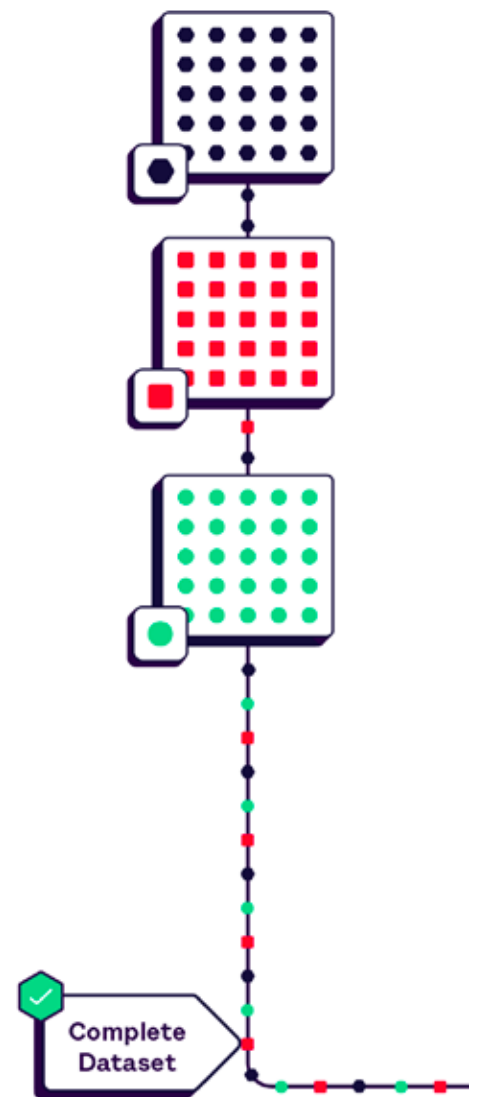
In short: what are you not paying attention to...but you should be?

There are plenty of adequate tools to measure metrics that you already know are important. A **great** tool will point out the situations, circumstances, pitfalls, and possibilities of your digital experience that aren't apparent yet. By preparing for what's coming around the bend, you're able to stay several steps ahead of the market and your competitors.

IMPORTANT: Not all tools give you this much freedom.

In our opinion, if your digital analytics solution is not prepared to do anything and everything you ask — it's useless.

So what does a strong foundation look like?



PART 3

The principles of good analytics

You want robust sources for data — and you want to collect every bit of it.



Automatic Data Capture is a must. Without it, you will always be playing catch-up and the dataset will never be fully complete. Metaphorically, with Autocapture, there's no need to plot scripts in advance. The cameras are always running and you can look at any footage, from any angle, any time you want.



APIs are critical for adding context to the events you track, so you can gain a complete view of user behavior on your site. Being able to pair customer data with data on things like in-store purchases, call center interactions, or conversations with sales reps gives you more — and deeper — answers to the questions you have.



Integrations enrich your dataset by pulling in data from multiple sources and blending it with behavioral data from your digital analytics. Can you connect to Stripe, Shopify, Salesforce, Marketo, and Optimizely? The more integrations your digital insights solution can accommodate, the better.



The Basics of Data Tracking

There are two main ways to capture data for analytics.

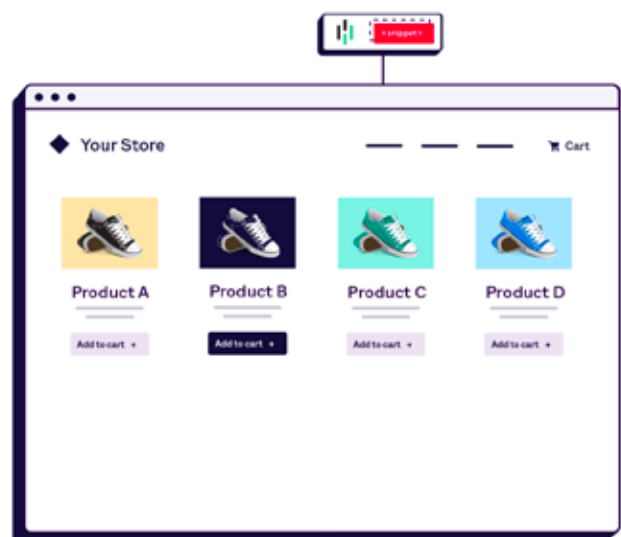
Explicit (aka manual) tracking requires engineers to insert tracking code into each event. Data accumulates from the moment of instrumentation. Any event that is not explicitly tracked does not collect data for analysis. Google Analytics, Mixpanel, Amplitude, etc. are examples of explicit tracking.

Implicit tracking (also called automatic capture or retroactive capture) requires only that a single Java snippet be inserted into the header of a site or application. After that, all activity is tracked automatically: every click, swipe, form fill, pageview, and more. Heap is the analytics solution powered by Autocapture.

Best of both worlds: Implicit + Explicit tracking

If you had to choose just one tracking method to have in your corner, Autocapture would be the obvious choice. But best of all, when you choose Heap, you get both implicit tracking and explicit tracking abilities for a truly complete data set.

You can start your analysis by capturing everything through Autocapture, then perform explicit tracking as needed to add granular context to events pertinent to your core business needs. For nuanced use cases and analysis goals, you can supplement additional metadata using snapshots, APIs, and custom properties, all within our UI — no codebase changes needed. It's simply the best way to get full value out of your analytics investment.



You want trusted governance

Clean data makes for confident insights. But without rigorous organization, keeping it trustworthy is a Sisyphean task. When information is missing from manual instrumentation, agile PMs are forced to make gut decisions, or delay a release until they gather necessary data. These difficulties compound as your company gets larger.

Look for the following features so your data stays future-proof and inconsistency is never a problem, no matter your size.



Event visualizers make it simple for users to locate the exact events that matter to them, and to group and label those events in the way that best answers their questions. For maximum agility, once they're named, events should be available immediately for graph and funnel analyses.



Collaborative workflows are possible with robust and customizable permissions. Ideally, individual users can go exploring in the data without affecting what other users are seeing. And teams should be free to access the data they want, analyze it with flexibility, and leverage it to build a powerful user experience.



Standardized event naming with categories and annotations provides structure and context for events, actions, properties, and customer segments. Together, these features eliminate confusion over what events refer to, making it easy for everyone on the team — and across the company — to find the data they're looking for.



Data Dictionary provides naming conventions and a single source for all product data, including events, properties, categories, and customer segments. Newly-created definitions should automatically be submitted for verification, to give analysts confidence that they're using the right information.

You want scalability

Be careful! Plenty of analytics tools, even those with lots of bells and whistles, have trouble with scale. When data governance can't keep pace as you grow, users often find themselves in lonely silos, able to answer small focused questions, but unable to work as a team to tackle more important initiatives. That's no way to scale.

Ideally, your solution will offer the following features to push your analyses forward, instead of holding your team back.



Event repair alerts admins about stale and/or duplicate event definitions, then guides them through the process of repairing or archiving. There's no confusion about definitions and your dataset stays lean and mean.

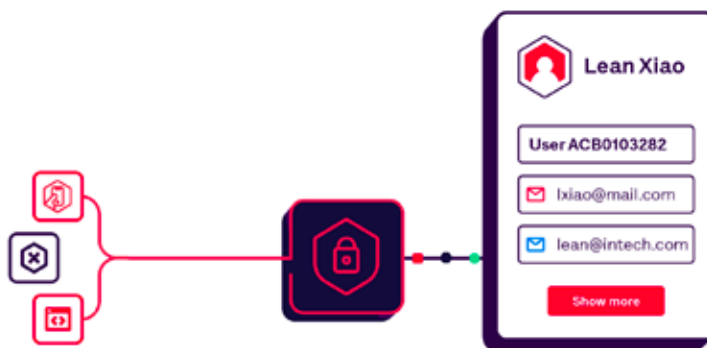


Custom permissions give each user the right level of access and control. You can roll out data to everyone the whole company and empower each user to do the most with it.



Unified views keep everyone on the same page, reversing the usual trend towards entropy. When everyone is looking at the same data all the time, silos don't get a chance to form.

In short, you want everybody looking at the same data in the same place. And anyone coming on board to access the dataset easily, without worrying whether it's trustworthy or not.



You want advanced data science

If your teams were in a race (and let's face it, they are) would you rather they have a paper map to the treasure, or a live GPS feed? A powerful data science layer makes all the difference between having information in front of you, and being able to take meaningful actions with it to make effective progress. Some of the features that data science enables are:



The ability to view the differing paths

and optional steps customers take on your website, so you can capture the differences in conversion rates between them. At Heap we call these [Journey Maps](#), and they are not currently available from anybody else.



The ability to quantify the amount of effort

that steps in the journey take, so you understand the degree of friction your customers experience at every point in a given checkout flow.



Ways to recognize customer interactions

that you didn't choose to track, but are having outsize impact on conversion or retention, so you can build in appropriate steps in your funnels.



The ability to recognize customer cohorts

provides naming conventions that correlate highly with the outcomes you're trying to achieve, and suggest them as groups for segmentation.

The possibilities above are just a few of the new features available in [Illuminate](#), the latest development in digital analytics from Heap.



PART 4

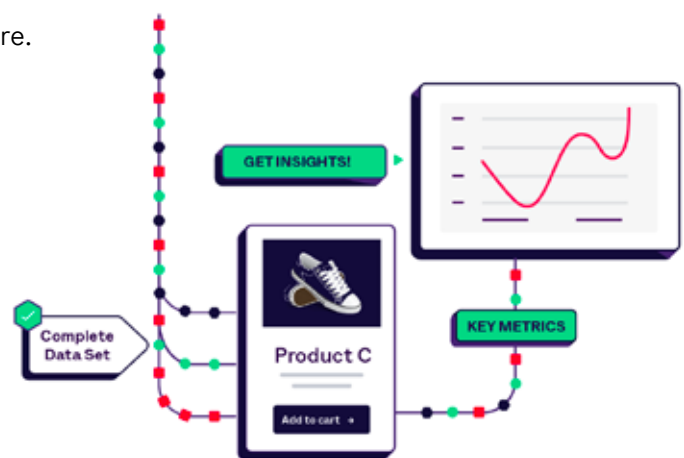
Conclusion

Extraordinary digital experiences don't happen randomly. They are created by deeply and intuitively understanding shopper needs and desires, and evolving your website to meet them. Digital analytics is the means to this end.

We believe that to be useful, a platform must have two critical capabilities: a comprehensive customer data foundation, and an analytics environment that's built to mine through it for hidden insights. [Learn more here.](#)

You have lots of choices when it comes to choosing a solution. We hope this guide has been useful.

At Heap, we believe we're best set up to serve your needs, both today and tomorrow. We would love to hear about your data challenges and show you new ways to address and overcome them. Please reach out if you'd like to know more.





About Heap

Heap's mission is to power business decisions with truth.

We empower product teams to focus on what matters — building the best products — not wrestling with their analytics platform. Heap automatically collects and organizes customer behavioral data, allowing product managers to improve their products with maximum agility.

Visit heap.io to learn more.