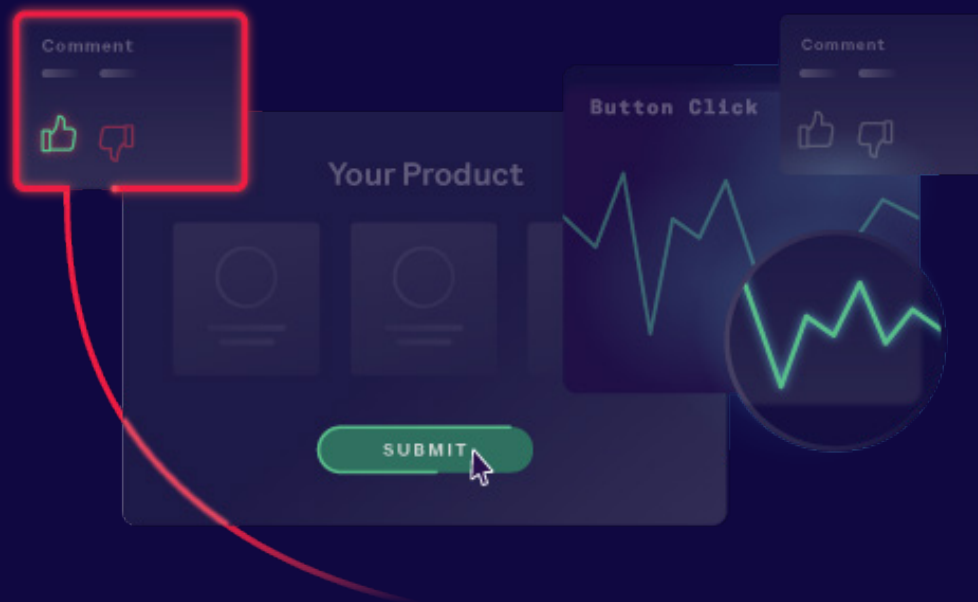




# Product Analytics Buyer's Guide

A guide to choosing the right product analytics solution



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## PART 1

# Who needs product analytics —and why

## ABOUT THIS GUIDE:

Our intention is to give you, the reader, a thorough overview of product analytics and provide useful consideration for bringing it into your business.

**Product analytics** is a set of tools that examine the behavior of users within your product. This provides critical information to optimize performance, diagnose problems, and correlate customer activity with long-term value.

For product teams, analytics is like having a crystal ball. Instead of guesses, you can craft and test hypotheses. Instead of relying on customer interviews, which don't always yield usable feedback, you get to see in real time how people are interacting with your site. So you not only can see how well you meet your users' needs, you can evolve your product to anticipate them.

Ultimately, product analytics is about harnessing real information to make the most effective decisions. If you're not currently doing that, either you don't have an analytics tool, or the one you have makes it too cumbersome to collect the data you need and put it into an actionable framework.

**In either case, we wrote this guide for you.**

# What kind of companies need product analytics?

**Well, in a nutshell...all of them.** Every company, regardless of size, is iterating on product-market fit. Small companies are trying to find it, growing companies are attempting to expand it, and large ones are trying not to lose it.



## Startups and small companies

need product analytics to **a quality product** in the first place. Addressing product-market fit through product analytics gives you the quickest and most actionable feedback about your offerings. It also offers quantitative direction towards greater effectiveness as you iterate on your MVP.



## Post-startup companies

need product analytics to **scale properly**. Product analytics is key to your effective growth at this stage. It gives you the ability to develop your data value chain, increase user retention, and maximize conversion rates while reducing customer churn.



## Enterprise companies

need product analytics to **stay nimble**. Large orgs need to keep improving to adapt to evolving customer demands, and to stay ahead of emerging competitors looking to disrupt the market. Product analytics not only helps enterprise companies iterate and refine their product; 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?



**Product managers** looking for ways to increase activation, conversion, and retention, create captivating digital experiences, and tie feature usage to higher-level business metrics.



**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.



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



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

# Why do you need a powerful product analytics tool?

If you don't actually know what users are doing in your product then it's very hard to make decisions with accuracy. When millions of dollars are at stake, making decisions based on hunches and intuition is risky, bordering on reckless.

You know you need to be more nimble than your competition, but what's the evidence that reveals whether you are or not? Without a way to measure and record the metrics you are responsible for, you're like a pilot flying without instruments. If you don't have a system that allows you to run experiments and test the results quickly, you may as well be throwing darts at the wall. And without documentation, you're never able to establish and get credit for how your improvements made a positive difference in the product.

**You need a way to know what you know ...as well as what you don't know.**

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

If you're working without product analytics, you're basically managing your product like a big game of telephone.



## A word about process:

Maintaining product-market fit requires constant vigilance. Hard-won ground can easily be lost when you fail to evolve with markets, technology, or social dynamics. We believe staying ahead in this game is equal parts art and science. Only product 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?

**Well, a lot actually.**

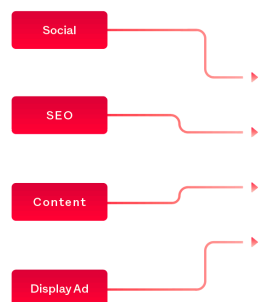
**It's fifteen years old.** That's an eternity in technology. SaaS literally did not exist when Google Analytics was founded. It was built for SEO and simple page metrics, and never designed to accommodate the depth and sophistication of a modern customer journey.

**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.

**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 product analytics 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 measuring how people get to your site. But to consistently turn them into paying customers, you need a more sophisticated analytics platform.

## What GA is Good For:



## What Heap is Good For:



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

## PART 2

# How to choose a good product analytics tool

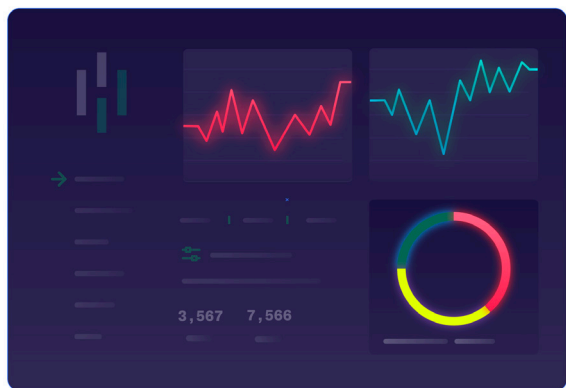
Here are the main benefits to consider:

## 01 It should save time and resources, not make life more complicated.

This the most important thing to know upfront—is implementation seamless, or will it give your devs extra work to do? Manual setup and tracking not only eats up scarce and valuable engineering time, it can also make you less likely to deploy your expensive new tool. That's a lose-lose.

## 02 It should help you become hypothesis-driven.

Product analytics' most valuable application is in discovery. It allows your PMs to sift through data to uncover new correlations. A good tool makes it easy to formulate, test, and discard hypotheses rapidly until you get the answers you seek.



A good tool answers these questions:

- Where are users spending their time and on which tasks?
- What behaviors most predict long-term retention?
- How do power users navigate our site, and how can we nudge other users 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?

### 03 It should give you all the data you need.

The only way to be scientific about your approach is to have the data—ALL of it. 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 engineer time required. Now your data becomes a place to go exploring.



### 04 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.

### 05 It should give you advanced comparison skills.

**Behavioral Segmentation** allows you to isolate groups of users 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 users with more of what they like, and less of what they don't. Not all tools can do this.



## 06 It should be geared toward increasing conversion and retention.

**Product Analytics is critical for measuring and systematically improving AARRR, aka the Pirate Metrics:**

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

**Activation:** What steps does a user take in your product? Each step on their journey to becoming a paying customer is known as a micro-conversion. Wouldn't it be a great idea to optimize the effectiveness of each one?

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

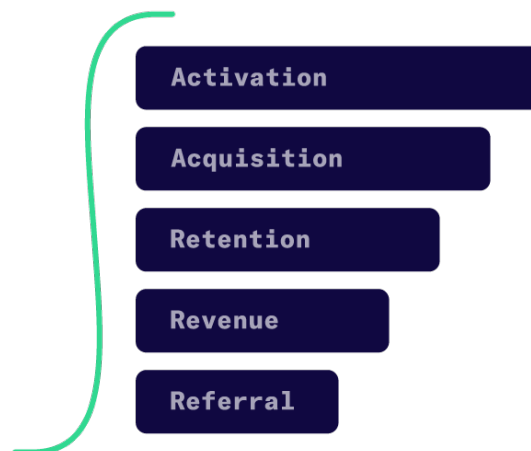
**Referral:** Are purchasers talking up your product or disappearing? Product analytics helps you measure customer loyalty through their actions, social posts, etc.

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



**Questions an analytics tool should help you answer:**

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



## 07 It should give you X-ray vision.

An adequate tool will let you measure metrics that you already know are important.

**A great tool will help you discover the “unknown unknowns” in your product.**

What do we mean by “unknown unknowns”? The situations, circumstances, pitfalls, uses, and possibilities of your product that you haven’t noticed yet. A great product analytics tool will help you locate these, keeping you several steps ahead of the market and your competitors. This is analytics for exploration, not just documentation.

## 08 It should easily connect to your data warehouse.

The larger your organization, the more important it is to centralize your dataset and blend product 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. not just documentation.



**Important: Not all tools give you this much freedom.**

In our opinion, if your product 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 data management

You want robust robust sources for your data



**Automatic Data Capture** is a must for getting the most use out of any product analytics tool. Manual tracking requires advance planning and uses valuable engineering time. Without automatic capture, you will always be playing catch-up with your data and the dataset will never be fully complete. Metaphorically, when you have 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 user 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.



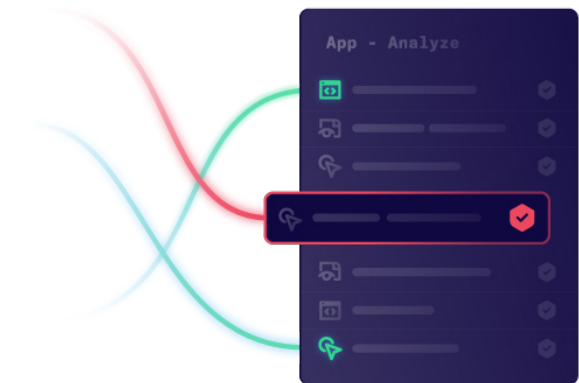
**Integrations** enrich your dataset by pulling in data from multiple sources and blending it with behavioral data from your product analytics. Can you connect to Stripe, Shopify, Salesforce, Marketo, and Optimizely? The more integrations your product analytics solution can accommodate, the better.

# You want trusted governance

Clean data maximizes opportunities 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 only increase 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.



**Standardized event naming** with categories and annotations provides structure and context for events, actions, properties, and user 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.



**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.



**Data Dictionary** provides naming conventions and a single source for all product data, including events, properties, categories, and user 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.

## PART 4

# Conclusion

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

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](#).

Heap's mission is to power business decisions with truth. Our software automatically collects, organizes, analyzes, and connects customer data, so businesses can discover insights that lead to more valuable products and experiences. With Heap, organizations of all sizes can eliminate technical bottlenecks and gain a single comprehensive view of their customers.

