



Product Analytics Buyer's Guide

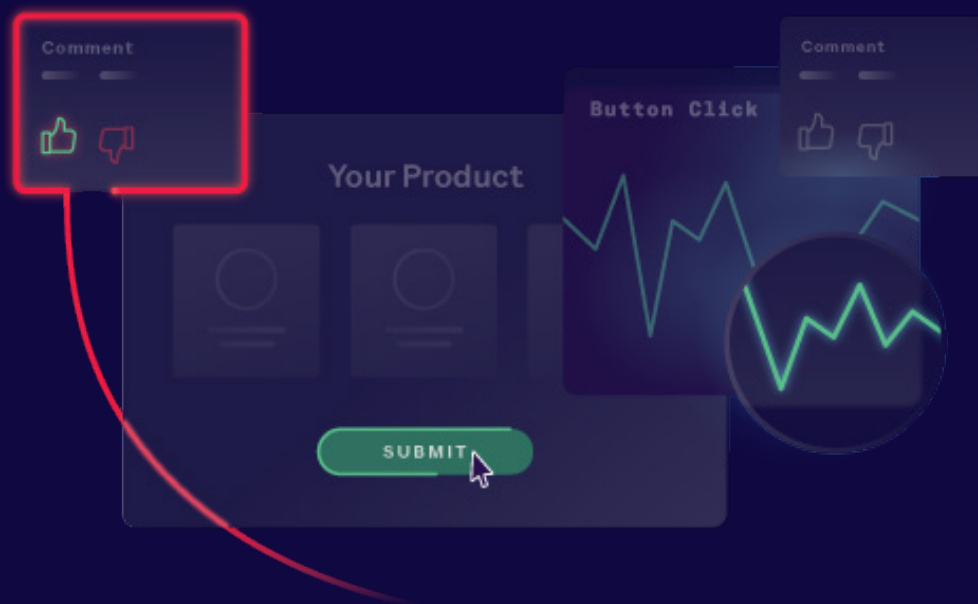


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PART 1

Who needs product analytics—and why

Our goal in this guide is to give you a thorough overview of product analytics, and the advantages it can give your business.

What is product analytics?

Product analytics is a set of functionalities that capture and visualize all the ways users engage with your digital experience. A good Product Analytics tool shows you every activity every user does on web, mobile, or any other platform, across a lifetime of interactions. You then use this information to build and improve your digital experience.

Analytics is like having a crystal ball into the minds of your users. It lets you watch people interact with your site over time and across devices. It shows you which parts of your experience users love, where they get stuck, and what routes they take through your experience. You can see how different groups of users behave, how behavior changes on different platforms, and more.

When you truly understand your users' needs, you can evolve your product to anticipate them. **This is what makes it possible to understand and improve complex customer journeys, to drive engagement and retention, and to optimize your product investments.**

Product Analytics lets you track all the user behavior you know — and see all the user behavior you don't.



What is Product Analytics good for?

On one level, Product Analytics is good for producing a great digital experience. That's true whether that experience happens on web, mobile, tablet, IOT, or on some combination of those.

On a business level, Product Analytics is good for answering questions that help produce three main outcomes:

1. Understanding & improving complex journeys. Mostly to drive conversion.

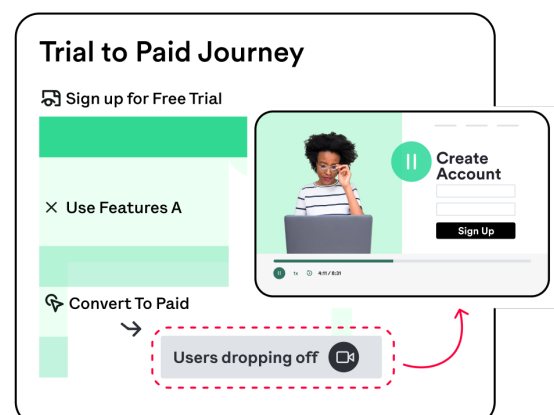
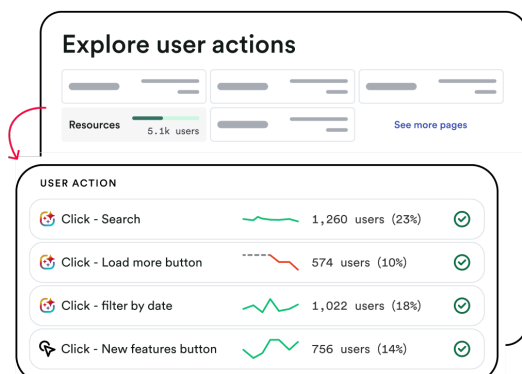
- How many sessions do users usually go through before purchasing a luxury item? Do they do search and compare? Which other elements of your site to purchasers tend to interact with?
- Which activities do users like to do on mobile, and which on web? How do they move back and forth between those platforms?
- How do users navigate through long processes, like loan requests? Where do they mostly get stuck?

2. Driving engagement by understanding its key drivers. Then using this information to prevent churn.

- How are new users adopting the product? Is onboarding effective?
- How do I know that our activation metric accurately reflects long term value?
- What activities bring users back, for repeat purchase or ongoing usage?
- What features drive long-term revenue per user?

3. Optimizing product investments by enabling data-driven decisions.

- Of all activities our team should work on, which will have the greatest impact on the business?
- Which successful features should we optimize, and which underperforming ones should we deprecate?
- Was our hypothesis about changing the user flow correct? Why or why not?



What kind of companies need product analytics?

All of them! Small companies need to find Product-Market Fit. Growing companies need to know how to scale. Large companies need to stay agile.

Startups need product analytics to create a quality product in the first place.

Product analytics gives you the quickest and most actionable feedback on what's working in your product and what not.

Post-startup companies need product analytics to scale.

Product analytics is the key to growth. It gives you the ability to increase user retention, maximize conversion rates, and focus on the new features that customers really want. (Not just what they say to sales!)

Enterprise companies need product analytics to stay nimble.

Large orgs need to adapt to evolving customer demands, and to stay ahead of competitors looking to disrupt the market. Product analytics keeps organizations in touch with their customers, and 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.

What verticals tend to get the most from Product Analytics?

Really, it's all verticals where companies offer a digital experience. (Which right now is most companies!) But traditionally Product Analytics has seen the most adoption in these verticals:



B2B SaaS, where it's the primary way to learn how users navigate your digital product.



Retail or eCommerce, where every increase in conversion makes a big difference to the bottom line.



Financial Services, which often requires complex forms and wants to encourage repeat visits.



Travel and Hospitality, where users often engage on multiple platforms.



IN SHORT: any time you have repeat visits, cross-device journeys, high-consideration purchases, Product-Led Growth (PLG), or where long-term retention is critical, Product Analytics is a major asset.

What roles tend to use Product Analytics?

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.

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



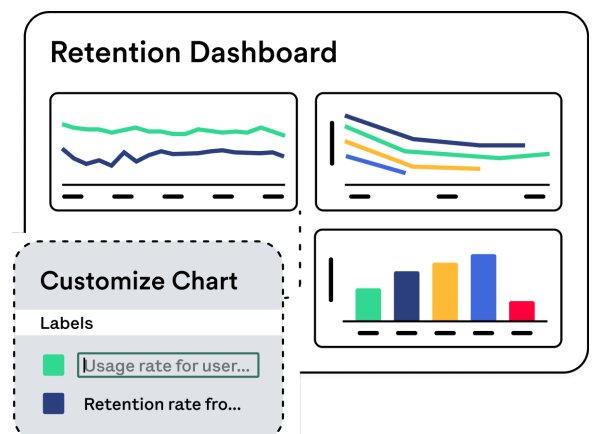
Product leaders who want to measure the effectiveness of their team, use data to prioritize the product roadmap, and demonstrate impact to the C-Suite.



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.



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.



What about Google Analytics?

It's analytics. By Google. What's not to like? A lot, actually. While GA4 is an improvement over the previous version of GA, we still don't recommend it.

- **“Codeless tracking” is kind of a sham.** While it's better than pure manual tracking, with codeless tracking you still have to decide what events you want to track in advance. You'll still end up with an incomplete, biased dataset. GA4 doesn't offer retroactive data capability, so you're limited to collecting data on events from the moment you decide to track them. Forget to track something? Too bad!
- **Integrations and customizations are limited.** **Very limited.** Users will always have to interact with middleware. In GA4's case this is BigQuery, Google's data warehouse platform. While a free connection to BigQuery will be included, you still have to pay for the data you use.
- **Mobile and web? No dice.** Consumers now do 70% of their web browsing on mobile devices. With people visiting your site from multiple devices and platforms, the solution you choose should be able to link these visits. Even many advanced product analytics tools don't do this automatically. Google Analytics doesn't do it at all.
- **Data thresholds.** Because of privacy concerns, Google doesn't want to show you everything it can. Google's solution? Restrict your data. When thresholding happens (which you are often unable to prevent), you miss out on tons of useful data. And can end up reaching improper conclusions.

We're not saying Google Analytics isn't an ok tool for measuring how people get to your site. But for anything more, it just won't do.

The Basics of Data Tracking



There are two main ways to capture data for analytics:

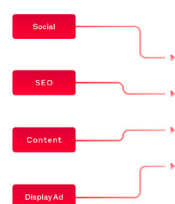
Explicit (aka manual) tracking requires engineers to insert tracking code into each event. Data accumulates from the moment of instrumentation. Any event that is not explicitly tracked does not collect data for analysis. Google Analytics, Mixpanel, Amplitude etc are examples of explicit tracking.

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.

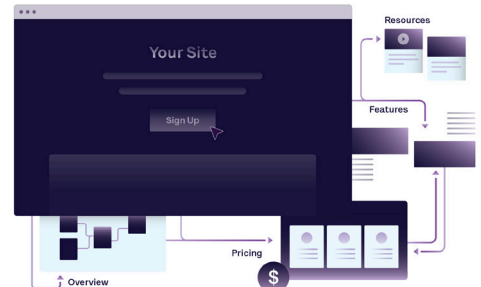
Hybrid tracking is a new premise that pairs the infrastructure of an explicit platform with codeless, retroactive data collection. It claims to be the best of both worlds. In practice, this approach fails to deliver proactive insights, because only predefined events are available to the system. Without a mechanism for handling raw events that haven't been explicitly 'tagged' within the data capture tool, the onus is still on teams to figure out what the data is trying to say.

It's important to note that with Heap, having autocapture-driven features does not prevent you from designing explicit tracking experiments to your desired level of granularity! Heap gives you the advantages of both methods, without the deficiencies of hybrid tracking. Users can 'get under the hood' to tinker and tune, or just put it "D" and steer where they want to go. The choice remains yours.

What GA is Good For:



What Heap is Good For:



PART 2

Something new: Product Analytics *plus* Digital Experience Analytics

Let's offer a hypothetical: you're looking for a Product Analytics solution but keep hearing something about "Digital Experience Analytics." Or you're already a Digital Experience Analytics (DXA) customer, and are interested in finding out how the two go together. Well, this section is for you!

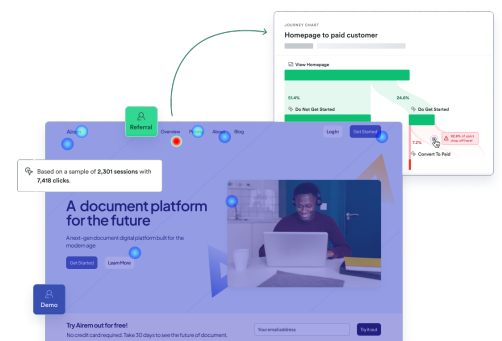
Thanks to some new developments in the analytics marketplace, you're now able to combine Product Analytics and Digital Experience Analytics—in a single platform!

Let's learn a little more.

What is Digital Experience Analytics (DXA)?

Contentsquare DXA/DEM is a set of tools that quickly identifies user friction, performance issues, and depth of user engagement within individual sessions. It includes features like Session Replay, Heatmaps, Zone Analysis, Voice of Customer, and more.

DXA is geared for teams that want to know what drives engagement and abandonment on their sites and mobile apps. It's perfect for learning what aspects of your site people pay attention to, and what aspects get less attention.



What does Product Analytics add to DXA? (Or how do they work well together?)

What Product Analytics adds to DXA is the ability to see what users or groups of users do over time. Product Analytics also shows you how users behave across devices - what they do on mobile vs web, or web vs IOT.

If you're already using DXA, adding Product Analytics will let you understand user journeys across sessions, devices, and time, so you can prove ROI on even the most complex experiences. For example:

Analyze user behavior across sessions

As powerful as it is, DXA mostly focuses on individual sessions. By adding Product Analytics, you can see how users behave over time, especially as they switch from device to device. You can ask questions like:

- How and where are users switching devices in their journey?
- Do “browsing” sessions eventually lead to conversion? How many browsing sessions usually take place before the prospects convert?
- Which paths do most users take before converting?

Use data to align the whole organization

Traditionally Product Analytics and DXA have been owned and deployed by different teams. By putting them together, you can put the whole org into a single platform: marketing, product, design, analytics, engineering, and more.

Bring segmentation into your DXA analyses

Large orgs need to adapt to evolving customer demands, and to stay ahead of competitors looking to disrupt the market. Product analytics keeps organizations in touch with their customers, and 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.

Import offline data into your analyses

Product Analytics makes it easy to ingest offline events. We're talking store purchases, physical touchpoints, in-person marketing campaigns, and more. Because of Product Analytics' data structure, it's simple to bring this data into the platform. That lets you track the effects that changes in your digital experience have on in-person behavior, and vice versa.

When these tools occupy the same platform, you get all potential lenses on the customer experience in one place. This gives you a complete view into what users are doing, everywhere.

It's a complete view of everything customers and prospects do.

Which features are in Product Analytics, and which are in DXA?

Glad you asked! Here's a handy chart.

Product Analytics	DXA/DEM		
✓	✓	Page and Site optimization	See which elements on your site drive purchase, engagement, and LTV
	✓	Site errors and site performance monitoring	Keep your site or product performing at an elite level
✓	✓	Behavioral analytics	Understand what every user does, everywhere
✓		Cross-device tracking	See what users do on web, mobile, tablet, IOT, and all other digital surfaces
	✓	Session Replays	See your digital experience through the eyes of your users
	✓	Heatmaps	Easily visualize how users navigate your pages or site
	✓	Zoning Analysis	Understand which elements on a page are performing well, to optimize page layout
✓		Marketing campaign data and attribution	See which campaigns perform the best, and how users get to your site or product (THE substitute for GA4)
✓	✓	Visual journey maps	Visualize the multiple routes customers take through your product or site
✓		Adoption, retention, and churn analysis	Know which behaviors predict adoption, retention, and churn, so you can structure your site or product around them
	✓	A/B testing optimization	Surface the tests, designs, and experiences most likely to reduce bounces and convert

PART 3

How to choose the best product analytics platform—9 considerations

Now you know something about Product Analytics. So how do you choose the right solution? We propose that whichever solution you choose, you follow these 9 considerations:

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

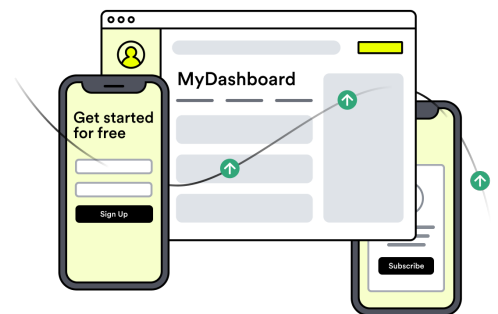
The most important thing to know upfront: is tracking automatic, or will your tool give your devs extra work? Manual tracking gobbles up engineering time, and still may not give you all the data you need.

Likewise, a tool can deliver all the data you need, but if it's making YOU 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 helps you find the information you need in it.

02 It should follow the full customer journey.

Prospects and customers don't just magically appear and disappear. They come and go because how they use your product over time is part of their journey. Do purchasers visit many times before clicking "buy"? What activities correlate with long-term usage?

If your solution can't see how users engage over time, it's not really capturing the impact of your product on your business.



If your product analytics tool is making YOU do all the work, it's wasting your time.

03 It should track users across multiple devices.

Doing everything on your laptop is so 2010. Today users move from web to mobile to tablet to watch to ... whatever device will show up next. And they (we!) expect those transitions to be seamless.

Lots of Product Analytics tools track only web behavior. Or only mobile behavior. But the real insight lies in knowing how users move from and between different platforms.

04 It should find the needles in the haystack.

If your team 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 users take on your product or site, so you can capture the differences in conversion rates between them.
- 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 user flow.
- Ways to recognize user 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 suggest user cohorts that correlate highly with the outcomes you're trying to achieve.

05 It should help your team make smarter decisions.

Data is rarely valuable on its own. It's useful to the degree it can aid your decision-making. For example:

How many "invisible steps" are occurring between two points in a funnel?

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?

If your tool can't help direct your larger investment decisions, it'll rapidly run out of value for you.

06 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.

For this you need things like naming conventions, collaborative workflows, a data dictionary, and more.

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 spaghetti.

07 It should return clear ROI.

For as many cool things as Product Analytics can show you, it's useless unless those insights help quantify the effects of your decisions.

When we changed that user flow, how many more users converted?

How much did we save in support calls?

Did our decisions affect down-funnel behavior?

If your tool can't show clearly what you're doing right and what not, it'll keep you making decisions on gut alone.

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 data from across the business, all, 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.



09 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.

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.

Referral: *Are purchasers talking up your product or disappearing?*

Product analytics helps you measure customer loyalty through their actions, social posts, etc.



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.



Activation

Acquisition

Retention

Revenue

Referral

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. We believe that to be useful, a platform must have two critical capabilities: a comprehensive user data foundation, and an analytics environment that's built to mine through it for hidden insights.

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

Learn more about how Heap can give your team the insights that drive business results.

Contact Us