



SNOWPLOW

POWERING YOUR DATA JOURNEY

POWERING YOUR DATA JOURNEY: DATA PROCESSING

HOW TO CREATE A CULTURE OF DATA EXCELLENCE BY TAKING OWNERSHIP OF YOUR DATA PROCESSING

When data is a strategic asset, businesses actively do more to take better care of what happens to it.

[SNOWPLOWANALYTICS.COM](https://snowplowanalytics.com)

SPEEDREAD: DATA PROCESSING IN 60 SECONDS

- Every business is reliant on data to help them make informed business decisions. While measuring clicks and conversions is enough for some, those wishing to get under the hood of their business need to take a different approach.
- Black box tools, like Adobe Analytics and Google Analytics 360, leave organizations blind to what's happening to their data when it's being processed.
- With no visibility into how the data is processed, organizations can't ensure data quality, apply their own business logic, adapt it for different use cases or ensure the security of their data.
- In treating data, organizations wishing to make data a strategic asset need to invest in building out their own data capability.
- Taking data processing in-house, organizations can build a data infrastructure that collects and operationalizes behavioral data at scale, supports event collection across platforms, and uncovers opportunities that are perfect for their individual organization.
- Ultimately, in treating data as a strategic asset, it changes an organization's mindset to one where they actively want to take better care of it, which creates an ingrained culture of data excellence.

WHAT DOES DATA MEAN TO YOUR BUSINESS?

Take a look at your smartphone. Your life is contained within that little box—from your contacts to emails, applications, photos, music, videos...and much, much more.

That little box—or rather the data it contains—is incredibly valuable, which is why you know where it is at all times to prevent it being lost or stolen.

So why don't businesses treat their data with the same care and attention?

Arguably, data is an organization's greatest asset. And yet so often it's entrusted to third-party tools where data teams lose sight of what's happening to it. In placing that data into someone else's hands businesses lose control, no longer

maintaining it, structuring it or securing it.

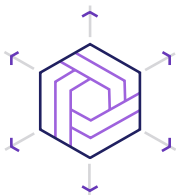
Some organizations are happy to trust standalone black box tools with their data, such as Adobe Analytics and Google Analytics 360, and are able to obtain the insights their business requires.

If an organization views data as being strategically important to the business and treats it as such, the data then allows them to paint a more vivid picture of what's going on. The data can inform the business as to what's needed to secure their future success.

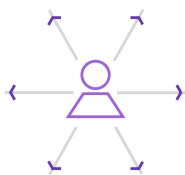
THE BLACK BOX APPROACH LEAVES ORGANIZATIONS BLIND

When an organization has made the strategic decision to invest in building out their own data asset and data capability, traditional packaged analytics tools are unlikely to provide the insights required to take appropriate actions.

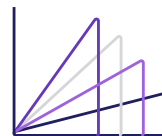
The biggest challenge with using black box tools is that they provide limited visibility into how the data is processed. And without that visibility:



You can't ensure the data quality.



You're not able to apply your own business logic.



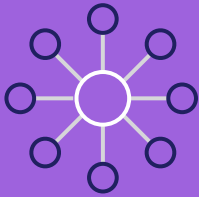
You can't adapt data to different use cases.



You're placing your security in someone else's hands.

Without visibility into how the data is being processed, organizations must trust that their future success is based upon the data from black box packaged tools.

Event sources



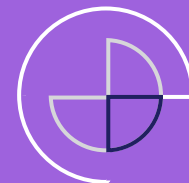
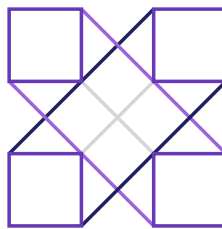
Black box magic



Google
Analytics



Adobe
Analytics



Reports

YOU CAN'T ENSURE DATA QUALITY

Just like a magician masks his wizardry behind a curtain, once the data goes into the black box, an organization loses sight of everything that's happening.

For example, they don't see whether any data has been dropped, or how the tool deals with bad data. As the audience, you're only privy to the big reveal. You don't get to see how the trick was done.

If an organization was shown behind the scenes so they could see the process their data had gone through, they could spot a potential quality issue. Able to improve the data quality, they can reach a different outcome—a better outcome—where the insights provided, and subsequent actions taken, are based on more reliable information.

YOU'RE NOT ABLE TO APPLY YOUR OWN BUSINESS LOGIC

Traditional black box products are built for a 'one-size-fits-all' approach.

It means they have to process the data based on a set of assumptions about the questions the business wants to ask, who a user is, and how to divide the activities up into discrete units of analysis.

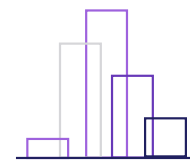
But we believe these assumptions are wrong because every company is different—the customers they seek, the markets they serve, the products/services they offer are all unique, and so the opportunities presented should look different for each individual organization. Therefore, to uncover those opportunities, organizations need a tool that empowers their users to:



Decide what questions they want to ask.



Decide what data they want to track.



Decide how they want to use that data to answer their questions.

YOU CAN'T ADAPT DATA TO DIFFERENT USE CASES

Another consequence of being built with a 'one-size-fits-all' approach is that users have to treat their data in a very siloed way.

Unable to join the data with other sources, such as non-web and mobile data, users are confined to simply viewing the data that's presented on each platform.

Data offers a world of possibilities. And for organizations seeking to make their data a strategic asset, they need to be able to adapt their data sets to apply them for different use cases. Gaining this flexibility in how the data is reported means users can identify actionable insights, such as how to personalize the service for different customer segments.



YOU'RE PLACING YOUR SECURITY IN SOMEONE ELSE'S HANDS

Imagine that data is a company's most sacred asset. It's through the insights locked within that data that they're going to uncover new opportunities or identify innovative ways to gain a competitive edge.

It's through that data that they will better understand their customers and how to best meet their needs.

Why would you ever place that asset into the hands of a third party?

And with stricter legislation now in effect around data privacy, such as GDPR, can you be certain that the data is not only safe, but also processed in a compliant way?

Elevating data to make it a strategic asset makes organisations actively want to take better care of it. By retaining control of their data, organizations can demonstrate to their customers, as well as partners and employees, that they're doing the right thing with data. In itself this has the benefit of presenting the business as being more trustworthy, which in turn positively impacts their reputation.

RETAINING OWNERSHIP OF THE DATA

Data quality can erode in many ways.

Whether the raw data is flawed due to the collection process, incorrectly modeled based on the wrong logic being applied, or degrades over time as it's exported and added to new systems as the organization matures, the end result is the same—performance declines, productivity suffers, and data engineers struggle to identify where the errors lie. Confidence in data—and indeed the data team itself—can quickly disappear.

But when an organization has made the strategic decision to invest in building out their own data asset and data capability, it creates a shift in mindset. Rather than trust that the tools are processing data in a way that's right for each individual organization, businesses start to

realize that processing is actually a really big undertaking.

Acknowledging that anything could happen to the data while it's being processed, which could affect its security, privacy, and quality, organizations start to understand how retaining ownership of their data and data processing:

- **Gives them more possibilities to explore and uncover data opportunities.**
- **Provides richer, quality data for better decision making.**
- **Protects the privacy and the security of the data, as well as its integrity.**

BY TAKING DATA PROCESSING IN-HOUSE, IT BECOMES PART OF THE DATA DELIVERY PROCESS

Rather than rely on traditional black box tools, we recommend organizations who are really looking to build a data asset to take a different approach.

Yes, performing data processing in-house is harder and more costly when compared to out-of-the-box tools. But in taking a DIY approach, organizations build something they own and can control. Because they have visibility over what's happening 'inside the box' they know exactly what's happening to the data. And it's this transparency that builds user and consumer trust in how the data is managed.

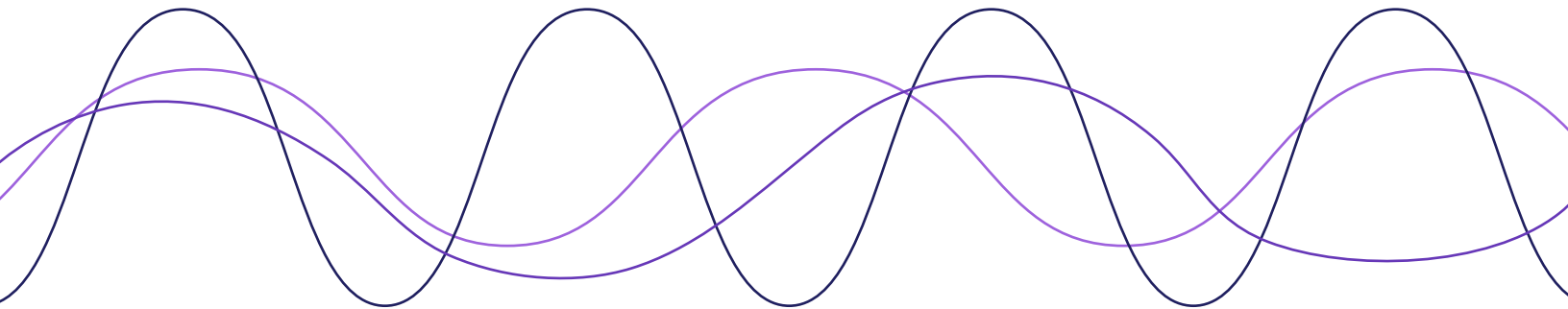
Adopting this DIY approach to processing, organizations can create a data pipeline that collects and operationalizes behavioral data at scale, supports event collection across platforms, and uncovers opportunities that are perfect for their individual organization.

There's decreased complexity associated with build-it-yourself today, driven by developments in open source frameworks such as Apache Kafka and Apache Spark, and web services such as Amazon Web Services, Google Cloud Compute, Azure and IBM Bluemix. (You can also leverage platforms, such as Snowplow, who give you all the benefits of DIY without the costs).

BUILD FOR FLEXIBILITY

Where traditional tools provide a one-size fits all data structure, taking the process in-house enables users to customize data collection and processing to suit their specific business model, purposes, and user experiences.

Unlike standalone black box tools that present data based on rigid metrics, building a customized platform enables organizations to consider a whole spectrum of variables. It enables users to track the specific metrics they deem beneficial, providing complete freedom over the events they want to record, how those events should be structured, and how they want to process them.



Furthermore, rather than be confined to a single platform, organizations can combine multiple data sets from different systems and then deliver the outputs directly to where it's most useful—often their own data warehouse.

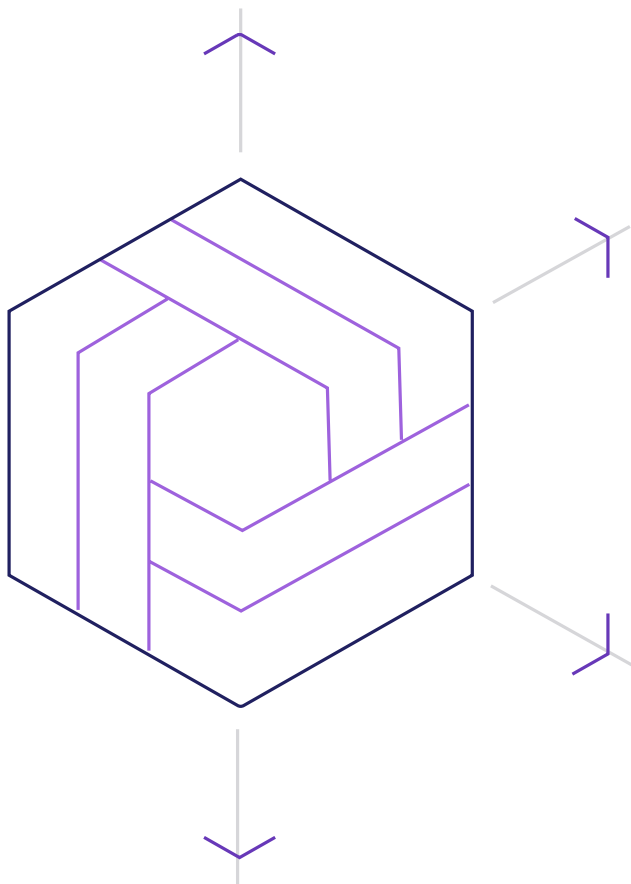
Able to customize the platform to their exact requirements, users are empowered by gaining access to data as a strategic asset, with the ability to use it to drive proactive action rather than reactive reporting.

ENSURE DATA QUALITY

In reality, organizations will never achieve 100% quality. It's a process around continuous improvement where the company embarks on a collective effort to identify (potential) issues and works together to resolve them.

Unlike traditional tools where users are forced to trust the information, creating a customized platform in-house enables organizations to gain visibility over the raw data and control over the logic applied to the data as it's processed. This means that users are free to ask and answer any question of their data. Now, when the results don't feel right, there's no need to rely on gut instinct. They can simply return to the data and unpick it to validate or test hypotheses.

Taking ownership of the data enables businesses to measure precisely the metrics and behavioral activities they consider crucial to their success. For a marketer in particular, access to reliable data that they can trust means they can accurately attribute revenue to specific campaigns and tactics, which is hugely important when it comes to planning budgets, analyzing lessons learned, and identifying areas for improvement.



APPLY SPECIFIC BUSINESS LOGIC

Able to define their own business logic means that organizations will generate insights that align with their strategy and can therefore feel confident about making more informed decisions that secure their future success.

It's important that each functional team feels comfortable and empowered with the tools and data at their disposal, which is why we believe it's beneficial to involve them in defining the logic to be applied.

Centralizing this effort not only strengthens the bonds between the functions to break down organizational silos, it also avoids any confusion, particularly if several teams are involved with modeling the datasets.

This approach will seem like more work upfront—after all, it would be much simpler to rely on something pre-packaged that users can use straight out-of-the-box. But in taking the time to decide what's right for their organization, businesses achieve the flexibility needed by owning and developing their own logic. The end more than justifies the means, and the data team is at the heart of building a successful data asset.

TREATING DATA AS AN ASSET CREATES A CULTURE OF DATA EXCELLENCE

Less than a third (32%) of data teams are able to extract all the insights they need¹, often because a robust data strategy with a strong data culture has not been established.

Organizations that commit to using data as a core capability overcome this weakness by embracing the mindset that data should underpin everything they do and every decision they make. When ‘doing data right’ becomes fundamental to how they operate, it’s not simply a by-product of what they’re trying to do, a means to solve a specific problem or just because everyone’s telling them that data is ‘the next big thing’.

Treating data as a strategic asset establishes a culture of data excellence across the business, bringing employees and stakeholders together with a single view of the truth to better control how the data is collected, managed, interpreted, and used.

¹ Data Strategy and Culture: Paving the way to the Cloud. <https://www.exasol.com/en/community/resources/resource/data-strategy-and-culture-paving-the-way-to-the-cloud/>

PUTTING YOU IN CONTROL OF YOUR DATA

Snowplow is a data delivery platform that collects and operationalizes behavioral data, at scale. We empower you and your team to rise above the difficulties of data delivery and organization. This enables you to focus on your data journey and transition data from being a by-product of your operations to a strategic asset that drives the business forward.

Unlike standard black box tools, Snowplow empowers you to collect high-quality data that is accurate, complete, and meaningful, giving you more time to analyze and drive value from your data.

Discover why 600,000 websites and countless mobile apps trust Snowplow Insights.

REQUEST A ONE-TO-ONE DEMO TO LEARN MORE.

[Book your demo](#)



“ CUSTOMER INSIGHT

“Snowplow provides all of our event data in a data model which we own and can shape to our organisational needs. Snowplow has really helped accelerate our analytics; we can quickly answer questions which would have required a tremendous amount of engineering effort with our previous solution.”

Darren Haken Head of Data Engineering, Auto Trader