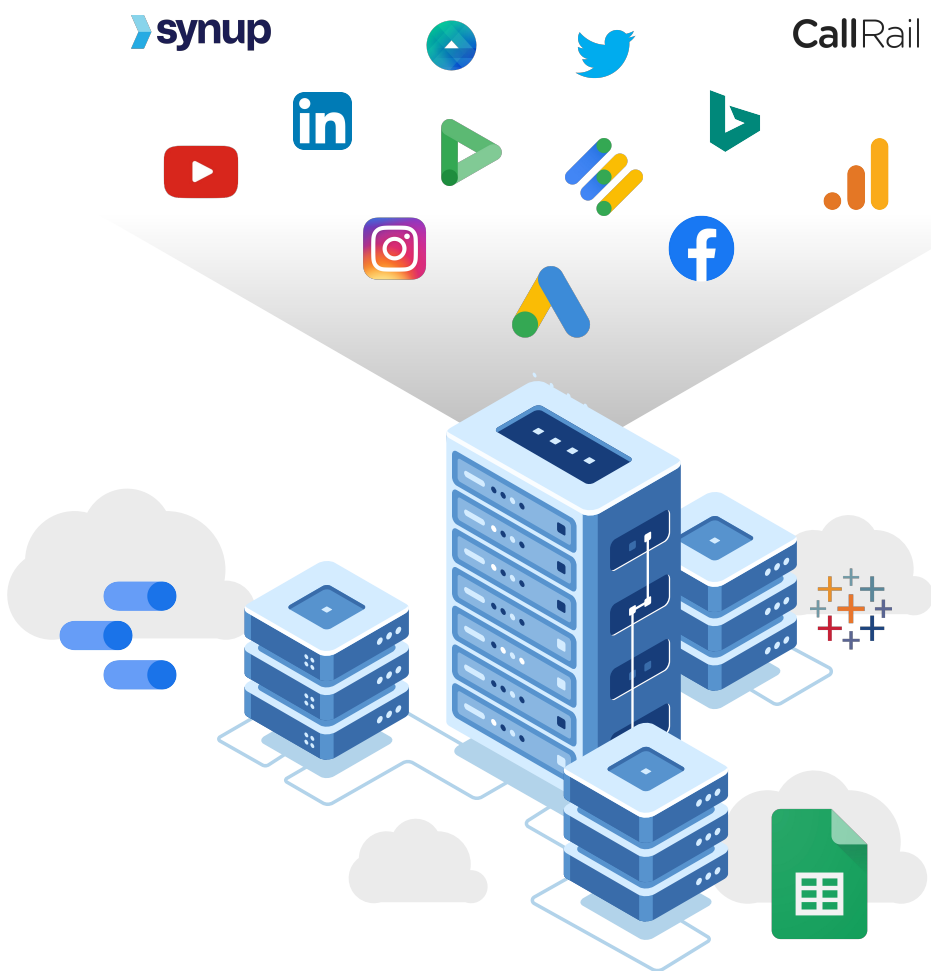


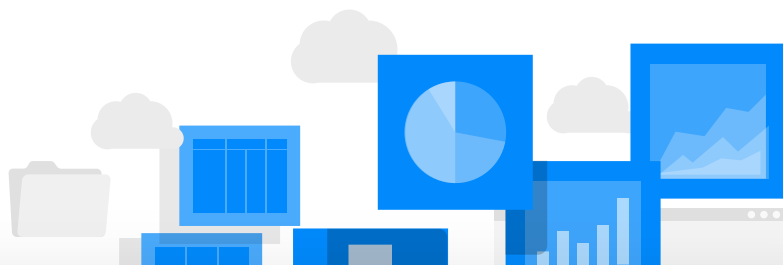


Data Warehousing for Digital Marketing

In 9 pages



Acuto.io



1

Why data warehouse?

The term “data-driven” is everywhere in our industry, but the truth is that most agencies struggle with data silos that make it challenging to leverage agency-level data to gain unique insights like industry benchmarks or search term value across an entire vertical. So if you want to show your clients that your whole approach to data-driven is cut from a different cloth you need the necessary tools and technologies to deliver truly unique insights and automations.

All agencies have huge amounts of valuable data at their disposal coming from a wide range of sources and marketing channels. A data warehouse is simply a great tool to **centralise all your agency data**: you can join and process huge datasets from various sources, prepare cross-channel data for reporting and push it out to data visualization platforms, and you can easily run advanced analytics and machine learning algos across all your agency data. Think about the possibilities!

So what you are really getting with a data warehouse is a powerful technology that can make your agency stand out with **unique insights** that are based on your client’s current and historical data. And it’s a great way to make your teams **more efficient** because you can introduce **advanced automation** across channels and platforms.

But it can sound a little daunting to implement, pulling *all* your agency data into one central hub... And that’s not surprising: after all only the biggest agencies can afford to have data engineers, developers, and data scientists on permanent payroll.

That’s why Acuto exists in the first place: our data engineers and developers experienced the transformational impact that advanced technologies can have when working in tech-oriented global agencies like Brainlabs, ForwardPMX, and Merkle. We strongly believe that every agency deserves a tech team to work alongside the paid media team to enable them to compete and work according to best practices.

And because we found initial success as a business working with smaller agencies that have 10 to 100 employees, we actually found an approach easily competes with enterprise-level tech stacks without breaking the bank.

In this eBook we’ll show you an approach to data warehousing that literally any size agency can implement: it’s **flexible**, infinitely **scalable**, and extremely **cost-effective**.

2

Key Benefits of Data Warehouses

All agency data in one place

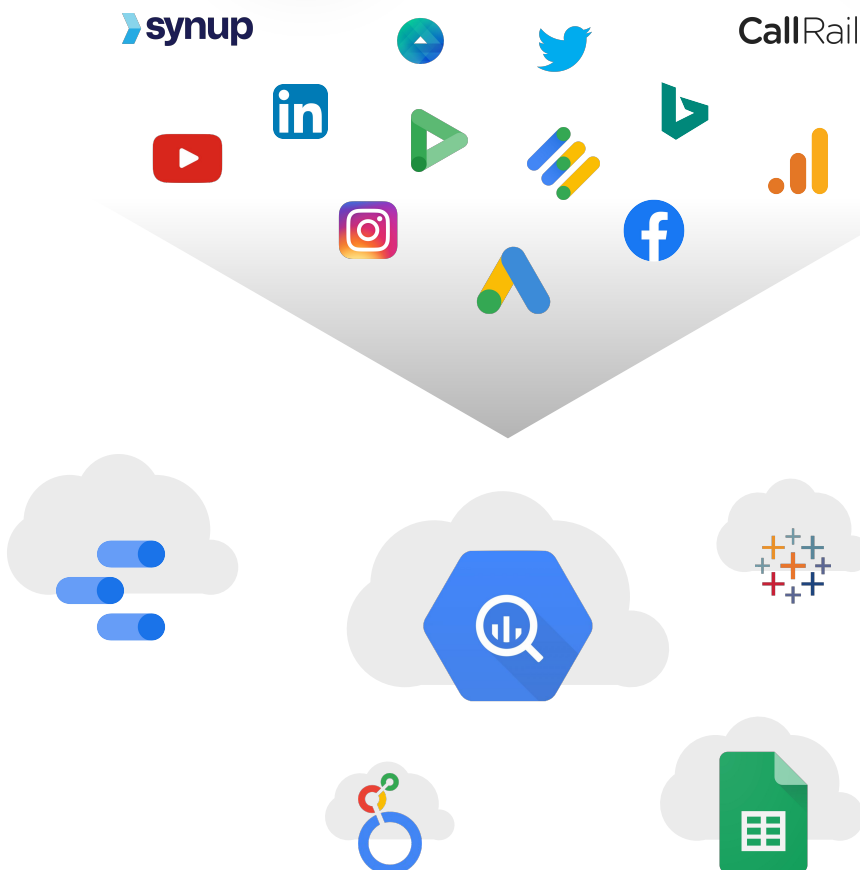
- ✓ Pull any data from any source and report in any data visualization platform
- ✓ Run advanced analytics and apply machine learning
- ✓ Centralise checks and alerts, make optimization changes centrally across channels

1

Faster, cheaper, more powerful

- ✓ Processing huge datasets takes seconds rather than minutes
- ✓ 99.99% uptime SLA and high availability means your data is safe and always accessible
- ✓ Processing and storage costs are downright cheap these days

2



Common Use Cases for Digital Marketing

Stop Managing Your Clients in Silos!

Innovative agencies have been using their own data warehouse as the backend to their automation workflows across multiple platforms and channels for a while now. Think agency-wide reporting, multi-channel optimizations, advanced analytics based on proprietary data models... All managed centrally.

Advanced Analytics

Of course every innovative agency has its own unique strategies and rules for things like budget management and ad optimization, it's what has made you successful over the years! Centralising your agency's data is an opportunity to analyze a wealth of historical data and to optimize your clients' campaigns with strategies that are derived from unique insights gleaned from your own data. That's a big differentiating factor.

Cross-channel Reporting, Health Checks and Alerts

Whether it's industry benchmarking to give your account managers guidance on what's "normal" performance in a vertical for your agency, or you're trying to figure out which verticals you perform best in and compare that with data on where your account managers are spending the most time, you can go way beyond standard performance reporting for clients and will see surprising correlations.

Automating Cross-Channel Optimizations

Modern data warehousing also allows you to work more efficiently by automating your strategies and rules across multiple platforms and to push optimisation changes back to the ad networks. That's fairly advanced stuff and our CTO wrote about it in this [PPC Hero blog post](#) if you are curious about your options and want an introduction.

5 Signs That You Need a Data Warehouse

Once you're dealing with large datasets you need a data warehouse designed to process large amounts of data. There are **obvious signs like Data Studio or Sheets slowing down** significantly because you are pulling in huge amounts of data. If you use tools like Supermetrics to pull large amounts of data directly into DataStudio or Sheets your reports might break frequently.

There are also **less obvious** signs because owning your own data warehouse isn't just a question of performance, it's also a strategic decision. Once your data is all in one place a whole world of options opens up for you. If you want to leverage more advanced analytics it's almost always wise to invest in this technology.

Top 5 signs you need a data warehouse

1

Is your agency's data siloed and is it hard to compare channels?

2

Are Data Studio and Sheets slow and do reports often break?

3

Do you want to pull data from different sources with APIs and merge it?

4

Do you want a proprietary tool to automate optimizations across channels?

5

Are portfolio-level performance insights across channels valuable to you?



API stands for "application programming interface". APIs are a very efficient way to automate data streams because they allow two applications to communicate and to access data.

Which Data Warehouse Tech?

We always recommend Google's industry-leading BigQuery data warehouse for digital marketing agencies because it integrates seamlessly with tools like Data Studio and Sheets and offers enterprise-level performance despite being very cost-effective. You also get free access to useful machine learning algorithms.

Depending on your agency's spend and which data sources you want to pull data from it can make sense to build out your own API connections or you can use out of the box data pipelines (we discuss the pros and cons on the next page).

Reality check: you will need experts with a very good command of various technical skills to set this up. Since few agencies have the specialist cloud engineers in house we offer a **managed advertising data warehouse service**. You own everything, we just help you set it up and manage it so you can focus on what you're great at.

Now you're probably thinking that this is super expensive and time consuming to set up. As promised, this is an approach that literally any size agency can implement thanks to our managed service: it's **flexible**, infinitely **scalable**, and extremely **cost-effective**.



Why We Recommend Google's BigQuery Data Warehouse

- 1 **Data visualization integrations:** BigQuery makes it easy to push data out to Google Sheets and popular data visualization platforms like Data Studio, Tableau, Looker, Microsoft BI etc. You might be using some of these already!
- 2 **Data pipeline integrations:** for our managed data warehouse service we looked for compatibility with leading two-way data pipeline providers for the big ad networks. More on that on the next page.
- 3 **Availability:** Google BigQuery offers industry leading 99.99% uptime SLA. That means less than 5 minutes of unavailability per calendar month are guaranteed. In plain English it translates to you never noticing any delays.
- 4 **Performance:** BigQuery is hosted on the Google Cloud Platform and you get the same massive processing power and infrastructure Google uses for search. You can process huge amounts of data in no time.
- 5 **Security:** as a managed data warehouse provider the security and integrity of our customers data was a key consideration alongside disaster recovery options.



Google
Big Query

ROI: Data Pipeline or Direct API?

You'll pull data continuously and you have a choice to make when it comes to how. You can manage data ingestion by connecting APIs directly from various data sources. Or you can use a data pipeline like Funnel, Adverity, TapClicks, Improvado, or Shape ADI that manage various API connections for you.



It's a trade-off between set-up time, licensing and maintenance costs, the level of granularity you want to pull data with, as well as time spent on data normalization.

We help agencies implement both approaches and here is a post we made with a [real-world scope that compares the costs of building out custom APIs vs. going with Funnel.io](#), a popular data pipeline. You definitely don't need 500+ connectors that the likes of Funnel or similar platforms advertise, but you are paying for them.

Sometimes a mix of the two can be right for you - it all depends on your agency's needs, your spend, and what you want to do with the data once it's all in one place.

For example, Shape ADI is a unique data pipeline in the sense that it has a two-way API functionality that allows you write optimisation changes back to the ad networks. So you get quick time to value if you want to pull data, analyse it, and build advanced solutions on the back of it that manage bids and budgets for example.

It is built for PPC use cases so Shape ADI focuses on quality over quantity of connectors and data is normalized and readily comparable in BigQuery. However, it covers "only" key ad networks like Google Ads, Youtube Ads, Facebook Ads, Microsoft Ads, LinkedIn Ads and Twitter Ads. So for clients that use Shape ADI we typically build out additional custom API connections as part of our services.

Direct API connection

- ✓ High ROI and no recurring fees. Proprietary tech makes agencies more valuable for a reason.
- ✓ Maintenance is part of a managed service with additional benefits or you in-house fully
- ✓ Full flexibility and control over your data, allowing you to build advanced solutions



Data pipelines

- ✓ Quick set-up (e.g. if you are under pressure to deliver a new reporting platform this can help)
- ✓ No code setup (management of data, reporting, and analytics still require expertise and time)
- ✓ Some data pipelines like Shape ADI are made for digital marketers with two-way APIs



Key Elements for Success

As with all advanced technologies it's important not to underestimate the human factor. The reality is that very large agencies can afford to have data engineers and teams of developers on payroll and find it easier to attract top talent. That's why we founded Acuto to give agencies an edge that are on the smaller side but have clients that are no less ambitious and demanding! All our engineers and developers have backgrounds in paid media before transitioning into technical roles at big agencies like Merkle, ForwardPMX, and Brainlabs and that experience makes a big difference.

Technical Expertise

Good command of SQL and experience working with APIs and/or data pipelines to add more data sources. One of many coding languages is needed if you want to create custom solutions that push optimizations back to ad networks on top of that. And data visualization skills in Data Studio or the BI platform of your choice are key to make outputs look good. Finally, if you want to create your own data models you'll also need a data scientist.

Minimise Maintenance and Manual Steps

You will connect your data sources so they are continuously pulling data and data integrity is key so you can trust your analysis and automations. Updating and managing API connections takes maintenance and that's why we offer our managed data warehouse to make sure your data is always reliable. Our developers also build advanced automations and custom solutions as part of the service so you can get the most out of this approach.

Enable Your Staff to Work With the Data

Most agencies use Google Sheets and Data Studio already and Google's BigQuery data warehouse plugs right into that. People are often surprised by how easily you can build impressive custom dashboards in Data Studio. We do provide SQL and Data Studio training for account managers as part of our managed service to upskill your team. It's not rocket science and a great career development initiative for your staff as well!

Next Steps

Despite the many advantages, agencies often shy away from implementing a data warehouse because they worry that they do not have the requisite skill sets in house.

As a result we meet many agencies that still struggle with data silos and experience performance issues for cross-channel reporting because they use data pipelines that pull data straight into data visualisation tools like Data Studio and Sheets that are not made to process such large quantities of data.

That's why we founded Acuto and our data warehouse services have helped many agencies from the planning phase all the way through to implementation and we keep working with them to implement data and automation solutions that set their agencies apart.

Based on the lessons we have learned along the way we recommend that you keep five points top of mind, which we have listed below. If you do, you can expect a much higher return on your investment in your data warehouse down the line.



"Acuto's deep understanding of ad-tech coupled with the ADI's scalability has made this state of art technology accessible to all agencies".

Chris Vlessis, Co-Founder & CEO of Shape

You're not alone - look for help in these areas:

- 1 **Human resources and deep expertise:** when we built our team of technology consultants, data engineers and developers it was important that they have PPC backgrounds - that's how we know what to focus on when helping agencies.
- 2 **Maintenance and Data Management:** experienced data engineers do not just maintain API and data pipeline connections. They keep BigQuery costs low with efficient SQL queries and manage your data for reliable and stable reporting.
- 3 **ROI and time to value:** every agency is different and it's important to identify the best tech for your needs. What's on your roadmap? Is it cross-channel reporting only or will you also build proprietary tech using BigQuery as a data backend?
- 4 **Ownership:** if you own your BigQuery data warehouse or even your API connections you save money on licensing fees year on year that that can be invested in analytics and automation solutions that make your agency unique.
- 5 **Differentiation:** identify opportunities to leverage BigQuery for advanced analytics and even machine learning approaches that impress clients and are based on your agency's current and historical data. That's hard to replicate!

9 pages are up... need more details?



Get in touch with us!

Email info@acuto.io

We'll send you more information on particular questions and can give you advice on how to achieve your goals with your data warehouse.

