

PLAYBOOK

What's Possible with Sigma: 8 Analytics Use Cases Customers Love

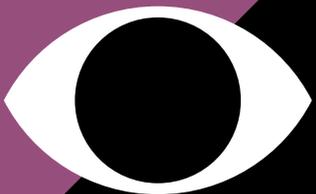
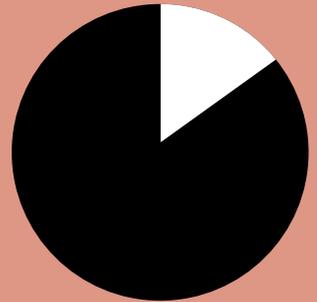
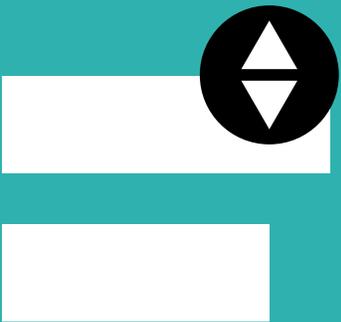


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From marketing and finance to sales and operations, the decisions teams must make and the challenges they face are nowhere near the same as they were ten, five, or even two years ago.

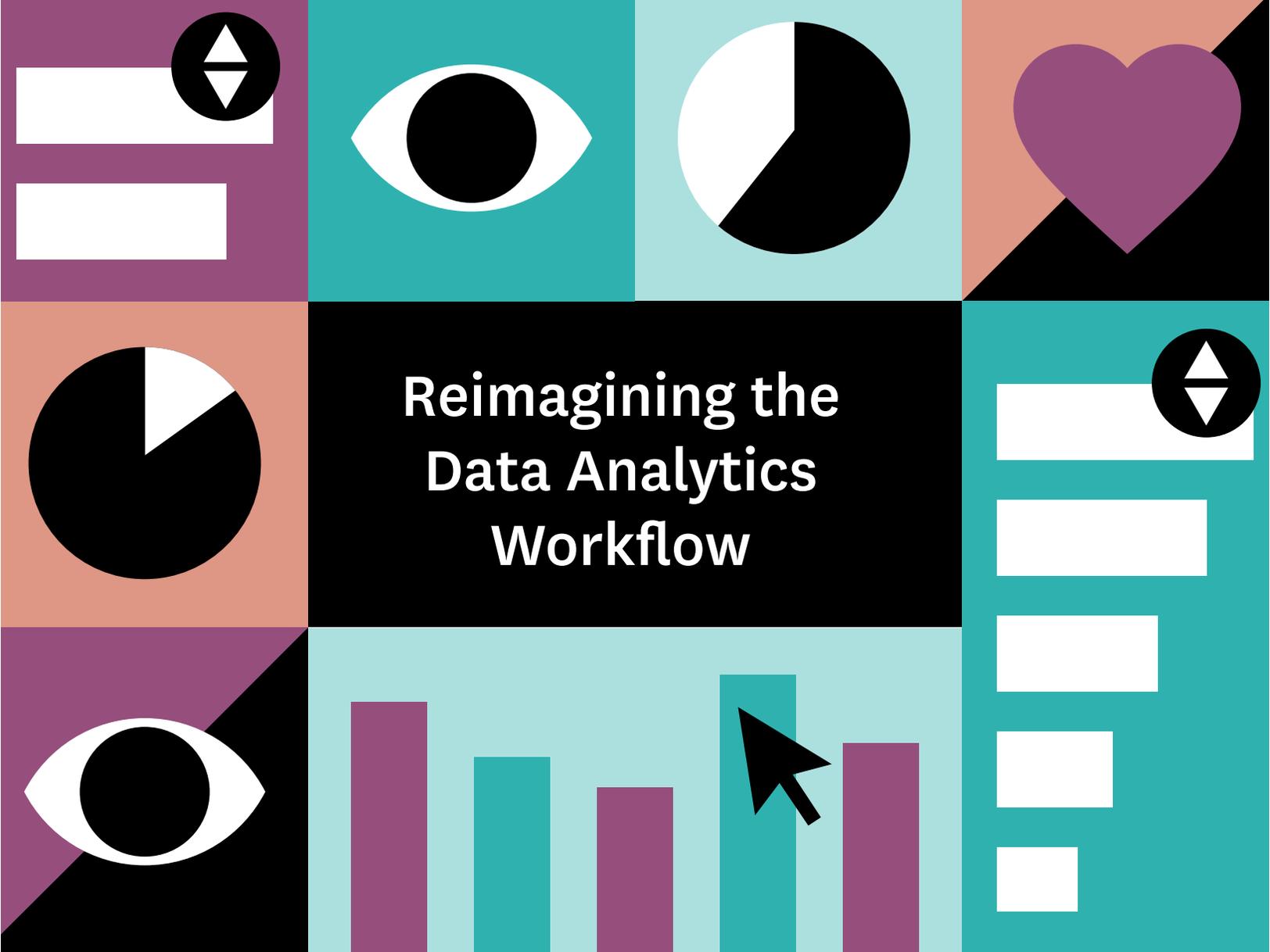
Unexpected events like the global COVID-19 pandemic, technological advancements such as the cloud, and the growth of data and its associated threats and requirements have changed business at its core.

The average adult now makes more than 35,000 decisions¹ each and every day. Your company's approach to data analytics must evolve to empower everyone to make accurate and informed decisions at the speed, scale, and level of granularity required by the world around us.

The good news? Sigma's cloud-native analytics and business intelligence (BI) solution was purpose-built to enable companies to identify and navigate today's toughest challenges and biggest opportunities.

Teams across industries use Sigma to easily conduct complex yet critical analyses to find the real-time answers they need to deliver business outcomes like reducing customer churn, improving operational efficiencies, and maximizing revenue.

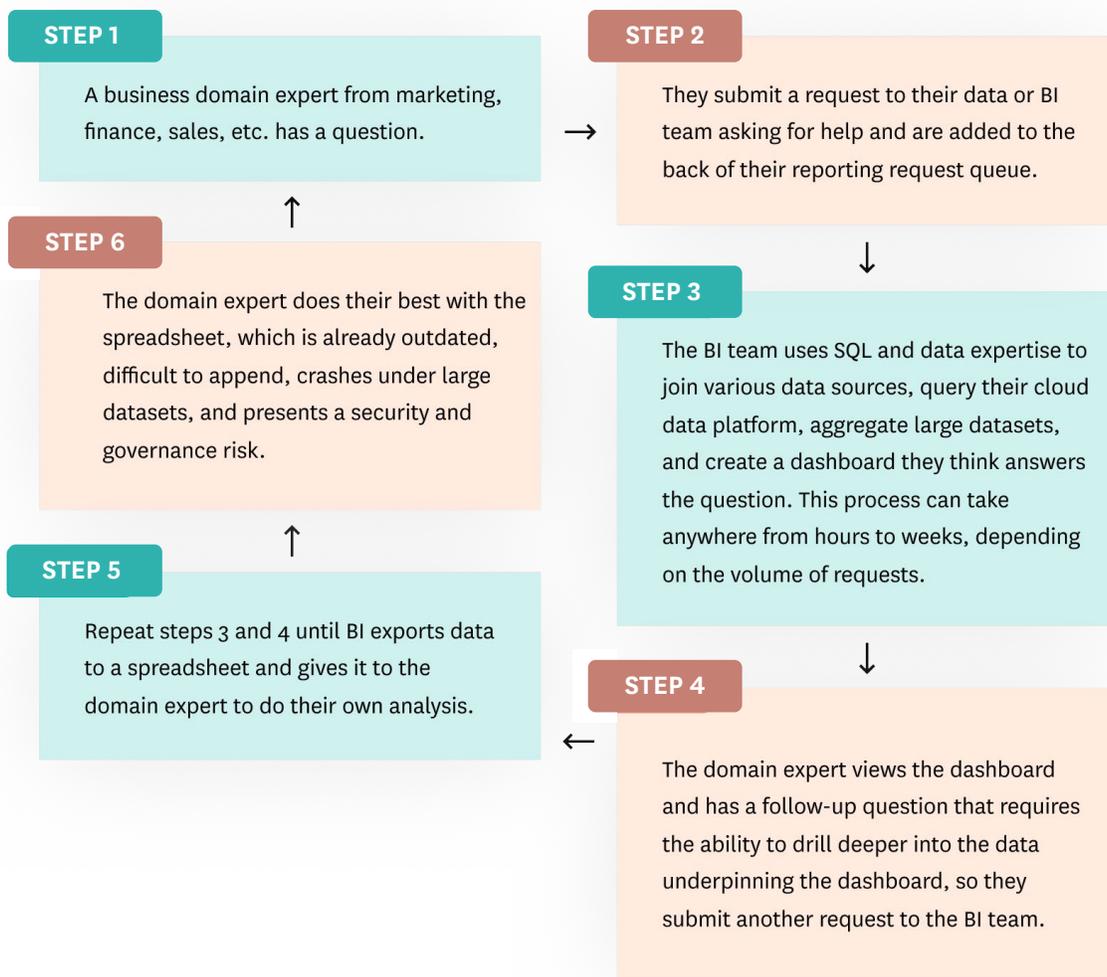
From marketing spend attribution to supply chain optimization, this playbook digs into what's possible with Sigma and the use cases our customers love the most.



Before we dive into our most popular use cases, it's important to first understand why status quo analytics no longer work, how Sigma is different from other BI solutions on the market, and what a modern analytics workflow should look like.

What the traditional analytics workflow looks like

Whether you're a business domain expert or sit on the data/BI team, the following workflow will likely look familiar to you. Unfortunately, it's hardly conducive to making agile, data-driven decisions in the face of sudden supply chain disruptions, new market share opportunities, or real-time customer demands.



How Sigma is different from other analytics tools

How do teams get stuck in this outdated analytics workflow? About 62%² of companies say self-service BI tools, or tools that enable line of business workers to generate insights independently, are essential to their success.

These companies are investing billions of dollars in solutions³ that claim to deliver on this vision — and what they're getting is surface-level dashboards, month-long BI request queues, and risky data extracts. In other words, companies are buying into the promise of self-service analytics, but the paradigm has fallen painfully short.

These traditional self-service BI solutions fail to deliver for 3 key reasons:

➔ RETROFITTED FOR THE CLOUD

They weren't built for the cloud or to leverage the full advantage and power of the cloud data platform. Access to data inside Snowflake Data



Cloud, Amazon Redshift, or Google BigQuery is limited and requires extensive pre-modeling.

SCALE LIMITATIONS

They're unable to scale to support the volume and variety of data generated today. Data must be extracted, summarized, or aggregated for analysis, which prevents teams from drilling into dashboards and reports at a granular level.



CODING SKILLS REQUIRED

They require SQL or proprietary code to join in new data sources, ask ad hoc questions, and do complex analysis. The vast majority of workers lack these skills and are forced to resort to using the tool they know best: the spreadsheet.

In contrast, Sigma is redefining self-service analytics in a way that enables companies to reimagine the traditional data analytics workflow.

Sigma is different from other BI solutions in 3 key ways:

CLOUD-NATIVE

Sigma was born in — not retrofitted for — the cloud, and purpose-built to harness the compute power and security of the cloud data platform. It provides teams with direct, governed access to all of the data in Snowflake, RedShift, and BigQuery for analysis — no pre-modeling required.

UNIQUELY SCALABLE

Sigma leverages the unlimited scale and speed of the cloud data platform to crunch through billions of rows of live data in seconds. Data never leaves the warehouse or has to be summarized or aggregated for analysis, so teams are able to easily drill down to row-level detail as needed.

FAMILIAR USER INTERFACE

Sigma gives everyone the power of SQL through its spreadsheet-like interface, which converts familiar, Excel-like formulas and functions to optimized SQL so no technical or coding skills are required. Sigma eliminates limiting, risky extracts and accelerates time to insight by up to 90%.

What a modern analytics workflow looks like

Because Sigma delivers on the promise of true self-service BI and empowers anyone to do ad hoc investigative analysis, companies are able to realize the full value of their cloud data platforms, the data they have collected, and even their employees.

This effectively transforms the traditional analytics workflow and cuts the number of steps it takes for business teams to move from question to answer in half:



STEP 1

A business domain expert from marketing, finance, sales, etc. has a question OR wants to drill into the data underneath an existing dashboard from Tableau or other visualization tool.



STEP 2

They open their cloud-native analytics tool to get direct, governed access to all of the live data inside their cloud data platform.



STEP 3

They use the spreadsheet-like interface to join data sources together, calculate, filter, sort, do what-if analysis, create visualizations, collaborate with teammates, and get the answers they need. This process takes anywhere from 30 seconds to a couple of minutes depending on the complexity of their analysis.

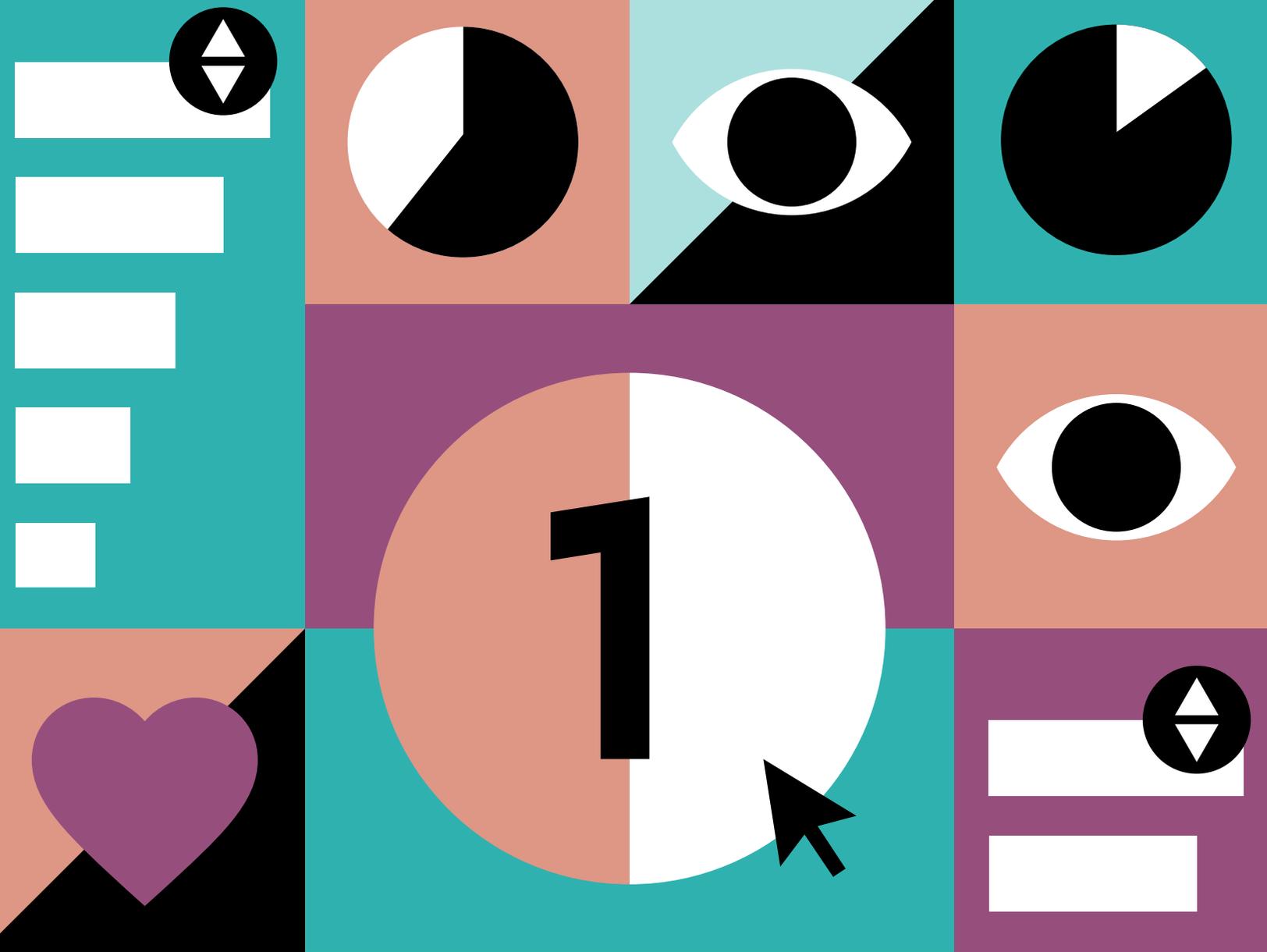


STEP 3.5

The BI team cheers while enjoying the freedom to work on the more challenging, strategic, and innovative data projects they love.

8 Analytics Use Cases

With a clear understanding of how Sigma has empowered companies to completely reimagine the traditional data analytics workflow, it's time to dig into 8 specific use cases our customers love most in more detail.



Marketing Spend Attribution

What it is

Marketing spend attribution is the science of determining which touch points, channels, and messages along the customer journey have the greatest impact on conversion. The goal is to identify the tactics and initiatives that generate the highest return on investment (ROI) to refine marketing strategy, efficiently allocate spending, and accurately forecast results.

Who cares about it

➔ **MARKETING TEAMS ACROSS ALL INDUSTRIES**

Marketers need to know how the money they're spending is impacting the bottom line so they can better predict outcomes, defend performance, and course-correct in real-time.

➔ **SALES TEAMS ACROSS ALL INDUSTRIES**

Sales teams want to know how many viable leads to expect from marketing within a given timeframe so they can roll up more accurate forecasts.

➔ **EXECUTIVES ACROSS ALL INDUSTRIES**

Business leaders expect marketing teams to invest the company's money wisely and maximize positive returns over time.

Which business outcomes it drives

- Minimize customer acquisition costs
- Increase marketing and sales conversion rates
- Maximize the return on marketing spend

Why it matters now more than ever

The average customer journey now consists of more than 60 touch points⁴ along the path to conversion. With so many potential points of influence, it's more difficult and critical than ever for teams to pinpoint which marketing efforts are moving the needle to invest their budget and resources accordingly.

Where traditional analytics falls short

- ✘ Each prospect and customer interaction creates dozens of data points. Over time, this adds up to millions or even billions of rows of data that must be analyzed at once for accurate insights. Spreadsheets tap out at around a million rows, and most BI tools crash under this load.
- ✘ Marketing attribution requires an end-to-end view of the customer journey all the way through sales to customer success. Marketers alone use an average of 12⁵ applications — getting a complete picture means joining data across dozens if not hundreds of disparate data sources. This is a complex and code-heavy modeling exercise with traditional analytics tools.
- ✘ Marketing attribution dashboards are common, but typically display KPIs at an aggregate level across entire channels or campaigns. Digging into the data underpinning the dashboard to answer follow-up questions or get a more granular view into individual ad or messaging performance is not possible without BI assistance.

How Sigma makes it possible

- ✔ Because Sigma was built to leverage the compute power of cloud data platforms, it effortlessly crunches through billions of data points in seconds — everything from prospect zip codes to products purchased to cost-per-click.
- ✔ Joining data from across marketing automation platforms, CRMs, and even CSVs is easy for anyone with Sigma. Even semi-structured JSON data can be parsed and joined into an analysis in just a few clicks via Sigma's spreadsheet UI. BI teams also have the option of "pre-joining" or linking various data sources marketers may or may not want to include in their attribution analysis.
- ✔ Sigma offers its own visualization tools, as well as works alongside traditional dashboard solutions like Tableau. Because all data is accessed live in its entirety directly from the cloud data platform, marketers can click directly into the data underneath the dashboard to investigate data down to the individual ad or asset level in Sigma's spreadsheet UI.

Success Story



Yesware, a popular sales productivity platform, used Sigma's spreadsheet UI to join four years of marketing pageview and product trial data in just a few days — without ever typing a single line of code.

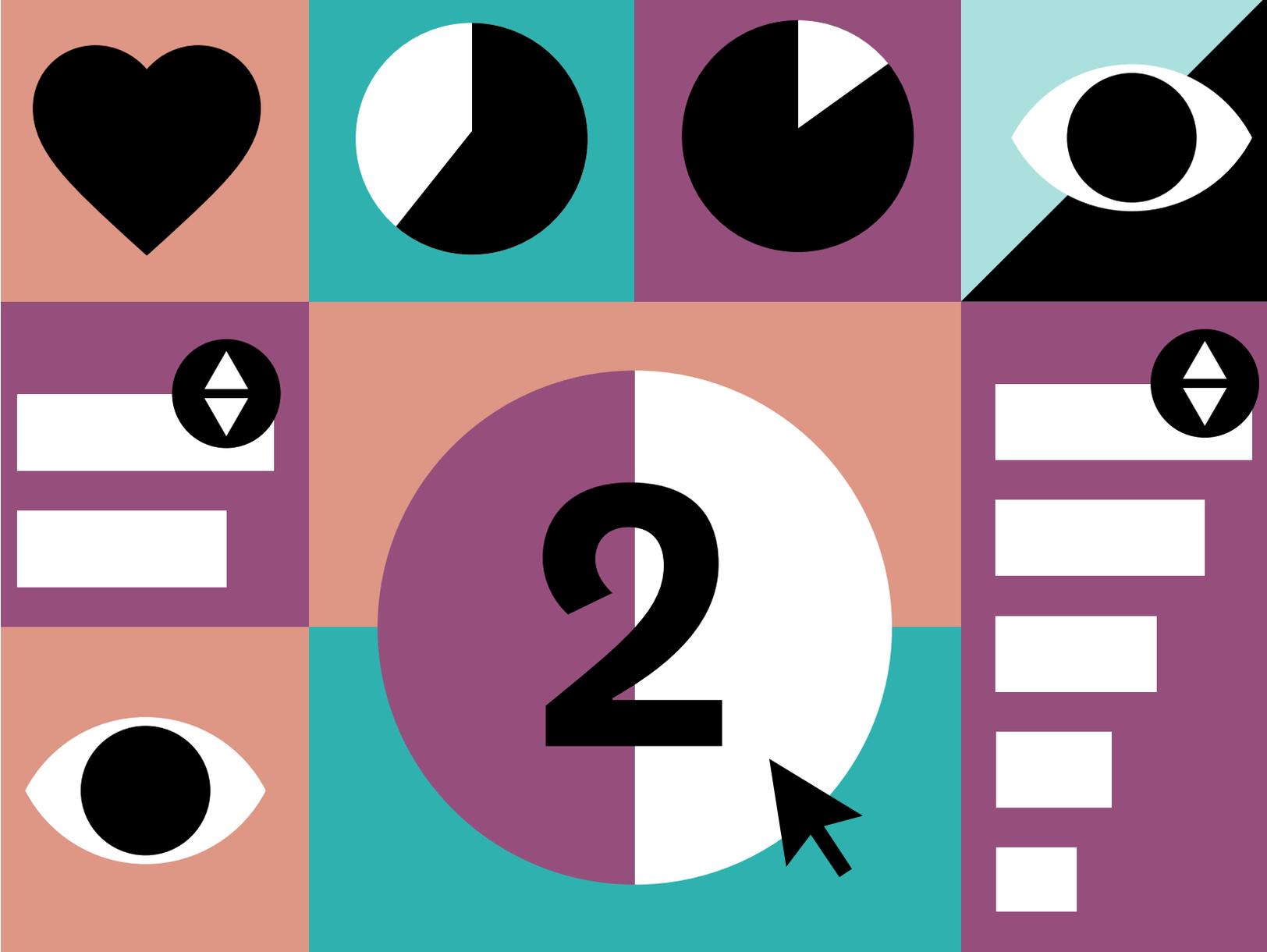
First, the team matched every single site pageview and tracking event with anonymous user IDs. Once a user was identified through a trial signup, they backfilled the data and mapped these anonymous users to known email addresses.

Next, Yesware combined data from Customer.io, Google Analytics, Salesforce, Zendesk, and Google and Facebook ads for a complete view of user behavior at each stage of the funnel.

Sigma gave them the power to analyze, optimize, and attribute ROI at every touch point, resulting in a 50% reduction in customer acquisition cost.⁶

50%

Reduction in customer acquisition cost.



Inventory Management

What it is

Inventory management is the ongoing process of determining the correct quantity, type, and brand of goods to stock for both physical and online stores. The goal is to sell products quickly at maximum profit by accurately forecasting and fulfilling consumer demands based on factors like seasonality, shelf-life, past sales data, supplier availability, market trends, and store location.

Who cares about it

➔ MERCHANDISING TEAMS ACROSS RETAIL AND ECOMMERCE INDUSTRIES

Merchandisers must always know which goods are in high-demand and how many are in stock to create online and in-store displays that attract customers and drive sales.

➔ INVENTORY MANAGERS ACROSS RETAIL AND ECOMMERCE INDUSTRIES

Inventory managers are responsible for stocking the right amount of the right products in the right stores at the right prices. Striking the right balance is critical for maximizing sales, increasing profit margins, minimizing holding costs and unplanned markdowns, and driving customer satisfaction.

➔ CATEGORY MANAGERS ACROSS RETAIL AND ECOMMERCE INDUSTRIES

Category managers handle merchandising and inventory management for a particular category of goods a retailer sells, such as “men’s clothing” or “jewelry.”

Asset management is a similar analytical exercise to inventory management, except that it focuses on the optimization of internal goods that a business needs to run effectively. Examples include laptops and printers for tech companies, or engines and transmissions for car manufacturers.

Which business outcomes it drives

- Maximize retail sales
- Improve gross profit margin percentage
- Minimize carrying/holding costs
- Increase customer loyalty and satisfaction

Why it matters now more than ever

Not only has COVID-19 disrupted most supply chains, it has also significantly impacted the types of goods consumers buy. Retailers must be able to assess product availability and consumer demand in real-time to quickly spot and mitigate supply issues and avoid over or under-stocking specific items.

Similarly, with the rise of social media influencers and the fast fashion business model, consumer demand volatility is at an all-time high. For many retailers, ensuring available inventory reflects the latest trends is more critical than ever to maintain brand image and market share.

Where traditional analytics falls short

- ❌ Store inventory is in constant flux, so staying on top of the latest sales and shipments requires real-time insight. Waiting at the back of the BI team's request queue due to the inability to independently access this data is not conducive to success. Teams are often forced to turn to stale, siloed data extracts, resulting in inaccurate analyses and conclusions.
- ❌ A single product can generate dozens of rows of data once multiplied across available colors, sizes, and styles. Inventory management requires the ability to zoom out to analyze billions of rows of data at once, as well as the ability to zoom in to examine individual SKUs. Scale limitations cause spreadsheets and traditional BI tools to crash once they reach a certain threshold, but summary dashboards and aggregated extracts prevent non-technical teams from getting granular.
- ❌ Third-party data like weather and stock market trends can have a major impact on successful inventory planning. However, the more data sources that must be joined for an analysis, the longer it takes and more difficult it is to conduct using SQL and traditional BI solutions.

How Sigma makes it possible

- ✅ Sigma's spreadsheet interface acts as a real-time window to the live data housed inside your cloud data platform. Not only are non-technical business teams able to access this data and do their own inventory analysis any time a question arises, but these analyses are automatically updated to reflect the latest available data for up-to-the-minute insight.
- ✅ Sigma harnesses the compute power of the cloud data platform to allow teams to analyze billions of rows of data at once without negatively impacting performance. This combined with Sigma's user-friendly spreadsheet experience enables even non-technical users to start with high-level analysis across entire brands or product categories and quickly drill down into individual SKUs or transaction-level data as needed.
- ✅ With Sigma, anyone can visually join together data from across dozens of sources — including e-commerce platforms, point-of-sale systems, inventory management solutions, and CSVs — in just a few clicks. Snowflake customers can even pull third-party datasets from Snowflake's Data Marketplace directly into Sigma for instant analysis.

Success Story



Lovepop designs pop-up cards, flower arrangements, and other gifts that are perfect for celebrating holidays, milestones, and everyday moments. With an internationally based manufacturing facility, it's critical for Lovepop to optimize their inventory to ensure the right products are shown to site visitors and available when they purchase.

“Sigma is a critical piece in the process used to optimize our inventory,” says Tophi Rose, Director, Analytics & Data at Lovepop. “We use Sigma to quickly surface information about our inventory position which enables our sales and planning teams to make the best decisions possible.”

“I had always assumed that fall and Thanksgiving products had similar selling windows,” says Rose. “However, this year I used Sigma to look into this hypothesis and found that fall product sales peak several weeks before Thanksgiving products. Understanding this insight allows us to better plan our design schedules as well as our inventory replenishment schedules.”

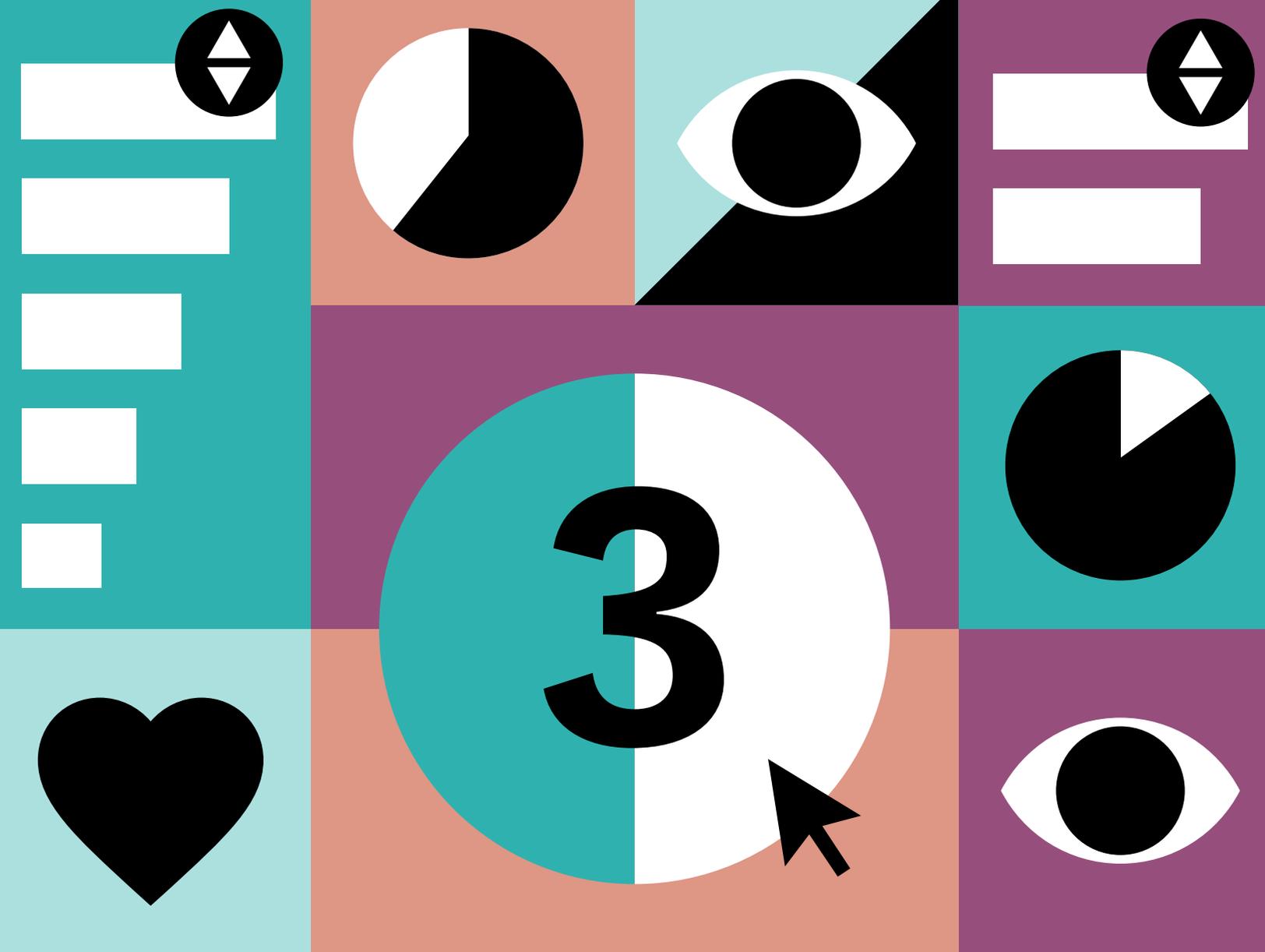
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Sigma is a critical piece in the process used to optimize our inventory.



Tophi Rose

Director, Analytics & Data at Lovepop



Cohort Analysis

What it is

Cohort analysis divides data sets with information about users, prospects, or customers into smaller subsets based on shared characteristics, behaviors, and/or experiences within a given timeframe or funnel. Businesses use cohort analyses to better understand how to engage and interact with these specific groups (or cohorts) to impact KPIs such as customer acquisition costs and lifetime value (LTV).

Who cares about it



MARKETERS ACROSS ALL INDUSTRIES

Marketing teams rely on cohort analysis to better understand their best-performing target audiences and reach prospects with similar profiles. It reveals which messages and channels convert at the highest and least expensive rates, as well as offers insight into how to more effectively personalize campaigns.



CUSTOMER SUCCESS TEAMS ACROSS ALL INDUSTRIES

Knowing the experiences and interactions of customers with the highest/lowest churn rates empowers customer success teams to determine the best training tactics and materials to improve customer retention and LTV.



PRODUCT TEAMS ACROSS ALL INDUSTRIES

Recognizing the types of users who engage the most or least with a product and their in-app behavioral patterns enables product teams to strategically improve user experiences and develop the right features.

Cohort analysis is a broad use case with many applications. In this section we will touch on a **few of the most common examples.**

Which business outcomes it drives

- Minimize customer acquisition costs
- Increase marketing and sales conversion rates
- Improve customer retention
- Maximize customer lifetime value
- Increase user adoption

Why it matters now more than ever

More than $\frac{3}{4}$ of consumers⁷ say they choose and spend more on brands that offer personalized experiences. Modern buyers don't respond to one-size-fits-all marketing techniques. Reaching, acquiring, and retaining customers in today's highly-individualistic society requires the ability to truly understand their needs and behaviors and meet them where they are.

Where traditional analytics falls short

- ✘ Every cohort analysis should start with an educated hypothesis, but identifying your highest value cohorts requires trial and error. Rapid iteration and data investigation is necessary to create, discover, and refine cohorts based on an unlimited combination of data points. This requires line of business teams who know exactly what they're looking for to be able to do rapid what-if analysis at scale in a way that neither traditional BI tools nor spreadsheets allow.
- ✘ Insights are only as good as they are recent. Cohort analyses should be done querying live data — not reviewing static, week-old dashboards or data extracts provided by BI teams. Timing becomes especially critical when you have to operate within a narrow or fixed window (i.e. you're running a promotion that lasts just a few days or you just introduced a new product).
- ✘ Because of the large datasets involved, cohort analyses done via traditional BI tool or spreadsheet extract present data at an aggregate level and don't allow users to dig into this data at a granular level. However, the ability to slice cohorts down to an individual in-app message or SKU often yields the most surprising and impactful insights.

How Sigma makes it possible

- ✔ Sigma's spreadsheet interface enables anyone to build an initial cohort analysis based on a near-unlimited number of factors and continue to iterate over time. Pulling in additional data sources, running "what-if" scenarios, and drilling into particular data points can be done in just a few clicks. It's made possible by Sigma's direct yet governed connection to the cloud data platform and the billions of rows of live data housed inside.
- ✔ Building a cohort analysis in Sigma means you're leveraging the most recent data available in your cloud data platform — and that the cohort will automatically stay updated over time as the underlying data changes. For example, this means teams can A/B test an ad for a short-term holiday sale, see the full-funnel sales results across A and B cohorts in real-time, and optimize their strategy accordingly before it's too late!
- ✔ With Sigma, data never leaves the cloud data platform. Analyses never have to be summarized or aggregated to work within scale limitations. This means teams can quickly create cohorts based on billions of rows of data and easily drill into granular detail to understand the real impact of specific messages, demographics, or touch points.

Success Story

The sales of a **highly recognized producer of home and office equipment** was heavily dependent on big box retailers like Staples, Best Buy, and Office Depot. With these chains facing increasing market volatility, this company knew it needed to invest in direct-to-consumer marketing to mitigate risk.

The goal was to enable their marketing team to comb through massive data sets to create rich customer cohorts and deliver personalized experiences based on things like email habits, past purchases, what they own, what they click on, etc.

However, their existing BI tool couldn't handle the scale of the 100 million+ row tables in Snowflake's Data Cloud. They needed to find a tool that was powerful enough to provide granular access to tables with enormous amounts of data, but that could also still be used independently by business users without specialized coding skills.

Sigma has **empowered the company's marketing team to self-serve and answer ad-hoc questions** against hundreds of millions of rows of data. This new-found ability to quickly **understand customer and prospect behaviors, needs, and desires** is helping them **improve email content, customer retention, and sales revenue.**



Embedded Analytics

What it is

Embedded analytics refers to the ability to take reports, visualizations, and dashboards built in a BI and analytics tool and embed them into:

- **CUSTOMER OR PARTNER-FACING APPLICATIONS**
Many companies are leveraging embedded analytics solutions to not only monetize their data, but also quickly deliver high-quality data products that drive customer and partner satisfaction.
- **INTERNAL BUSINESS APPLICATIONS**
Embedding relevant analyses directly into business workflows increases the ease and frequency of data-driven decision making across the organization.
- **PUBLIC-FACING WEB PAGES**
Companies may choose to share research they've done around particular industries or global events to garner press coverage and brand awareness.

Who cares about it

➔ **PRODUCT AND DEVELOPMENT TEAMS ACROSS ALL INDUSTRIES**

Building data products into applications is a heavy lift with many infrastructure, compliance, and security considerations. For product teams looking to monetize their data and provide customers with business insights, embedding a third-party solution saves significant time and resources.

➔ **DATA AND BI TEAMS ACROSS ALL INDUSTRIES**

Putting specific reports and dashboards directly in the context of relevant business workflows encourages data-driven thinking within an organization, and can also reduce the volume of ad hoc requests.

➔ **MARKETING AND PUBLIC RELATIONS TEAMS ACROSS ALL INDUSTRIES**

First-party research is a valuable commodity. Embedding survey results or research analyses across public webpages or publications is a great way to get the interest and attention of potential buyers.

Which business outcomes it drives

- Create new revenue streams
- Increase customer and partner satisfaction
- Accelerate time to market for data products
- Resource savings for data and development teams
- Improve speed and accuracy of decision making
- Generate brand awareness and website traffic

Why it matters now more than ever

Growing pressures to be data-driven have led to a surge in embedded analytics, with the global market projected to reach \$60 billion⁸ by 2023 at a CAGR of 13.6%.

And the juice is worth the squeeze⁹: Application teams claim embedded analytics accounts for 50%+ of their application's total value. More than 90% say embedded analytics contributes to customer satisfaction, revenue growth, and competitive differentiation, while 49% report a drop in ad hoc reporting requests from end-users.

Where traditional analytics falls short

- ❌ Traditional BI solutions require data teams to anticipate the questions line of business users will ask and model data accordingly using SQL or proprietary code. This limits non-technical end users' ability to interact with and dig into embedded dashboards and reports to the extent that the data has been pre-modeled for them.
- ❌ The most common workaround for companies without customer or partner-facing analytics functionality is to extract data to a spreadsheet and attach it to an email. This practice opens companies up for data breaches and compliance infringement since once data is in the wild they have zero control over or visibility into who has access and how it's being used.
- ❌ Building and maintaining embedded dashboards is costly from a time, money, and resources perspective. But most BI solutions charge premium rates for every internal user or viewer license.

How Sigma makes it possible

- ✅ Sigma's flexible modeling functionality allows users to query tables directly from the cloud data platform without any modeling required, as well as curate datasets, define calculations, and prejoin sources to give others a clear, endorsed path for exploration. This combined with Sigma's spreadsheet UI makes it easy for anyone to interact with embedded dashboards and even drill into the raw data underlying the analysis down to the lowest level of detail.
- ✅ Customer/partner-facing, in-app embedding with Sigma keeps data safe inside the cloud data platform. It gives companies complete control over who sees what by authenticating users directly through the application.
- ✅ Connecting Sigma to your cloud data platform and building out embeddable dashboards and reports takes minutes. What's more, Sigma's reasonable viewer license rates make embedded analytics available for a fraction of the cost of competitors' solutions.

Success Story

PAYLOAD™

PAYLOAD offers a logistics and supply chain management application that collects vast amounts of a variety of customer data, including field ticket data for pickup and delivery, events that occur along a route, and much more.

“To improve retention, generate new business, and ultimately enable customers to get the full value of our application, we needed to build analytics solutions into our product,” recalls Chris Lambert, PAYLOAD CEO. But building an analytics solution into the Payload application was projected to take 2 full-time employees 6 months with the company’s existing BI tool.

Sigma’s embedded analytics functionality offered PAYLOAD a more cost-effective and straight-forward approach to building a secure analytics solution into the application. “We simply embed Sigma dashboards into PAYLOAD and authenticate our customers through our own application,” explains Chris.

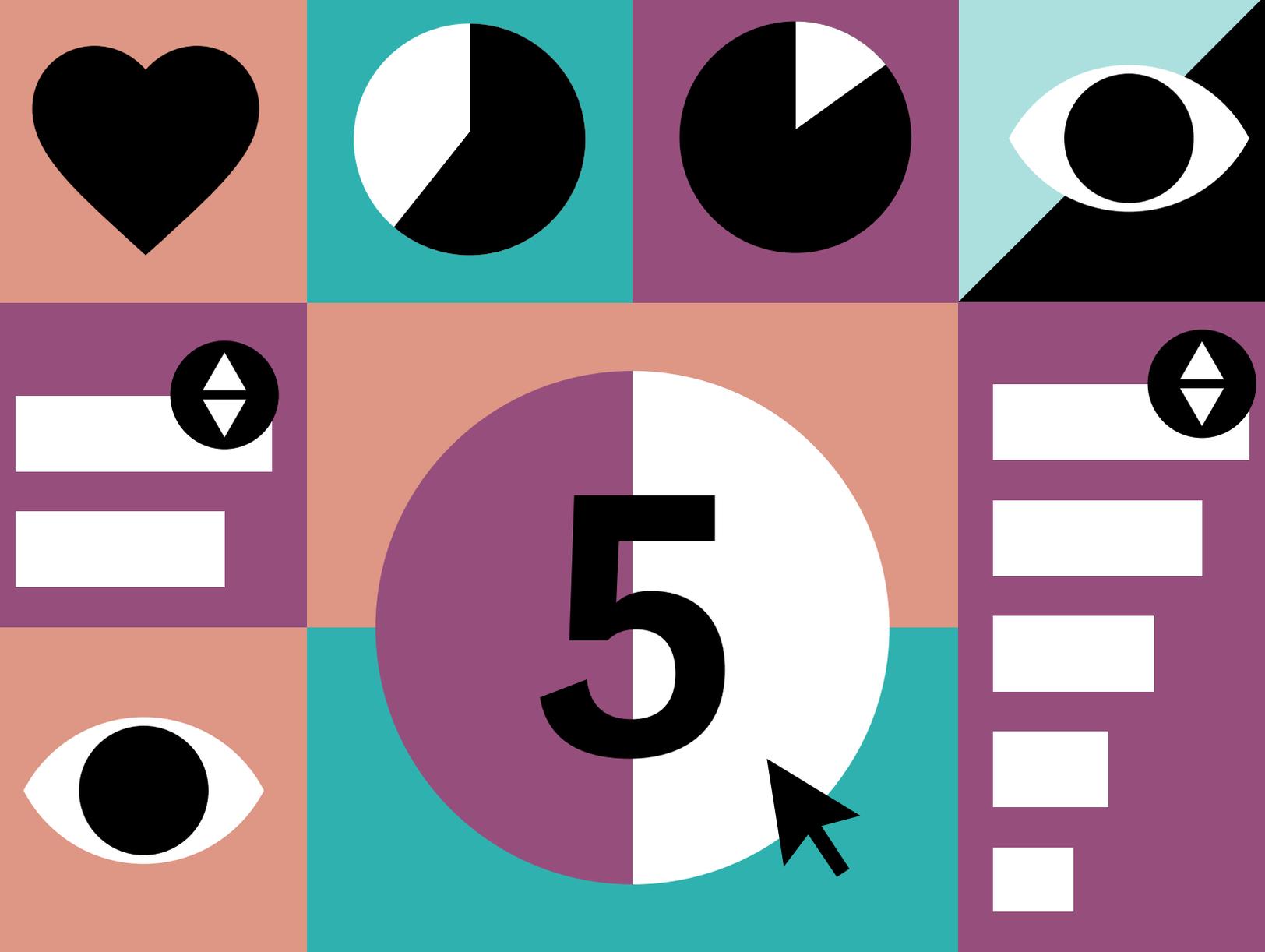
The results? The creation of a new revenue channel, 50% BI resource savings, and 600% cost savings.¹⁰ “Adding Sigma dashboards and insights to the PAYLOAD application has had a huge impact on the perceived value of our product,” says Chris. “It’s not only helping us retain current customers, it’s enabling us to expand these accounts as well.”

“

Adding Sigma dashboards and insights to the PAYLOAD application has had a huge impact on the perceived value of our product.



Chris Lambert
CEO at PAYLOAD



Product Performance/ Service Efficiency

What it is

Product performance and service efficiency analyses measure the impact and effectiveness of a customer's experience with a service or product. The intention is to spot areas of friction and opportunities to improve the product or service in ways that increase customer conversion, usage, satisfaction, adoption, and retention.

Who cares about it

- ➔ **PRODUCT MANAGERS ACROSS SAAS/DIGITAL INDUSTRIES**
Product managers need insight into product performance and usage patterns to determine which features to add, improve, or sunset, and where to most efficiently focus development efforts.
- ➔ **USER EXPERIENCE (UX) DESIGN TEAMS ACROSS SAAS/DIGITAL INDUSTRIES**
Understanding how users move through and engage with products helps UX teams streamline workflows, A/B test design variants, and create better experiences overall.

- ➔ **OPERATIONS TEAMS ACROSS MANUFACTURING INDUSTRIES**
Operations teams look for ways to strategically improve manufacturing processes to minimize product defects, improve quality, lower production costs, and maximize profitability.
- ➔ **CUSTOMER SERVICE TEAMS ACROSS ALL INDUSTRIES**
Customer service teams must adhere closely to service-level agreements (SLA's) to satisfy and retain customers. This requires constantly monitoring service efficiencies and quickly resolving any gaps or roadblocks.

Which business outcomes it drives

- Increase free trial/freemium user conversion to paying customers
- Accelerate product adoption and daily/monthly active user rates (DAU/MAU)
- Improve net promoter score (NPS)
- Drive customer retention and loyalty
- Maximize cross/up-sells
- Improve profitability through operational efficiencies
- Lower product defect rates through process improvements

Why it matters now more than ever

Generation Z has never been forced to look an answer up in an encyclopedia or wait for a dial-up internet connection. Tolerance for slow, cumbersome, and unintuitive experiences has reached an all-time low.

Case in point? 90% of people¹¹ have stopped using an app entirely due to poor performance. On the flip side, research shows that every \$1 invested in UX results in up to \$100 in return!

Where traditional analytics falls short

- ❌ The faster teams can spot and address product errors, customer dissatisfaction, and personalization opportunities, the better they can drive loyalty and combat churn. Waiting hours for the BI team to deliver the results of an A/B test or discovering a client churned from a 3-day old spreadsheet extract is detrimental to your business and brand reputation.
- ❌ Truly understanding the path from freemium user to paid customer, or the impact of a particular in-app communication on customer lifetime value, requires the ability to analyze each touch point in the context of the entire customer journey. This means connecting the dots and integrating data across multiple applications like CRMs and helpdesk platforms — a process that takes a lot of time and technical expertise when using traditional BI tools.
- ❌ Data points add up quickly as users click around your application or chat with customer support. Scale limitations cause spreadsheets and traditional BI tools to crash once they reach a certain threshold, but summary dashboards and aggregated extracts prevent non-technical teams from digging into these interactions and understanding their impact on a granular level.

How Sigma makes it possible

- ✅ Sigma's spreadsheet-like interface and formulas give non-technical teams instant access to live product and customer data — no coding or extracts required. Critical decisions can be made in real-time to give users the best experience possible as they engage with your product, service, and employees. Sigma can also send automatic alerts as soon as product performance anomalies are detected or other predefined data conditions are met, so teams can take action fast.
- ✅ Integrating data from across applications and touch points is a seamless and code-free experience using Sigma's spreadsheet interface. Whether querying tables directly from the cloud data platform or leveraging datasets curated and pre-joined by the BI team, product and service teams can easily get a full picture of the end-to-end customer journey to optimize each touch point for maximum engagement and conversion.
- ✅ With Sigma, teams can zoom out to analyze billions of rows of data around product usage patterns, as well as zoom in to examine data at the individual session or record-level. Sigma's user-friendly spreadsheet experience harnesses the compute power of the cloud data platform to allow anyone to analyze data at cloud scale and speed.

Success Story



Agero develops technology-enabled driver assistance and safety services and solutions for vehicle manufacturers and insurance providers. As the company grew and transformed its platform, its analytics tool struggled to meet increasing demands for data-driven decision making around product testing/development and migrating users to new products.

“When we saw Sigma, it became clear it could help us with our strategy of getting more people access to data when they need it,” explains Michael Bell, Sr. Director of Data Science and Analytics at Agero. “Using Sigma, our developers can more easily debug issues and improve the quality of our products.”

Sigma has had a direct impact on the development and roll out of Agero’s new dispatch product. “Our team is able to ask questions, identify opportunities for improvement, create a hypothesis, develop an A/B test, and within minutes build a dashboard in Sigma to visualize those test outcomes. It allows us to iterate and improve our product very rapidly,” says Bell.

Sigma has also accelerated user migration to Agero’s roadside assistance platform by helping the team quickly identify which service providers are engaged. “Our operations team gets a prioritized list of folks to reach out to help them make the transition to the new platform,” explains Bell.¹²



Using Sigma, our developers can more easily debug issues and improve the quality of our products.



Michael Bell

Sr. Director of Data Science and Analytics at Agero



General Ledger Reconciliation

What it is

A company's general ledger is a report that records each of its financial transactions over a given period. Finance teams must verify that each transaction was recorded correctly by comparing the ledger against the original financial documents such as expense reports, accounting records, invoices, etc.

If they match, the ledger is considered reconciled and the books are closed. If they do not match, investigation must be done to determine the source and cause of the variance. An accurate general ledger is critical to a business' overall financial health, as it is the basis of all financial reporting and used to inform other key financial documents.

Who cares about it



CHIEF FINANCIAL OFFICERS (CFOS) ACROSS ALL INDUSTRIES

CFOs oversee the financial operations, compliance, and well-being of the entire organization, so it's critical that they have an accurate and reliable view of all transactions.



ACCOUNTANTS ACROSS ALL INDUSTRIES

Accountants manage day-to-day journal entries and regular general ledger reconciliation. They must keep track of income, assets, liabilities, equity, etc. and often turn to the general ledger to help inform and prepare these other documents.



FINANCIAL ANALYSTS ACROSS ALL INDUSTRIES

Financial analysts use the company's general ledger and associated data to uncover trends across sales, expenses, inventory, labor, and more. They then recommend ways to cut costs, maximize returns, and better manage budgets.



OPERATIONS TEAMS ACROSS ALL INDUSTRIES

The ability to analyze the transactions that feed the ledger like AP and AR invoices, sales orders, procurement, and inventory is critical for operational teams to understand what's driving revenue and expenses outside of the ledger.

Which business outcomes it drives

- Maximize revenue
- Minimize financial inefficiencies or losses
- Identify and address runaway spending more efficiently
- Increase finance team productivity developing other reports

Why it matters now more than ever

The complexity of business today and the inputs required to run a modern organization have grown exponentially. For example, most global brands have tens of thousands of suppliers. Proctor and Gamble¹³ states that it has over 75,000 suppliers, while Walmart¹⁴ has 100,000 suppliers. And that's not considering all the other overhead costs required to run a business, like labor, buildings, etc.

It's not uncommon for businesses to record 100s of millions of individual transactions in their ledger. Minor inaccuracies or missing transactions add up over time but may be difficult to spot until it's too late, making accurate and efficient reconciliation challenging yet highly critical.

Where traditional analytics falls short

- ❌ The sheer volume of data recorded in a general ledger makes it error-prone and unwieldy. These reports often cause traditional BI tools to slow down or even crash under the weight of billions of rows of data.
- ❌ Traditional, highly-technical BI solutions limit finance teams to high-level, static reports on the overall financial health of the organization. But the inherent “what if?” ad hoc nature of general ledger analysis means that the data needed to make business decisions is often buried several layers beneath the dashboards provided by BI teams. Follow-up questions are sent to the back of the reporting request queue and can take weeks to get answered.
- ❌ Traditional finance tools often have separate modules for different parts of the business. Not to mention, invoices, budgets, and other financial documents usually exist in various formats and applications across the business. Bringing them together is a challenge without SQL, leaving finance teams dependent on data experts to curate datasets for them.

How Sigma makes it possible

- ✅ Sigma is a cloud-native BI tool purpose-built for the cloud data platform. It leverages the compute scale, power, and speed of the cloud to seamlessly analyze billions of financial data points down to transaction-level detail. Data is always live, accurate, and up-to-the-minute.
- ✅ Sigma’s intuitive spreadsheet-like UI allows finance teams to independently access and drill into the data underpinning financial dashboards and analyses. Non-technical users can easily expand and collapse aggregates, bring in additional calculations, filter quickly, and much more — without relying or waiting on busy BI teams.
- ✅ Sigma allows non-technical finance teams to break free from curated data sets to independently integrate and perform real-time analyses on all the data in their cloud data platform. Users can even join CSV files that do not exist in the data platform for a holistic, 360-degree view into the financial health of the organizations. This single source of truth makes it faster and easier to spot missing journal entries and other errors.

Success Story

In 2020, 6.3% of the US's GDP flowed through warehouses owned by this **logistics leader**, earning the company \$4.4B in revenue and generating a lot of data. The company's general ledger alone has more than 500 million rows of data.

But Tableau's scale limitations and poor performance prevented the accounting team from conducting its weekly bad debt ratio analysis and completing required compliance reviews. In fact, the company estimated that the wasted time and resources due to reporting delays cost them between \$2.4M and \$3.6M per year.

With Sigma, the accounting team can now **access the complete general ledger** in their cloud data platform, and **it takes just 2 minutes to filter!** The team's dashboard gives them an overview of local books' financial position, allowing them to **efficiently monitor issues in real-time, review transactions, and share insights with other teams** for follow-up.



Supply Chain Optimization

What it is

A supply chain is the network of people, companies, suppliers, resources, information, and activities involved in producing products and getting them into consumers' hands. Supply chains span from raw material generation all the way through final sale, and encompass the flow of products through stages including manufacturing, distribution, fulfillment, and more.

Having the ability to see into and optimize each link of the supply chain offers companies a slew of opportunities and potential business outcomes. These include the ability to increase profit margins, anticipate and mitigate disruptions, more accurately forecast demands, and more.

Who cares about it

The supply chain touches different teams across many industries, and titles vary. Some of the most common job roles and related industries are:

➔ **SUPPLY CHAIN AND OPERATIONS MANAGERS ACROSS MANUFACTURING, SUPPLY/DISTRIBUTION, CPG, AND RETAIL INDUSTRIES**

Supply chain and operations managers oversee the end-to-end supply chain across various departments, teams, and suppliers. Their responsibilities include analyzing massive datasets to procure raw materials at more competitive prices, planning demand based on sales data, and identifying supplier trends that lead to increased waste or revenue.

➔ **DISTRIBUTION, LOGISTICS, AND TRANSPORTATION MANAGERS ACROSS CPG, MANUFACTURING, SUPPLY/DISTRIBUTION, AND TRANSPORTATION/LOGISTICS INDUSTRIES**

These titles perform logistical analyses to optimize shipping costs, warehousing, supplier throughput, and more. Their ultimate goal is to get products from point A to point B in a timely and cost-effective manner.

➔ **PROCUREMENT AND PURCHASING MANAGERS ACROSS MANUFACTURING, RETAIL, AND CPG INDUSTRIES**

Procurement and purchasing managers manage relationships with suppliers and are responsible for acquiring the raw materials or goods their companies need based on cost, delivery times, demand, and other key factors.

➔ **INVENTORY MANAGERS AND MERCHANDISERS ACROSS RETAIL AND CPG INDUSTRIES**

These employees must always know which goods are in high demand, how many are currently in stock, and which to display front-and-center or together to drive the most sales.

Which business outcomes it drives

- Lower production, inventory, and distribution costs
- Accelerate production cycles
- Maximize profit margins
- Enhance visibility into inventory and demand planning accuracy
- Improve order fulfillment speed and accuracy
- Increase customer satisfaction

Why it matters now more than ever

The COVID-19 pandemic put tremendous strain on the global economy – and its impact on the global supply chain is only beginning to take effect. For example, the Federal Reserve's Beige Book¹⁵ survey notes that disruptions in production and supply chain logistics is responsible for significant price surges in commodities like agricultural products, building materials, cleaning products, and microchips.

Supply chain optimization can help organizations uncover and address hidden risks but is only possible when organizations have an end-to-end view across the entire supply chain.

Where traditional analytics falls short

- ❌ Supply chains are complex networks with many people and moving parts. One link can impact all the others, and avoiding disruption often requires making data-driven decisions on the fly. High-level dashboards don't give teams the detailed visibility they need, and waiting on data experts to answer time-sensitive questions using complex, code-heavy BI tools simply isn't a viable option.
- ❌ Supply chain optimization requires the analysis of billions of rows of data from multiple sources all at once. Joining multiple data sources and types is difficult with traditional BI solutions that require the use of SQL or another coding language. Even then, data is typically presented at an aggregate level due to scale limitations, leaving business teams without the ability to zoom into granular details around particular suppliers or SKUs.
- ❌ Because there are so many links in the supply chain, the ability to collaborate on analyses and share data is critical — both with internal departments and external suppliers. But spreadsheets and traditional BI tools that require data prep extracts create silos and limit visibility to stale snapshots of data.

How Sigma makes it possible

- ✅ From stress testing the supply chain using what-if analysis to quickly analyzing the downstream effects of delayed transportation, Sigma makes it easy for business teams to independently analyze data ad hoc and in real-time. Its familiar and intuitive interface gives non-technical teams direct, governed access to all of the live data they need plus the power of SQL in a spreadsheet!
- ✅ Sigma's unique cloud architecture enables organizations to quickly explore, analyze, and visualize up to billions of records of live data across the entire supply chain with unlimited scale and speed. Joining data from across dozens of sources is done visually in just a few clicks. Data never has to be summarized or aggregated, giving teams the power to investigate complete datasets and drill down to the level of detail necessary to make strategic decisions.
- ✅ Sigma gives teams a single, secure, source of truth for all their analyses, complete with robust user access roles and permissions. Data is pulled live directly from the cloud data platform and automatically stays updated, so collaborating and building on one another's analyses is easy, and teams never have to worry about overriding others' work. Sigma's Embedded Analytics functionality also makes it possible to securely share interactive dashboards and reports with external suppliers.

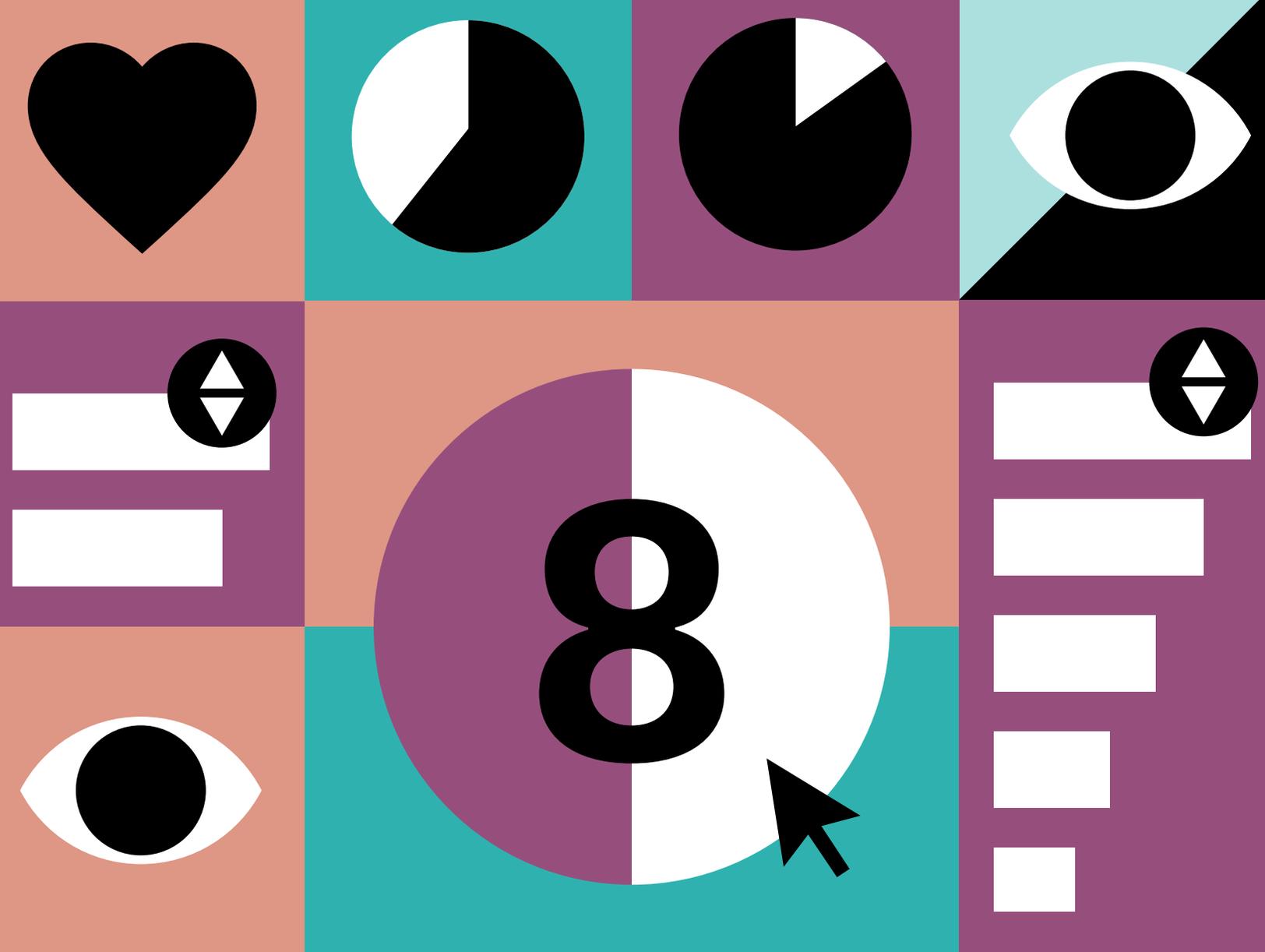
Success Story

The **leading foodservice distributor in the US** is a Fortune 500 company that partners with 300,000 restaurants and foodservice operators to help their businesses succeed, resulting in a multi-billion row dataset of service-level data.

Employees use a Service Level Impact dashboard in Tableau to identify issues that must be addressed to ensure fulfillments are achieved and SLAs are met. But scale limitations and an inability to anticipate changing data requirements prevented them from gaining timely access to all the data needed to conduct root cause analysis and find solutions to time-sensitive issues.

This led to missed SLAs, penalties, and ultimately, customer retention and acquisition challenges. The company needed a solution that allowed users to drill deeper into the data than Tableau's pre-built filters — without the BI team's help.

To solve this issue, the BI team recreated the Service Level Impact analysis in Sigma and added a link to it in the Tableau dashboard. **Now 2000+ employees can click into the live, governed, multi-billion row dataset underpinning the dashboard to do investigative analysis and independently find answers to any follow-up questions.**



Compliance and Regulatory Reporting

What it is

Compliance reporting refers to when a financial institution submits raw or summarized data to auditors which then evaluate its adherence to financial laws and regulations. This requires teams to maintain exceptionally clean and complete historical records to respond to regulatory requests in a timely manner.

Failure to respond to regulatory requests within a given timeframe or to deliver accurate compliance reports can result in legal investigations, fines, lawsuits, loss of customer trust, and poor brand reputation.

Who cares about it



RISK AND COMPLIANCE TEAMS IN THE FINANCIAL SERVICES INDUSTRY

Compliance teams are responsible for establishing, maintaining, and monitoring the internal protocols necessary to adhere to compliance mandates and pass regulatory audits.



FINANCIAL ANALYSTS AND ACCOUNTING TEAMS IN THE FINANCIAL SERVICES INDUSTRY

These teams must work together to update accounting processes and reporting protocols to avoid risk and meet new or changing regulatory reporting requirements.

Which business outcomes it drives

- Improve brand trust and customer satisfaction
- Minimize exposure to financial risks
- Ensure good-standing with regulatory bodies

Why it matters now more than ever

The financial services industry has been under increased pressure from regulatory bodies across the world since the 2008 Global Financial Crisis – and for good reason. Compliance with regulatory bodies is critical for maintaining the public’s trust in the financial system. But the demand for transparency has driven up the costs of compliance for financial institutions, primarily due to a growing number of regulations and faster reporting requirements.

Where traditional analytics falls short

- ❌ Organizations in highly-regulated industries are required to store massive amounts of data dating back many years. But traditional BI solutions were not designed to leverage the speed, power, and scale of the cloud and slow down or crash with these large datasets.
- ❌ Traditional BI solutions require SQL or other code to join in additional data sources, do complex analysis, and get answers to new questions. This creates a significant bottleneck, leading audit and risk teams to resort to stale, siloed, error-prone data extracts to avoid the BI request queue and satisfy time-sensitive requests.
- ❌ Regulatory reporting involves massive datasets from dozens of data sources accumulated over time. Integrating and doing analysis across all of these disparate data formats and nomenclatures is a major headache, and it's not uncommon for risk and compliance teams to face data governance issues that prevent them from speaking the same language and delivering accurate reports.

How Sigma makes it possible

- ✅ Sigma taps into the unlimited scale and speed of the cloud data platform to allow users to analyze billions of rows of data at once without any performance issues. This includes semi-structured data like JSON and log files, as well as decades old transaction data appended by CSV.
- ✅ Sigma's direct, governed connection to the cloud data platform breaks down barriers between audit and risk teams and the answers they need. Its spreadsheet UI gives audit and risk teams the ability to quickly and independently respond to ad hoc requests with confidence that the data is accurate and fresh.
- ✅ Sigma functions as a common language platform where data and compliance experts can collaborate on data validation, data exploration, and analysis of massive data sets to rapidly find rich insights. Technical teams are able to use Sigma to curate datasets for business teams where sources are linked and calculations are clearly defined, and business teams are able to explore the data freely within these endorsed, governed paths.

Success Story

COWEN

As a publicly traded financial institution, Cowen Inc. is required to store and retrieve data about each individual transaction — up to 11 million trades per day — to maintain regulatory compliance. But Cowen’s trade processing and record-keeping system introduced significant hurdles for business users because it required SQL expertise to access this historical data.

Every data request had to go through the IT department, which then provided the data in the form of siloed, stale, error-prone Excel worksheets. Cowen needed a user-friendly solution that allows business teams to have a holistic view of the data, while enabling them to respond to regulatory requests quickly and efficiently.

Today, Sigma empowers teams across Cowen to independently access and analyze historical data and take a holistic approach to their analytics. Sigma’s ability to manage Cowen’s 5 billion+ row worksheets and drill down into row level data while remaining performant has eased the burden of meeting strict regulatory requirements significantly.

“If we receive a regulatory inquiry or an inquiry from auditors, anyone can now go into Sigma, easily retrieve those records for any given date, and provide them with confidence, knowing the data is accurate,” says Ross Levin, Managing Director, Global Clearing, Settlement & Securities Finance at Cowen Inc.¹⁶

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If we receive a regulatory inquiry or an inquiry from auditors, anyone can now go into Sigma, easily retrieve those records for any given date, and provide them with confidence, knowing the data is accurate.



Ross Levin

Managing Director, Global Clearing, Settlement & Securities Finance at Cowen Inc.

What's Possible for Your Business?

The traditional, waterfall-style analytics workflow of the past doesn't cut it for our new normal of continuous change and disruption. Today's rapidly evolving markets require on-demand, data-driven decision making at all levels and across all departments.

Organizations that are reluctant to change or don't adapt fast enough risk losing market share or even their ability to compete entirely. Fortunately, a new breed of cloud-native tools and platforms has been developed to help individuals and teams navigate today's challenges and take full advantage of tomorrow's opportunities.

Sigma's modern business intelligence (BI) solution was purpose-built for the cloud and empowers everyone to ask questions and get answers from their data through a powerful yet familiar spreadsheet. Across industries, leading companies are using Sigma to reimagine what's possible and modernize their data analytics workflows.



Which of these use cases speaks to you and your company's needs? What else is possible with Sigma?

To learn more and register for a guided, hands-on tour of Sigma's key features, visit www.sigmacomputing.com.



About Sigma

Sigma is the only cloud analytics and business intelligence solution empowering business teams to break free from the confines of the dashboard, explore live data independently, and make better, faster decisions.

The award-winning platform capitalizes on the power of cloud data warehouses to combine data sources and analyze billions of rows of data instantly via an

intuitive, spreadsheet-like interface — no coding required. Sigma automates workflows and balances data access with unparalleled data governance to make self-service data exploration available to everyone and safe for the first time.

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